

ABSTRACT

Title of Dissertation: THE NEW POLITICS OF PATRONAGE: THE ARMS
TRADE AND CLIENTELISM IN THE ARAB WORLD

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In states without robust democratic institutions, public resources are often allocated on the basis of patronage. This distribution of patronage, along with the manipulation of official institutions (such as electoral systems and the judiciary) and the deployment of the coercive arms of the state provided the formula for authoritarian longevity in the Arab World. However, much regional scholarship continues to focus on the process through which patronage is distributed with little reference to how the underlying resources accrue to Arab regimes in the first place. Such studies fail to interrogate the organizational and financial interests of the external institutions (such as oil markets and aid organizations) that mediate this transfer of resources, and how those interests shape methods and patterns of resource distribution within Arab States. This paper is an attempt to identify some of these institutions and patterns by focusing on the array of patronage resources made available through the arms purchases executed by regional governments.

The specific class of resources examined here is reciprocal investment contracts that U.S. defense firms negotiate with procuring country governments in order to facilitate arms sales, known in industry parlance as ‘defense offsets.’ Procuring states

design their own offset policies, including the amount of investment that foreign arms manufacturers are required to make and the domestic enterprises where those funds must be allocated. The procuring state's discretion over the process allows us to draw some conclusions about how these governments distribute offset investment to strengthen incumbents' patronage-based support networks. This analysis also reveals how U.S. defense firms are able to influence the negotiation process in order to secure their own financial benefits. By examining how defense firms and their customers in the Middle East collude to structure weapons contracts in order to generate offset agreements that are mutually beneficial, we gain a better understanding of how patronage politics operates in the contemporary regional context. We are likewise alerted to the subtle ways in which influential external actors can insinuate their own interests into the process, and how the interactions between these groups create ever-evolving new opportunities for patronage politics.

THE NEW POLITICS OF PATRONAGE: THE ARMS TRADE AND CLIENTELISM
IN THE ARAB WORLD

by

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“Come you masters of war
You that build all the guns
You that build the death planes
You that build the big bombs
You that hide behind walls
You that hide behind desks
I just want you to know
I can see through your masks”

-Bob Dylan “Masters of War,” 1963

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Chapter 1: The Arms Trade and Political Patronage in the Arab World

Introduction: The Arms Trade as a Tool for Exploring Patronage Politics

The late scholar Harold Lasswell told us that political science is the study of “who gets what, when, and how.” In states without robust democratic institutions, the question of ‘who gets what’ is often resolved through a system of patronage-based politics. Indeed, much of the literature on authoritarian endurance in the Middle East was an effort to determine how Arab autocrats managed to accumulate patronage resources and distribute them through particularistic benefits to influential groups in order to maintain control over the levers of power. It was this distribution of patronage, along with the manipulation of official institutions (such as electoral systems and the judiciary) and the deployment of the coercive arms of the state that provided the formula for authoritarian longevity. However, much of this scholarship continues to focus on the process through which patronage resources are distributed domestically with little reference to how those resources accrue to Arab regimes in the first place. Scholars often fail to interrogate the organizational and financial interests of the external institutions (such as oil markets and aid organizations) that mediate this transfer of resources, and how those interests influence the methods and patterns of resource distribution within Arab States. This paper is an attempt to identify some of these institutions and patterns by focusing on the array of patronage resources made available through the arms purchases executed by regional governments.

The specific class of resources examined here is reciprocal investment contracts that U.S.

defense firms negotiate with procuring country governments in order to facilitate arms sales, commonly known in industry parlance as ‘defense offsets.’¹ These proprietary investment agreements signed between the defense firm and officials from the importing government can take a wide variety of forms. Procuring states design their own offset policies, including the amount of investment that foreign arms manufacturers are required to make and the domestic enterprises where those funds must be allocated. The procuring state’s discretion over the process allows us to analyze actual projects generated by defense offset contracts in order to draw some conclusions about how procuring country governments distribute this investment to strengthen their patronage-based support networks. An analysis of how these contracts are fulfilled also reveals how U.S. defense firms are able to influence the process in order to secure their own financial benefits, and how the efforts of these firms help fuel the expansion of offsets in the Arab World. By examining how Western defense firms and their customers in the Middle East collude to structure weapons contracts in order to generate patronage resources in a way that is mutually beneficial, we gain a better understanding of how patronage politics operates in the contemporary regional context. We are likewise alerted to the subtle ways in which influential external actors such as foreign defense firms can insinuate their own interests into the process, and how the interactions between these groups create ever-evolving new opportunities for patronage politics.

Although defense offsets first appeared after WWII – when President Eisenhower

¹ Although this paper is limited to the Arab World, a similar analysis could be undertaken of most other regions. Additionally, non-U.S. defense firms also engage in offsets, and although I make reference to a few cases in the following pages, the focus here is on American companies.

demanded that West Germany purchase American-made defense material to “offset” the cost of stationing U.S. troops on the continent – they have evolved into a multi-billion dollar incentive system that permeates the global arms market and extends into nearly every sector of procuring country economies. I argue that the impact of defense offsets in the Arab World is distinct not only because increases in the magnitude and complexity of offsets outstrip parallel developments in other regions, but also because they are uniquely well-suited to prevailing patterns of patronage politics in the region, and therefore serve as ideal mechanisms for allocating economic privileges that help sustain authoritarian support networks.

My research indicates that variation in the design of official offset policies reflects the unique strategies adopted by ruling elites in the Arab World to secure the support of (1) the indigenous military and security institutions or (2) powerful business elites – two constituencies identified in the regional literature as crucial to the maintenance of authoritarian regimes.² My analysis of existing data shows that in Egypt and Jordan, where indigenous military and security institutions remain an influential force in politics, the regimes’ offset policies are designed to channel patronage to military-owned firms

² Droz-Vincent 2007; Richter 2007; Bellin 2004; Brownlee 2002; Henry and Springborg 2001; Springborg 1989. Pepinsky (2009) concludes that when regime supporters are divided according to the mobility of their capital assets, the authoritarian ruler is unable to mount a coherent response to economic crises and the regime breaks down. Such was the case in Indonesia during the financial crisis of the late 1990s, when Soeharto was torn between an indigenous military establishment that favored protectionist economic policies due to its largely immobile asset base and an equally powerful ethnically-Chinese capitalist class that preferred the relaxation of economic controls in response to the crisis. The patterns of offset-acquisition in my cases (direct offsets in states with powerful military constituencies whose economic interests are tied up in state-owned factories and other immovable assets like real estate and large-scale infrastructure vs. indirect offsets in states where the economic elite have more to gain from the expansion of services, the financial industry and commercial exports) largely mirror this distinction between mobile and immobile asset bases. Where Pepinsky utilizes economic crises to illuminate the dynamics of (both successful and unsuccessful) regime maintenance strategies, this project utilizes offset contracts.

and enhance the capability of those firms to compete in the private sector. Conversely, in Kuwait, Saudi Arabia, and the UAE, the regimes' offset policies direct investment toward large family-owned conglomerates, which wield more political clout than the Gulf States' defense establishments. Although the strategies employed by these governments may differ – in the type of offset they seek and in how they distribute them – their goals are the same: to utilize defense offsets to provide political patronage to pivotal domestic constituencies in order to consolidate and maintain their support.

In addition to informing our understanding of important power differentials that exist between groups of domestic elites in the region, this research also pushes the empirical boundaries of the traditional distributive state paradigm beyond its focus on oil revenues and foreign aid. As Moore and others have argued, two-plus decades of economic liberalization have fundamentally altered the universe of available resources and the institutional channels that regimes have at their disposal for the distribution of those resources.³ Systemic developments including the ideological triumph of economic liberalism have restricted the ability of regimes to utilize traditional, overt subsidies, while the region's growing share of the global arms market has created a large reservoir of potential patronage assets. The sheer magnitude of money involved in the arms trade, as well as the secretive nature of the transactions and their exemption from trade-related oversight bodies such as the World Trade Organization, further contributes to the appeal of defense offsets as a system for patronage distribution.

³ Pete W. Moore. "Keeping the baby and tossing the water: Advancing the debate about rents and politics in the Arab World." unpublished manuscript.

Defense offsets also provide us with some analytical traction that we may not get from examinations of oil revenues and foreign aid, which are highly fungible and subject to donor conditionality, respectively. In contrast, governments and political institutions outside the importing country have little control over the dispensation of offsets, which are negotiated between the procuring country government and the private sector firm selling them weapons.⁴ This discretion on behalf of the procuring state allows us greater empirical purchase on the processes associated with the diversification of patronage politics and helps inform our understanding of coalition formation. Similarly, defense offsets are discrete contracts that flow to particular recipients, which makes it easier to trace their path from the time the contracts are signed until the point at which the investments are distributed. This is in contrast to resource rents, which are lump sums distributed through a broad range of institutions, as well as rents like preferential access to credit or subsidized use of public goods (such as land, electrical infrastructure, etc.) for which reliable documentation is rarely available. Although the information on these contracts is not collected systematically across cases, and significant secrecy and intentional obfuscation present challenges to data collection, it is possible to develop a coherent picture of the domestic actors on the receiving end of offset investment. By expanding our lens to scrutinize new types of resources available to the distributive state, we can improve the analytical leverage provided by what Schumpeter termed the “fiscal sociology” approach, which promotes a focus on how states raise and spend revenues.

⁴ This impotency however, is partially self-styled. Because offsets enable defense firms to maintain their market share and provide (or are perceived to provide) important benefits to their host governments, those governments have an interest in facilitating offsets. Governments have helped facilitate offsets by passing formal legislation that restricts their oversight role, and by hamstringing watch-dog groups and under-funding or downsizing federal agencies that collect information on offsets.

This will help refine our understanding of the mechanisms of political patronage in the Arab World.

Far from complicating my thesis, recent events in the region illustrate the durability of the domestic actors and institutions that are on the receiving end of offsets and other types of regime-mediated patronage. Like oil revenues and foreign aid, defense offsets have helped transfer privileges to these groups, increasing their political influence by supplementing their economic activities and further entwining their interests with the institutional fabric of the state. Like the distribution of other privileges, allocating offset-generated investment has required the establishment of bureaucratic agencies and the formulation of both formal and informal offset policies. Often, the recipients of offset-generated investment have close familial and business linkages with the officials in these agencies. By identifying new classes of benefits that go these privileged political actors, we can better understand the resilience of regime support networks. The removal of incumbents such as former Egyptian President Hosni Mubarak or challenges to the legitimacy of the Gulf monarchs will not fundamentally alter the influence of historically powerful domestic constituencies, and the particular constellation of military and business elites that have prevented the emergence of alternate centers of power in these states will persist unless offsets and other similar privileges are undermined by genuine political and economic reforms.⁵ I believe the applicability of this analysis – which rests

⁵ The current trajectory of reforms – such as those pushed by Hosni Mubarak’s son and former heir apparent Gamal Mubarak – illustrate the absence of prospects for democratic change. When Gamal set about in 2008 promoting changes that would have enriched his private business associates – personified in the figure of Ahmed Ezz, the steel tycoon and former ruling party secretary for organizational affairs who stood to gain monopoly power over the Egyptian steel market – the military generals pointed to rising labor militancy and strikes as a threat to national security that required re-assessing Gamal’s preferred platform of “reform.” Ezz’s control over the price of steel would have hurt military producers, for whom steel is a

on the explanatory power of global security markets and influential elite networks – will not only survive the recent events in the region, but also help inform our understanding of subsequent outcomes, including intermediate power struggles and the eventual configurations of post-revolutionary governments.

The Contemporary Outlines of Defense Offsets

“Defense offset” is the term used to describe a range of industrial and commercial incentives that procuring countries demand from arms manufacturers in exchange for purchasing their products. Because offsets are unregulated (except in rare instances when they involve sensitive technologies) official offset policies vary widely by state. On the low-end are states requiring that 35% of the original contract value be offset through inward investment; many states demand offsets equivalent to 50-60% of the original contract. Beyond this, offsets in excess of 100% are routine, and a recent agreement concluded between BAE and South Africa included offsets nearly four times the value (400%) of the aircraft being purchased.⁶

Classification schemes used by firms and governments generally divide offsets into two categories: direct and indirect. Direct offsets are *directly* linked to the defense materiel or

primary input. Most of Gamal’s closest associates were major beneficiaries of the corrupt privatization schemes instituted by the Egyptian government at the behest of international donors and financial institutions. These individuals – who have been the primary targets of opposition activity – are now under investigation, barred from traveling abroad and their assets have been frozen. In contrast, General (Ret.) Sayed Meshal, the Minister of Military Production, has kept his post. See also the comments of Rashid Khalidi and Robert Springborg in Ken Stier. 9 February 2011. “For Egypt’s Military, Big Business Means Staying Power.” *TIME*.

⁶ This offset contract between BAE and South Africa was the basis for a major suit filed by the U.K.’s Serious Fraud Office, which resulted in a large fine. I make reference to this and similar cases later in the dissertation, I include it here to provide a broad outline of offset activities. The 400% figure comes from Burrows, Gideon. 2002. The No-Nonsense Guide to the Arms Trade. London: Verso Books, p87.

service provided, and can include co-production and/or licensed production of particular weapons systems; the transfer of related military technologies; investment in defense production facilities in the procuring country; or the use of in-country subcontractors or suppliers. Indirect offsets are investments in civilian, non-weapons related ventures. These can include establishing joint ventures with domestic commercial operators; transferring non-military technologies; eliciting investment from third parties; and providing capital or other financial assets (such as preferential credit terms) for state-owned enterprises or investment vehicles.⁷ The end result is that procuring governments receive large infusions of financial resources. *Janes Defence Weekly* estimates that the Gulf countries alone raked in more than \$30 billion in offsets between 1990 and 1997,⁸ and industry forecasts estimate another \$54 billion for the Gulf between 2010 and 2015.⁹

Offset contracts are also proprietary agreements, meaning their details are only visible to the exporting firm and the procuring government.¹⁰ (Although the efforts of both to promote offsets as developmental tools means they frequently make information available through official publications and corporate literature) This makes them ideal vehicles for delivering subsidies to domestic interest groups. Both the firms and the

⁷ In previous decades indirect offsets frequently took the form of a commitment on behalf of the defense firm to purchase commodities or manufactured goods from the procuring country or locate third party buyers. However, such simple ‘barter’ schemes have largely been abandoned in favor of more complex transactions involving financial firms and offset brokers. Programs designed by these intermediary firms often allow procuring countries to leverage offset investment as a financial tool to secure additional financing.

⁸ Military-Offsets to Grow? 1 December 1998. *Jane’s Intelligence Review*.

⁹ CTO Newsletter. 24 May 2010. 28(10).

¹⁰ This limited visibility is the culmination of years of industry efforts to conceal offset agreements, aided by the collaboration of their host country governments, who are keen to avoid the political backlash associated with outsourcing coveted defense jobs. The process of eliminating oversight – and the associated political implications – are explored in depth in Chapter 2.

procuring governments have an interest in channeling offset-generated investment into the business ventures of influential domestic elites in the procuring country, who not only provide the base of support for political incumbents, but also serve as gatekeepers whose loyalty is indispensable for foreign arms manufacturers seeking a competitive edge in future deals.

Breakdown of Chapters

This chapter will situate defense offsets within the context of patronage-based politics in the Middle East, and explore how the unique characteristics of offsets make them a particularly attractive resource distribution mechanism for authoritarian regimes. This project is a bit unique, in that it not only attempts a rigorous examination of domestic politico-economic structures, but does so with reference to a highly complex mechanism (offsets) with which few readers will be readily familiar. As a result, a great deal of the first chapter is spent detailing how offsets function and laying out some rather mundane details regarding their history and typology. Chapter 2 will outline the evolution of offsets, paying particular attention to recent innovations in offset design that have contributed to their proliferation and increasing complexity. This chapter will also treat the issue of discrepancies in available offset data. Figures provided by procuring governments, defense firms, industry trade groups, offset brokers and service providers, public interest organizations, and independent researchers vary dramatically. The patterns and discrepancies in these various data sources provide a powerful insight into the interests of relevant actors and the complex networks involved in the offset industry. Chapters 3 and 4 will provide case material on my two groups of cases: the oil-rich Gulf

States of Kuwait, Saudi Arabia, and the UAE, and the populous oil-importers Egypt and Jordan, respectively. The juxtaposition of Gulf and non-Gulf cases not only demonstrates substantive differences in the nature of patronage and clientelism in these societies, but also allows me to take advantage of the wealth of empirical data available for offsets in the Gulf countries and the theoretical rigor of the much larger literature on authoritarian dynamics in the region's oil-importing states. Chapter 5 will clarify the theoretical goals and conclusions of this project, address some emergent trends that hint at the future trajectory of defense offsets in the Middle East, touch on some comparative cases outside the region, and explore areas of future research.

The Groundwork for a Multi-Case Comparison Egypt and Jordan: Providing Patronage to the Military

Whereas the militaries of the Gulf have traditionally been small, foreign-trained and depoliticized, and therefore a less potent political constituency, the military and internal security services have played a prominent role in the politics of the region's more populous oil-importers, especially Egypt and Jordan. These states exist in an atmosphere of bureaucratic authoritarian politics characterized by populist and nationalist discourses that have historically focused on achieving economic independence, often by building indigenous defense capacity and using the military as an engine for economic development. Unlike the Gulf States, Egypt and Jordan (or Transjordan as it was known until 1949) inherited extensive military, police and intelligence structures built by colonial authorities, first to enforce their own rule, and later to mobilize the domestic

population in support of the Allied war effort.¹¹ This trajectory of state formation has manifested itself in the pursuit of patronage that directly benefits the regimes' domestic security constituencies. The military's historic role in the economy is reflected in the preferential access that military producers have to public goods such as scarce industrial materials (steel); infrastructure (airplane hangars, factories and warehouses); and hard currency. Offset projects are an extension of these historic privileges, which in turn provide basic employment for rank-and-file soldiers, engineering positions for the large number of technicians educated in state-owned military and vocational schools, management positions for officers, and the prestige associated with being 'chosen' to partner with large foreign firms manufacturing technologically sophisticated products.

The Gulf Cases: Channeling Offsets to Domestic Business Elites

The character of defense offsets in Kuwait, Saudi Arabia, and the UAE reflect their unique historical integration into the global economy. The abundance of oil and gas reserves in the Gulf States suppressed the industrialization imperative and military-driven modernization programs that dictated the developmental trajectories of Egypt and Jordan. The resulting absence of either large-scale manufacturing or politically potent militaries has produced a preference for indirect offsets.¹² Although Saudi Arabia briefly flirted with the idea of establishing its own defense-industrial base in the 1980s and the UAE

¹¹ For the legacy of colonial security policy see Martin Thomas. 2008. Empires of Intelligence: Security Services and Colonial Disorder After 1914. Berkeley, CA: University of California Press. For the role that war mobilization played in the shaping of regional militaries and internal security forces see the many case-specific chapters of Steve Heydemann (ed). 2000. War, Institutions and Social Change in the Middle East. Berkeley, CA: University of California Press.

¹² Many scholars argue that the political and industrial elite in the West actively discouraged industrialization in the oil-exporting monarchies because they feared this would lead to a class-based social order that might generate conflict and endanger the regularity of energy supplies to the industrialized economies.

offset program currently includes a handful of weapons-producing components (including the 2007 acquisition of the German gun-maker *Merkel* by the investment arm of the UAE's Offsets Program Bureau,) there is currently little significant domestic production of defense material in the Gulf States. Unlike the militaries in the populous oil-importing states, the Gulf militaries were never assigned (nor did they appropriate for themselves) the role of economic growth engine that came to be associated with developing country militaries in the latter half of the 20th century.¹³ Their small populations also precluded the potential advantage of military-led industrialization –the availability of cheap and/or conscript labor.

The calculated accumulation of social and economic support from important tribal families and powerful merchants is what allowed the Gulf regimes to consolidate their rule – and it is these same families and business elites that are today the recipients of offset-generated investment. Although they were key to bringing to power the monarchies that govern the Gulf States today, they remain centers of economic, social and political power in their own right. Their support is provisional on the continued supply of patronage and state largesse that has characterized their relationship with the region's monarchies since the discovery of oil and the lucrative state contracts that followed. Offsets are a contemporary manifestation of this long-standing patronage system, facilitated by the region's massive military budgets and the ceaseless quest for methods of distributing discretionary privileges to loyal elites.

¹³ Both modernization theory and dependency theory accord a special role to the military: as an inherently modernizing institution or as an engine to drive independent domestic industrialization, respectively.

The Distributive State and Political Patronage

The argument for focusing on a state's distributive capacity is based on the premise that an examination of the processes by which states raise revenue and manage spending will tell us a great deal about the social, political and economic character of the state and its relationship to society.¹⁴ In studies of the Arab World, the examination of a state's distributive activities has necessarily centered on the ability of these states to generate 'rents' in the form of oil revenues and foreign aid. The definition of rent provided by classical economics is, "the difference between the market price of a good or factor of production and its opportunity cost."¹⁵ This difference is easily demonstrated in the case of oil, which provides enormous revenues to the exporting state well beyond the immediate costs of exploration, extraction, refinement and transportation.¹⁶ Industry estimates put Saudi Aramco's production costs at between \$2 and \$3 per barrel in 2005, up from about 7 cents in 1950 and 50-60 cents in the early 1990s.¹⁷ Meanwhile, the market price for a barrel of crude has averaged \$30 between 1970 and 2008, ranging from \$18 in 1950 to \$30 in the early 1990s to \$65 in 2005.¹⁸ Income from rents is distinct from

¹⁴ This is Joseph Schumpeter's "fiscal sociology," approach, which he championed in his text The Economics and Sociology of Capitalism, originally published in 1942. However, Schumpeter gives credit for the concept to one of his predecessors, the Marxist Economist Rudolph Goldscheid, who was writing at the beginning of the 20th Century. A great deal of my understanding of how rents interact with distributive politics comes from the writings of Pete W. Moore, whose works are cited in the bibliography.

¹⁵ Waterbury, John and Alan Richards. 2008. A Political Economy of the Middle East. Boulder, CO: Westview Press, p16.

¹⁶ Of course, profitability really depends on one's definition of "cost." It can be argued that the societies of oil exporting states have paid dearly in terms of overall economic development, repeated foreign interventions, environmental degradation and a host of other ills that are never included in the market price of oil.

¹⁷ "Saudi Arabia: Producing Oil Costs." 3 October 2005. *APS Review Oil Market Trends*. http://goliath.ecnext.com/coms2/gi_0199-4763932/SAUDI-ARABIA-Producing-Oil-Costs.html.

¹⁸ <http://people.hofstra.edu/geotrans/eng/ch5en/appl5en/oildisruptions.html>

other sources of government revenue such as taxes and tariffs because rents are in some sense unearned, or as Alfred Marshall termed them, “the free gifts of nature.”¹⁹ Nor does generating income from rents require the same institutional capacity as extractive activities like tax collection.

The analytical concept of a rentier state, as it is currently understood, was first applied by Hossein Mahdavy of Harvard in his 1970 essay titled, “Patterns and Problems of Economic Development in Rentier States: The Case of Iran.”²⁰ Scholars provide various economic thresholds for what constitutes a rentier state according to their cases and the particular phenomenon on which they focus, but the earliest theorists classified states as ‘rentiers’ if they derived at least 40% of their revenue from rents.²¹ The concept of the rentier state was contemporaneous with the rise of the world-systems literature, which posited that the forms of economic exchange taking place between developed and developing states had locked the latter into a position of structural dependence. Their ‘place’ in the global economy would be to supply cheap raw materials – including energy inputs, minerals, agricultural goods, and low-wage labor – to feed industrial expansion in

¹⁹ The Medieval North African philosopher Ibn Khaldun made a similar observation centuries prior when he lamented “the weak-minded persons” who seek to “discover property under the surface of the earth and make some profit from it” in the hope that “without any effort, he might find sufficient money to pay for the (luxury) habits in which he has become caught.” Ibn Khaldun. 1958. *Al-Muqaddimah* (An Introduction to History). Cited in Peter W. Moore. 2004. Doing Business in the Middle East: Politics and Economic Crisis in Jordan. Cambridge: Cambridge University Press, p19

²⁰ Hossein Mahdavy. 1970. “Patterns and Problems of Economic Development in Rentier States: The Case of Iran.” In Studies in the Economic History of the Middle East: From the Rise of Islam to the Present Day. M.A. Cook (ed.) Oxford: Oxford University Press. Before this, the concept of the rentier state was used to denote European states that made large loans to non-European states. See Michael Ross. 1999. “The Political Economy of the Resource Curse.” *World Politics*. 51(2).

²¹ It has since been pointed out that this threshold was arbitrary, there being no theoretical (or empirical) reason to suggest that alternative benchmarks might not be more useful. Nonetheless it became the convention for much of the rentier state literature. Beblawi, Hazem and Giacomo Luciani. 1987. The Rentier State: Nation, State and Integration in the Arab World. New York: Croom Helm

the manufacturing hubs of Europe and North America. The economies of the developing countries would always, therefore, remain ‘less-developed’ vis a vis their wealthier counterparts in the global North.²²

The implication for less-developed rentier states was compounded, since abundant rents acted as a further disincentive for state managers to diversify their sources of income. Rentier states would thus encounter a host of economic obstacles, collectively termed “Dutch Disease” or “the resource curse,” that frustrate the development of economic sectors not directly linked to the rent source. Oil-rich states may have thriving sectors related to oil extraction (such as petrochemicals and tanker transport fleets) but sclerotic performance in manufacturing and service industries because high-returns in the former crowd out investment in the latter. Also, because oil-related enterprises are not labor intensive, they provide few avenues for employment, forcing states to subsidize domestic consumption. Of course oil is not the only form of rent. States dependent on foreign aid will likewise experience difficulty in developing their economies, since domestic producers will be displaced (or prevented from emerging) because demand for goods and services is met by donor supplies.

The political corollary to this economic stumbling block is the absence of domestic

²² To the dependency theorists, because the construction of the Arab state was coincident with the building of the oil economy, state institutions are responsive to this industry, rather than any socioeconomic or political pressures originating from society, whose own development is suppressed by the distributional structure of the state. See Jacqueline Ismael. 1993. Kuwait: Dependency and Class in a Rentier State. Gainesville: University of Florida Press. See also Abdulkhaleq Abdullah. 1985. “Political Dependency: The Case of the United Arab Emirates.” Unpublished PhD thesis. Georgetown University. For classical dependency theorists (that do not deal directly with Middle East cases) see Frank 1966; Wallerstein 1974; Chirot 1977, 1994; Chase-Dunn 1989.

demands for institution-building and political representation, which produces an environment in which the distribution of privileges determines the relationship between the central authority and its citizens (or subjects).²³ Accumulating income from rents does not require that those in power organize the levers of the state to facilitate economic activity, either through the provision of physical infrastructure or the supply of services like labor and capital regulation, which themselves would necessitate the creation of a functioning bureaucracy.²⁴ Instead, the central authority can rely on accumulated rents to supply sufficient privileges to different groups in order to maintain their support. By contrast, states without access to substantial rents must build and maintain infrastructure to facilitate economic activity and conclude some sort of social bargain establishing the states' right to demand that citizens relinquish some portion of the fruits of their labor to

²³ The relationship between rent-dependence, extractive activities like taxation, and regime type is highly contested, especially by Middle East area scholars. Okruhlik challenges the validity of claims that Middle Eastern publics are placated with rent-based patronage by demonstrating that conflicts over the distribution of plentiful rents can be just as intense. Okruhlik, Gwenn. 1999. "Rentier Wealth, Unruly Law, and the Rise of Opposition. The Political Economy of Oil States." *Comparative Politics*. 31(3): 295-315. Scholars have also sought to explain the absence of successful political contestation by focusing on the state's ability to successfully repress dissent rather than puzzling over an apparently passive public (Brownlee 2002; Pripstein-Posusney 2004). Other scholars examine the internal logic of theories that link extraction with demands for representation. Herb contends that it was the very individuals and institutions employed by the state to collect taxes that eventually demanded political representation, and they did so because their role provided them with leverage vis a vis the central authority. Herb, Michael. Fall 2003. "Taxation and Representation." *Studies in Comparative International Development*. 38(3): 3-31. Because these arguments frequently center on observed distinctions between cases, I will address many of them in the following chapters.

²⁴ Scholars disagree over whether this produces a state that is isolated from society (and thus weakened) or insulated from society (and thus in possession of a greater range of options). Isolationists claim this organizational shortcoming has prevented the state from developing the pathways and institutional openings necessary to channel public sentiment into the decision-making process, weakening the regime's ability to respond effectively in times of crisis. Insulationists counter that the regime possesses a greater space for action in responding to such crises precisely because it remains aloof from societal pressures and interest group demands. Nazih Ayubi confronts this contradiction in his 1996 book Over-stating the Arab State: Politics and Society in the Middle East. London: I.B. Tauris. The author concedes a large 'quantitative' presence of the Arab state – in industrialization, social welfare, public sector employment, and spending, but also insists that the Arab state, "has frequently to resort to raw coercion in order to preserve itself" and is not a strong state because it lacks both the infrastructural power that comes from processes of taxation and the ideological power to ensure the continued legitimacy of the ruling stratum, p3.

the central authority. Such activities require extensive administrative organization.

Unlike taxes and tariffs, oil revenues, foreign aid and defense offsets flow to states (and can then be distributed by state functionaries) regardless of productive economic activities or the provision of public infrastructure.

Historically, rents have been central to the process of state-building and regime consolidation in the Middle East – for oil rich states and resource-poor ones alike. Both the physical infrastructure and governing institutions of the modern Gulf States were financed by (and designed to service) the export of oil.²⁵ And revenues from the export of oil were used to build the economic and political support networks that help sustain the Al Saud’s rule today. Likewise, the Jordanian monarchy relied almost exclusively on aid – first from the British, then the Americans – to develop the institutions of the state and service the different patronage requirements of its support coalition.²⁶ Bilateral aid, as well as successive tranches of loans and subsequent loan forgiveness, have provided for a massive chunk of the Egyptian state’s budget. Indeed, the rentier character of the Arab state has been marshaled to explain a number of “big” dependent variables, including regime type (Beblawi and Luciani 1987), regime durability (Chaudry 1989), foreign relations (Brand 1994), economic development (Karl 1999), institutional design (Moore and Peters 2009), coalition-building (Yom 2009), capital-labor relations (Moore 2004 and

²⁵ Anderson, Lisa. October 1987. “The State in the Middle East and North Africa. *Comparative Politics*. 20(1): 1-18. See also Robert Vitalis. 1995. When Capitalists Collide: Business Conflict and the End of Empire in Egypt. Berkeley: University of California Press.

²⁶ Moore, Peter and Anne M. Peters. August 2009. “Beyond Boom and Bust: External Rents, Durable Authoritarianism, and Institutional Adaptation in the Hashemite Kingdom of Jordan.” *Studies in Comparative International Development*. 44(3).

Bellin 2000) and domestic support for economic and/or political reforms (Okruhlik 1999).

Because regime authority in these states is predicated on the rulers' ability to effectively allocate benefits to critical supporters, ruling elites are compelled to seek out new ways to generate patronage resources when extant sources become politically problematic or economically unfeasible.²⁷ Similarly, the institutional edifice designed to deliver patronage to one group may not be well adapted to deliver patronage to a new group whose increasing influence demands that they be brought into the clientelist bargain. In this case, the government must create these new institutions – through establishing new state agencies, cultivating new bilateral trade relationships, adjusting existing regulatory regimes, etc. Defense offsets are emblematic of regime strategies designed to tap new sources of potential patronage, in this case, one that has emerged from the increasingly sizeable and sophisticated global arms market. Defense goods and services account for an increasingly large proportion of regional trade, making it a convenient (and abundant) channel for the transfer of patronage. Between 2001 and 2008 the value of U.S. arms transfer agreements with the Middle East was equal to 25% of all U.S. goods and services exported to the region.²⁸ The total stock of U.S. FDI in the Middle East as of 2004 was \$28 billion (1.4% of global U.S. FDI). A very conservative estimate of U.S. offsets as of

²⁷ Henry, Clement. M and Richard Springborg. 2001. Globalization and the Politics of Development in the Middle East. Cambridge University Press, p11.

²⁸ According to the “Survey of Current Business” published by the Bureau of Economic Analysis in the U.S. Department of Commerce, U.S. exports of goods and services during the period 2001-2008 were equal to \$235 billion. During that same period, the Congressional Research Service reported arms transfer agreements between the U.S. and Middle East governments amounting to \$59 billion. “Conventional Arms Transfers to Developing Nations, 2001-2008.” p14.

2004 is about \$5.1 billion, meaning offsets during that period accounted for 18% of all U.S. investment in the region.²⁹

Regional leaders have responded similarly to previous macro-shifts in regional political and economic realities that either obstructed access to existing sources of patronage or demonstrated the potential of new ones. Switching superpower allegiances is a notable – and not uncommon – example. In the 1950s, growing political unrest over corruption and nepotism in Jordan’s state institutions led the British to demand political reform in exchange for continued aid.³⁰ But instead of dismantling these aid-financed patronage institutions – which formed the very foundations of political support for the monarchy – King Hussein orchestrated even more unrest by firing his leftist prime minister and imposing martial law, quickly convincing the Americans that a substantial (and unconditional) aid package was necessary to counter the growing threat of Pan-Arab socialism.³¹ Similarly, President Sadat’s rapprochement with the Americans supplied him with the economic aid he needed to lavish the military with new weapons,³² provide the

²⁹ Figure from U.S. Bureau of Industry and Security annual offset report. FDI figures from U.S. Direct Investment Abroad: Financial Outflows Without Current Cost Adjustment, 2009. U.S. Department of Commerce, Bureau of Economic Analysis. “International Economic Accounts: U.S. Direct Investment Abroad: Balance of Payments and Direct Investment Position Data. <http://www.bea.gov/international/>. Also see “Middle East Free Trade Area: Progress Report.” July 3, 2006. Congressional Research Service, p6.

³⁰ Moore, Peter and Anne M. Peters. August 2009. “Beyond Boom and Bust: External Rents, Durable Authoritarianism, and Institutional Adaptation in the Hashemite Kingdom of Jordan.” *Studies in Comparative International Development*. 44(3), p268.

³¹ Ann M. Peters argues in her unpublished dissertation manuscript that these same corrupt institutions persist today alongside parallel institutions financed largely by U.S. aid – the present-day legacy of the original aid package rushed through by President Eisenhower in 1957. These donor-sponsored institutions provide public and social services to the Jordanian people, while the institutions administered by the regime operate as employment mills for key political constituencies.

³² This new weaponry was especially significant because denials and delays in arms deliveries by the Soviets were widely blamed for Egypt’s abysmal performance in the 1967 war with Israel, when the

politically powerful officer corps with privileged access to business opportunities in the nascent private sector economy, and renew many of the domestic subsidies that had prevailed under his predecessor.³³ The Gulf States have demonstrated an analogous capability to adapt their distributional arrangements, primarily by expanding state patronage to groups of modernizing business elites and technocratic-minded bureaucrats in order to cultivate a buffer of support against anti-regime sentiment from radical Islamists.

Similar political and economic shifts continue to confront regional rulers, who realize they must innovate and adapt their distributive strategies to meet new exigencies and capitalize on their niche positions as oil exporters, important geostrategic allies, aid recipients, and major defense purchasers. Defense offsets are not only modular in that they can be tailored to provide benefits to quite different domestic constituencies, but also serve as a hedge against disruptions in the flow of traditional rents such as oil revenues, labor remittances and foreign aid – which are dependent on oil price volatility and donor conditionality. A focus on offsets allows us to examine the processes through which regimes capture and tailor these new rents to meet the requirements of their unique survival strategies.

equipment only arrived after the fighting was over. See Keith Krause, September 1991. "Military Statecraft: Power and Influence in Soviet and American Arms Transfer Relationships." *International Studies Quarterly*. 35(3): P318-9.

³³ Marvin Weinbaum, April 1985. "Egypt's 'Infitah' and the Politics of U.S. Economic Assistance." *Middle Eastern Studies*. 21(2): 206-222.

Defense Offsets as Rents?

Thinking about defense offsets in the context of the rentier state paradigm illuminates some important aspects of how offsets operate within a given state's domestic political economy. This is especially true if we adopt an expansive and fluid definition of rents, one that equates them with 'easy money.' That is to say, sources of revenue may be more or less 'rent-like' depending on what efforts the state must marshal in order to capture them. Offsets display some features common to traditional rents (like oil and aid), but also differ from rents in important respects. Initially, offsets appear to function as rents because they represent a form of unearned income that is transferred from an external actor (the foreign defense firm) to the procuring country government. The purchasing government acquires these economic resources for doing something it would have done anyway: purchase defense equipment. Like the "free gifts of nature" that generate oil revenues and related strategic rents, the offset investment is not the result of costly government efforts to overhaul the domestic economy and make it an attractive hub for investment. And like oil and aid, offsets are mediated by the state, which decides where offset-generated investments are ultimately spent.

However, defense offsets are also a sort of anti-rent, because in reality *the procuring state pays for them*.³⁴ Ironically, it is not the procuring state but the defense firm that emerges from the exchange having gained financially, because the firm incorporates the projected costs of the offset into the original contract price and uses various other accounting

³⁴ Arguably, states pay dearly for oil revenues and foreign aid as well; those dependent on the former are subjected to politically-destabilizing price volatility and frequent violations of their sovereignty, while aid-dependent states find that most donor funds eventually find their way back onto the balance sheets of foreign firms, who are often granted preferential market access as a condition of granting aid.

mechanisms to minimize the actual investment they do make.³⁵ Initially, this seems to present a major challenge to my theoretical claim that procuring countries are using offsets to generate resources for patronage distribution. However, upon further inspection, it not only underscores a feature common to all forms of patronage politics – that they entail significant social costs – but also demonstrates why offsets are such an appealing vehicle for patronage. They satisfy the requirements of both defense firms and purchasing governments by providing financial gains to the former and an air of legitimacy for the patronage policies of the latter.

Defense offsets are also unlike other rents because they provide a vehicle for distributing patronage to regime constituencies that is unhindered by donor conditionality (in contrast to foreign aid) or political debates over the allocation of state resources (as with oil revenues). The debate over distributing offset projects never takes place because the fact that the procuring country pays for the offset *and* designates the domestic recipient of the resulting investment is concealed. This is possible not only because offsets are classified as trade related to national security – which exempts them from most potential sources of public scrutiny – but also because both firms and procuring governments have succeeded in depicting the offset as a concession made by the foreign defense firm. Sometimes this concession is framed as an expression of corporate citizenship in which the defense firm makes the investment in the interest of developing and diversifying the economy of the procuring country. At other times the offset is depicted as a sort of capitulation that the

³⁵ The inclusion of this cost is not made explicit in the contract. For instance, there is no line item that lists “offset cost.” However, it is clear that the majority of procuring country officials are aware of this practice, and continue to require offsets despite the obvious financial costs. This is examined more thoroughly in the following pages.

procuring country officials manage to wrangle out of the defense firm. Such careful framing means that the distribution of benefits in the form of defense offsets does not present the same political conundrum to Arab regimes that the distribution of other types of particularized benefits might generate. Gwenn Okruhlik argues that distributive states are not devoid of political battles because the allocation of benefits and privileges can be just as contentious as extractive activities like taxation. As Okruhlik aptly states, “money does not spend itself.”³⁶ However, in the case of defense offsets, these privileges do *appear* to distribute themselves, since external observers justifiably mistake the foreign firm’s partnership with domestic commercial businesses and/or domestic military producers as based on some sort of objective calculation by that foreign firm regarding the domestic entity’s suitability – ultimately underestimating the degree to which the procuring government controls this decision.

Defense offsets are also distinct from rents that may be generated through trade, such as licensing or quota preferences granted to well-connected businessmen. Like offsets, these rents pose a cost to the state, because they represent forfeited revenues,³⁷ but unlike offsets, the generation of these rents cannot be disguised as depoliticized investment flowing from multi-national (Western) firms into the domestic private sector or indigenous military production facilities. Defense offsets allow the procuring country

³⁶ Okruhlik, Gwenn. April 1999. “Rentier Wealth, Unruly Law, and the Rise of Opposition: The Political Economy of Oil States.” *Comparative Politics*. 31(3): p297.

³⁷ Boone demonstrates how commercial rent-seeking by powerful domestic elites can be sustained under a wide-variety of economic policy models adopted by states. It turns out this capacity has little to do with the policies themselves, and more to do with the efforts by state officials to strike political alliances with loyal economic elites. See Boone, Catherine. 1994 “Trade, Taxes and Tribute: Market Liberalizations and the New Importers in West Africa.” *World Development* 22(3): 453-467.

government to sidestep the inconvenient truth that many forms of (apparently apolitical) external investment are in fact dictated by regime connections and elite politics. Thus we have a situation where both procuring countries and defense firms support the provision of defense offsets because the procuring country is able to conceal the costs and political motivations involved in channeling offset investment to its political allies while the firms are able to pose as good corporate citizens while also supplementing company revenues.

The New Reality of the Distributive State and the Patronage Utility of Defense Offsets

So why do these regimes need the assistance of defense firms to facilitate the delivery of patronage they have been distributing for decades? The answer lies partly in the changing context within which these regimes operate. This next section will lay out the major changes that have altered the political patronage landscape.

Offsets are an ideal vehicle for the distribution of patronage for a number of reasons, some of which have been alluded to above. Important factors include the domestic context in the procuring countries, influenced by both antecedent social conditions and macroeconomic shifts that have altered the universe of patronage-generating mechanisms (and distribution channels) available to political leaders. These shifts include not only the liberal trajectory of economic reform, but also the increasing attention paid to issues of corruption in the developing world. Additional factors are attributable to the unique nature of offsets, including their embeddedness in the sacrosanct domain of national security and the symbolism they provide to both procuring country officials and defense executives, both of whom wish to demonstrate the potential developmental benefits

associated with the expansion of the arms trade. Still other factors include the domestic context in the exporting countries, most notably the permissive legal and regulatory environment within which defense firms operate, which helps facilitate the expansion of the arms trade and provision of offset contracts. A good part of the remainder of this chapter will focus on these factors, which demonstrate the various aspects of defense offsets that make them such an appealing mechanism for distributing patronage.

Antecedent Socioeconomic Conditions: The Legacy of the Distributive State

The legacy of statist development in the Middle East has contributed to the concentration of capital and industrial resources, which facilitates the absorption of offsets into regime-controlled patronage channels, making them politically expedient. Because offsets are usually for large-scale, capital-intensive projects, the necessary infrastructure and human and financial resources are only found in those firms and institutions that possess close ties to their respective regimes. In the Gulf, this is predominantly the royal families, the region's large merchant conglomerates, and a small coterie of private businessmen whose personal links with the ruling families have brought them additional privileges. In Egypt and Jordan this includes those who inherited or extracted wealth from the large public sector during the previous period of etatism or during the subsequent process of crony privatization.³⁸ Because the state controlled access to resources during the decades of central planning, regime-allied elites are often the only ones with sufficient resources to

³⁸ See Heydemann, Steven (ed). 2004. Networks of Privilege in the Middle East: The Politics of Economic Reform Revisited. New York: Palgrave Press. See also Brommelhorster, Jorn and Christian Paes (eds). 2003. The Military as an Economic Actor: Soldiers in Business. New York: Palgrave MacMillan. See also Siddiqua, Ayesha. 2007. Military Inc: Inside Pakistan's Military Economy. London: Pluto Press.

either purchase public sector companies or gain access to credit in order to establish private enterprises.

In the Gulf, the highly-diversified family-owned conglomerates that dominate the economy receive the lion's share of offset investment, but the particular branch within the firm that ultimately receives offset-generated financing is sometimes a prestige-oriented enterprise (such as green energy or aquaculture) or one aimed at increasing employment (such as vocational training initiatives).³⁹ However, despite the implied commitment to diversification and employment suggested by these initiatives, they often fail to realize their stated goal for the same reason that offsets feed into the existing patronage-based economic system. Mainly, they are engineered to meet political (rather than economic) goals and are therefore economically unsustainable, as aquaculture has proven to be in most cases, as have the employment programs, which end up training migrants from South Asia because they fail to attract native Gulf applicants.

Likewise, in Egypt and Jordan, the peasants, bureaucrats and urban poor that were the recipients of state oblations in the immediate post-independence period have been largely abandoned as a political class in favor of a more narrow pact that favors the military – including individual elite officers with extensive business interests of their own as well as

³⁹ Despite a stated commitment to generating jobs, offset policy in the Gulf has been an abysmal failure in this respect. In Saudi Arabia for example, the *Janes Defence Group* estimates that since the offset program was initiated in 1985, less than 4,000 jobs were created by offset investment, far below the estimates that firms provided during the negotiation process. (estimate appeared in article by Sylvia Pfeifer. 10 June, 2010. "Overseas defence clients get tougher." *Financial Times*). Other figures are even more conservative. Matthews calculates that a mere 2,000 Saudi jobs were created from over \$100 billion in defense purchases that included offset packages. See Matthews, Ron. 2002. "Saudi Arabia: Defense Offsets and Development." In Arming the South: The Economics of Military Expenditure, Arms Production and Arms Trade in Developing Countries. Jurgen Brauer and J. Paul Dunne (eds). New York, NY: Palgrave. This is explored in detail in Chapter 3.

the larger collective institution. In these cases the offset-generated investment in military owned and operated enterprises is billed as an effort to increase hard currency reserves through arms exports (which, unlike other forms of production, are almost exclusively traded for dollars as opposed to local currencies); contribute to military self-sufficiency; and create spillover through the incorporation of military technologies into civilian products. As in the Gulf cases, we will see in the intervening chapters that these stated goals have also proven illusory. Instead, the main impact of defense offsets in Egypt and Jordan has been to embolden the military and grant it additional leverage and influence in the domestic economy and the broader political system. The steep increase in the complexity and dollar values associated with defense offsets demonstrates that regional regimes are quite proficient at adapting their behavior in response to demands generated by the liberalization of global commerce and the subsequent shifts in the composition of influential domestic pressure groups.

The process of transitioning to a market economy has exacerbated these imbalances. The absence of meaningful political competition in the region has meant that the twin processes of trade liberalization and asset privatization have been carried out under conditions that privilege individuals with government connections. The long-term impact of this collusion has been demonstrated in the transition processes in many developing countries, where privileged networks of elites are able to use their newly acquired assets and dominant market position in order to undermine subsequent transition processes that might introduce elements of democratic accountability into the distribution of economic

resources.⁴⁰ Instead of increasing the productivity and efficiency of major sectors such as agriculture or textile manufacturing by building the countries' physical and regulatory infrastructure, the process of economic liberalization has concentrated investment in more speculative sectors where profits accrue quickly, including tourism, real estate, and the downstream petroleum sector.⁴¹ Additionally, offsets are often for strategic projects like weapons production, for symbolic projects designed to demonstrate economic diversification such as large aquaculture projects and renewable energy projects, or heritage industries, as with an offset in the UAE that built a facility to clone date palms. Because such high-profile projects are an important part of the regime's public image, it is unlikely they would be entrusted to individuals that circulate far from the centers of power.

Like other trade-based rents such as protocol trade and loan forgiveness, which are also likely to benefit regime allies as they are the ones with access to markets and credit in the first place, the distribution of offset projects consolidates power within the authoritarian support coalition. This is further reinforced by the preferences of defense firms, whose executives favor concluding investment agreements with politically influential individuals who will be able to intercede on their behalf during future arms sales negotiations. This also provides plausible deniability when critics accuse Western governments and firms of steering business toward a select (pro-regime) group in the procuring country: they are forced to do so because of pre-existing structural realities that

⁴⁰ Heydemann 2004. See also Joel Hellman et al. 2000. "Seize the State, Seize the Day: State Capture, Corruption, and Influence in Transition Economies. World Bank Policy Research Working Paper No. 2444.

⁴¹ Richter and Steiner, p24.

prohibit them from partnering with firms or individuals who do not have access to sufficient capital or equipment. In standard regime discourse, the military (or businessman with regime connections) gets the contract because it has access to the requisite cheap/conscript labor and factory space (or capital), not necessarily because it is politically expedient for the incumbent regime to allocate the project to them.

Macroeconomic Shifts and Strategies of Patronage Diversification

Offsets are important not only because of the magnitude of assets they involve, but also because they serve as replacements or hedges for other sources of patronage that may be inherently unstable or declining. Volatility in available patronage assets may be as politically problematic as an absolute decline, since evidence suggests that the distribution of subsidies is just as contentious as conflicts over extraction via taxation or other means.⁴² Defense offsets are particularly attractive to many developing country governments because they represent a resource that accrues directly to the state (and is distributed at its discretion) in an era when the ability of the state to mediate the transfer of economic resources is eroding. On the one hand, aid and other forms of foreign assistance may be increasingly conditioned by donor states and institutions, restricting the ability of the regime to channel this largesse toward critical client groups. A state like Jordan or Egypt may find that the political concessions (such as further normalization of relations with Israel or flyover rights for U.S. military campaigns) required to expand aid flows to deal with a burgeoning population of unemployed youth are increasingly difficult to meet. Likewise, for the oil-producers, the vast expansion of public spending

⁴² Okruhlik, Gwenn. 1999. "Rentier Wealth, Unruly Law, and the Rise of Opposition. The Political Economy of Oil States." *Comparative Politics*. 31(3): 295-315.

during previous boom periods has created a system of benefits that is difficult, if not impossible, to reduce. This is especially true as the legitimacy of these regimes largely rests on their perceived ability to manage the state's natural resource wealth to the benefit of the population. On the other hand, the variety of available rents is no longer solely composed of direct transfers made to individuals, although these certainly still exist. Instead, many emerging rent forms are concentrated in the regimes' ability and/or willingness to provide preferential access to economic opportunities, which vary depending on its power vis a vis global markets.

Shifts in regime strategies for maintaining the ability to exercise control over a fluid rent base is visible across a broad spectrum. In Iran the political leadership has relinquished much control over the economy to the Revolutionary Guard, an ally that increases in utility as domestic opposition forces increase in potency. The Guard has in turn used this authority to acquire control over substantial segments of the domestic economy, including a majority stake in Iran's largest telecommunications company.⁴³ In Africa, the introduction of a modern taxation system enabled many regimes to selectively promote tax evasion, providing an economic perk to political allies that also acted as a check on potential opposition, as those outside the regime's protective circle were selectively subjected to prosecution.⁴⁴ In Jordan, the formation of QIZs (qualified industrial zones) provided tariff and tax-free imports of capital and intermediate goods as well as duty-free access to U.S. markets for Jordanian businessmen. Financed by U.S. assistance, these

⁴³ http://news.bbc.co.uk/2/hi/middle_east/7064353.stm

⁴⁴ Catherine Boone. March 1994. "Trade, Taxes and Tribute: Market Liberalizations and the New Importers in West Africa." *World Development*. 22(3): 453-467.

privileges were extended as partial compensation for Jordan's cooperation with the U.S. on geopolitical issues, primarily improving relations with Israel.⁴⁵ Yet, instead of starting their own businesses and employing members of the Jordanian workforce, these businessmen maintained only those aspects of QIZ operations that provided immediate returns requiring minimal investment (the sale or lease of the facilities, construction of dormitories, the provision of security and other services) and turned the remaining operations (manufacturing and service provision) over to South Asian investors. As of 2003, only 9 of the 47 firms were owned by Jordanians and nearly half of the zones' 20,000 workers are foreign nationals.⁴⁶

Some of these traditional rents that may be in decline or present regimes with obstacles related to volatility include: (1) oil profits, both for the many states that have become net importers as well as for the oil exporters, who face equally difficult challenges to their own patronage distribution streams because of price volatility, (2) the drop in foreign economic and military aid since the end of the Cold War, including Gulf aid to the other

⁴⁵ Offsets have also been used to compensate Israel for disagreements arising over defense technology transfers. Although Israel did demand offsets for goods and services paid for with FMF prior to 1984 the dollar value was considered insignificant. However, as the dollar value of offsets rose and knowledge of the program spread throughout the U.S. government, demands were made to institute a policy that would phase out and eventually eliminate Israel's ability to request offsets on purchases it made using US military assistance funds. A limit was placed at 15 percent for 1984, amounting to \$225 million in offsets. A ceiling was set at \$200 million in 1985, \$150 million in 1986 and 1987, and thereafter the amount was to be zero. However, many of these offsets had been associated with the LAVI fighter aircraft project – a coproduction program with U.S. manufacturers that would have produced a product in direct export competition with the U.S.-built F-16. Disagreements over technology transfer and other aspects of the LAVI eventually resulted in cancellation of the program, which dealt a major political blow to the Israeli government. Offsets on FMF were subsequently re-authorized and continue to this day. Here the U.S. used offsets to appease the Israeli government after its decision to block the development of a major weapons system led to negative political fallout. Government Accountability Office. 22 June 1994. "Military Exports: Concerns over Offsets Generated with U.S. Foreign Military Financing Program Funds." GAO/NSIAD-94-127.

⁴⁶ Pete Moore and Andrew Shrank. 2003. "Commerce and Conflict: U.S. Effort to Counter Terrorism with Trade May Backfire." *Middle East Policy*. 10(3): 112-120.

non-oil producing Arab states, (3) declining tariff revenues as countries have reduced trade barriers within the context of regional and bilateral free trade agreements, and (4) a decline in remittances as migrant workers from the populous oil-importing Arab states are increasingly replaced by cheaper laborers from Asia. The fact that the Saudis initiated their offset program in 1984 in the wake of the oil bust is probably no coincidence; revenues and government spending took a severe hit as oil prices began to fall in 1982, from \$35/barrel to a low of \$10/barrel in 1986.⁴⁷

However, the contemporary era of liberalization is not the first time shifts in global patterns of economic exchange have altered the pool of patronage resources available to Middle East rulers. The taxes and tariffs levied on long-distance trade also declined dramatically during other periods, including when the centers of trade shifted to Italy in the aftermath of the crusades; after Mongol and Ottoman assaults destroyed many of the major Arab trading cities; and when European conquest of Sub-Saharan Africa made North African Arab intermediaries obsolete.⁴⁸ The historian Samir Amin points out that this reliance on the surplus revenue created by trade left Arab rulers particularly susceptible to external actors' efforts to disrupt the flow of goods. This dynamic continues to characterize the region's regimes, which must rely on revenues generated by their trading relationships and geopolitical importance in order to finance domestic spending.

⁴⁷ In 2010 dollars this is equivalent to a drop from \$92 to \$20 per barrel.

⁴⁸ Samir Amin. June 1978. "The Arab Nation: Some Conclusions and Problems." *Middle East Report*. 68: p6.

This decline in rents has occurred alongside significant demographic growth, which further complicates regimes' spending policies. The famous "youth bulge" and high population growth rates in Egypt and Jordan are well-known, but the Gulf States also face demographic challenges. In these states revenue growth from hydrocarbon exports has not kept pace with population growth, and the fiscal burdens on the state are increasingly large. For example, per capita income in Saudi Arabia fell from \$15,999 in 1980 to just \$8,373 in 2002. The national discourse in these states increasingly revolves around the inter-generational shift that must take place in order to make the domestic economy self-sustaining. New university graduates are told that the guaranteed state jobs and subsidies their parents enjoyed are no longer feasible, and that their respective societies must become "wealth-creating" as opposed to "wealth-consuming."⁴⁹ Nonetheless, substantial revenue flows from oil and gas exports have enabled these regimes to make significant investments in infrastructure, public services and human capital. This history of public expenditures has provided these regimes with some level of popular obeisance, but has also generated expectations that link the governments' legitimacy directly with economic performance, a bargain that can constrain rulers just as it provides them with flexibility.⁵⁰

Oil price volatility and demographic growth have been such a shock to Gulf budgets that

⁴⁹ Marcel, Valerie and John V. Mitchell. 2006. Oil Titans: National Oil Companies in the Middle East. Washington DC: Brookings Institution Press, p117.

⁵⁰ Auty and Gelb point out that the basis of political support in the Gulf regimes has shifted from its initial emphasis on religious and traditional legitimacy to one based on the development and modernization achieved via state spending from oil revenues. Auty, R.M. and A.H. Gelb. 2001. "Political Economy of Resource-Abundant States." In Auty, R.M. (ed.) Resource Abundance and Economic Development. Oxford: Oxford University Press.

the once inviolable oil and gas sector has been gradually opened up to foreign investment. Formerly the national oil companies (NOCs) were treated as yet another political institution within the state apparatus, and as such were not only responsible for financing major infrastructure projects and other social spending programs, but were also off-limits to foreign investment. The drop in oil prices in the mid-1980s forced the region's oil producers to reevaluate their management of NOCs, whose managers have since gained a higher level of autonomy from the bureaucracy and consequently focus more on expanding their own production capacity than in building roads or hospitals. As foreign investment laws have been liberalized, many of the Gulf States' offset projects are now in the 'downstream' sector, which includes refinement, transport and marketing of oil and gas as well as processing them into other finished products such as fertilizers and plastics.

For example the French defense firm *Thales* bought a 5% stake in Dubai-based *Gulf Energy Maritime* (GEM), the region's largest operator of commercial tankers, to fulfill an offset commitment,⁵¹ and *GEC-Marconi*, the defense arm of *General Electric* (now part of *BAE Systems*) provided start-up capital to establish the *Gulf Center for Remote Sensing* (now *Infoterra*) to provide remote sensing of Abu Dhabi's oil, gas and mineral assets.⁵² In Saudi Arabia, defense firms have participated in at least twenty different petrochemical and oil/gas service ventures under the auspices of that country's offset program. It is possible that the increase in the magnitude of offsets has been facilitated

⁵¹ Abu Dhabi's International Petroleum Investment Company (IPIC), the Emirates National Oil Company (ENOC) and Oman Oil Company (OOC) joined the joint venture after Thales.

⁵² "Emerging Abu Dhabi." 2006. Oxford Business Group, p176.

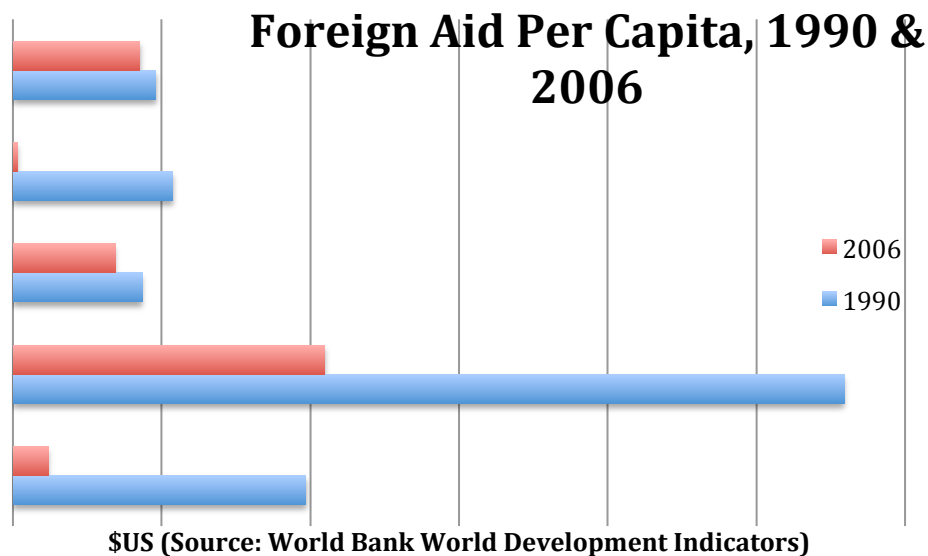
by the relaxation of restrictions on foreign investment in the oil and gas sector, since it provides a destination that can absorb large infusions of capital, streamlining the provision process. Furthermore, as equity partners, defense firms are entitled to a portion of the revenues corresponding to their initial investment.⁵³ The possibility that offsets could have played a role in such a dramatic shift in domestic economic policy in the Gulf countries suggests that the ebb and flow of exogenous rents can directly influence even the most sensitive policy questions.

Similar revenue instability afflicts the region's non-oil producers. In particular, per capita income from foreign aid and remittances has declined dramatically in recent decades. Concerns over the stability of military assistance can also be acute, since as suggested above, temporary dramatic increases in rents can raise both the expectations and the bargaining power of politically salient groups.⁵⁴ The table below shows the decrease in official aid and development assistance to several of the region's populous oil-importing states since 1990, the decade when most states began implementing offset programs in earnest. The reality that Middle East states do not engage in any meaningful level of domestic revenue extraction also suggests that shortages in traditional rents would have to be supplemented with new ones, since tax revenues would be insufficient

⁵³ Offset obligors (firms with offset obligations) frequently complain of being administratively burdened by numerous small offset projects in such fields as education or agriculture. Investing in the oil and gas sector allows companies to offload their obligations relatively quickly and with less recourse to outside advisors or administrators. Interview with M. Spiro.

⁵⁴ Military aid to Egypt, for example, has come under intense scrutiny in recent years. Although it is unlikely that the magnitude of aid will be reduced, the possibility is surely one that the Egyptian regime wants to hedge against.

to meet growing spending requirements.⁵⁵ For example, Egypt’s tax revenues in 2005 were equal to 9% of GDP, relatively high compared to the other populous, oil-importing Middle East states but less than half the 18.3% average for even low-income countries and only about one-quarter the percentage for the EU countries (39%).⁵⁶ Most GCC countries impose no taxation at all on citizens or national companies, despite the presence of free or heavily subsidized public services, but instead receive most of their tax funds from foreign entities.



⁵⁵ Consistent with theories of rentier economies the MENA countries use rents instead of taxation to fund government programs, which theoretically reduces the demand for representation from the public. Egypt is one of the only emerging economies where the effective tax rate paid by U.S. multinationals has increased over the past several decades; increasing from 28% in 1983 to 45% in 1997, providing further evidence that the Egyptian regime is looking elsewhere for revenues to avoid taxing the public. See Soliman, Samer. 2011. *The Autumn of Dictatorship: Fiscal Crisis and Political Change in Egypt Under Mubarak*. Stanford: Stanford University Press. See also Alex Cobham. September 2005. “Tax evasion, tax avoidance and development finance.” Working Paper Number 129. Finance and Trade Policy Research Centre. Queen Elizabeth House: University of Oxford.

⁵⁶ Bird, Richard M. and Eric M. Zolt. 2005. “Redistribution via Taxation: The Limited Role of Personal Income Tax in Developing Countries.” *UCLA Law Review*. Taxes represented 17.9% of GDP in 1994 according to official government statistics, but this was due to a low GDP, not a larger tax base. Monthly economic digest. February 2000. Cairo, Arab Republic of Egypt, Ministry of Economy. The tax income/GDP percentage for the 27 E.U. members in 2004 was 39% according to a EUROSTAT (the statistical agency of the European Commission). News Release. 22 June 2009. “Taxation trends in the European Union: EU27 tax ratio at 39.8% of GDP in 2007.” epp.eurostat.ec.europa.eu/cache/ITY.../2-22062009-AP-EN.PDF. Accessed on July 28, 2009.

The Strictures of Neoliberal Economics and Acceptable Mechanisms of Patronage

In addition to the volatility of revenue sources, the course of economic liberalization in the region has likewise altered the composition of acceptable patronage mechanisms and the socioeconomic character of those groups the regimes target for with their distributive policies. The traditional realms of state largesse – such as employment in the bureaucracy – are no longer compatible with the strictures of the global economy or the demands of the international institutions that shape it. As a result, rulers must look toward alternative arenas (such as the international arms trade) in order to ensure a continuous supply of suitable sources of patronage. Previous methods of privileging loyal elites, such as “sweetheart loans,” no-bid government contracts, and the sale of public land or state-owned factories for nominal fees, have become a flashpoint for regional discontent in the Middle East. Defense offsets, on the other hand, are obscure, and their distribution is characterized as either apolitical private sector investment (in the Gulf) or efforts to enhance military self-reliance and increase exports (in Egypt and Jordan). The price of defense offsets is hidden, as officials falsely claim they are financed by foreign firms.

By granting privileged access to the mechanisms of commerce, these regimes can supply the economic resources necessary to maintain the vast edifices of support required to buttress their authority, while also obscuring the high cost to broader economic and political development. The specific ownership models prevalent in offset-generated ventures reflect this reality. Many ventures created through offset investment are partnerships between defense firms and private sector businesses – which become part of

the ‘success story’ of private sector diversification and the role of foreign investment, while others are partnerships with state-owned companies. These public-private sector partnerships (or PPPs) are also promoted by development theorists and proponents of liberal economic reform as a sort of halfway house on the road to full-scale liberalization and economic modernization. In the Gulf these PPPs are nominally overseen by independent agencies tasked with managing them as private sector operations (i.e., as profit-generating enterprises) although the extent to which their governing boards are free of political pressure is unclear.

The Increasing Saliency of Corruption as a Governance Issue

The degree to which official corruption has become the cause célèbre of opposition politicians and multilateral organizations means that vehicles like defense offsets – which are legal and therefore possess at least a modicum of legitimacy – are attractive channels for transferring privileges to well-connected elites. Offsets’ greatest utility lies in this ability to provide a patina of legitimacy to a system of elite incentives. More traditional methods, such as “sweetheart loans,” no-bid government contracts and the sale of public land and productive assets for nominal fees, have become so ubiquitous that anecdotal cases of economic cronyism provide the core for narratives of economic underdevelopment coming from opposition activists, small-business owners, the IMF and World Bank and countless local NGOs.⁵⁷ Offsets, on the other hand, are obscure, and their distribution is characterized as either apolitical private sector investment (in the

⁵⁷ “A Special Report on Egypt: No Paradise.” 15 July 2010. *The Economist*.

Gulf) or efforts to enhance military self-reliance (in Egypt and Jordan) – all conveniently achieved at the (apparent) expense of foreign firms.

The broad range of individual and institutional actors that have grown politically powerful by extracting corrupt payments from the global defense trade are not likely to disappear, even in the face of enhanced scrutiny and international legal regimes targeting corruption and corporate governance. Offsets provide a convenient vehicle for achieving this same end-goal – that of transferring resources to politically influential actors in the procuring country – under a cloak of legality. Because authoritarian leaders face fewer veto points (such as parliaments or independent media outlets) in the decision-making process they ‘own’ their defense markets in a way more accountable regimes do not. And even when watchdog entities are present, it is relatively easy for domestic actors and/or foreign firms to intimidate them, and offsets frequently provide political cover for this intimidation. For instance, the German shipbuilder *MAN Ferrostaal* sent a letter to a South African newspaper claiming that its allegations involving the company’s payment of bribes to President Thabo Mbeki would “endanger thousands of jobs” by scaring away partners in its offset projects.⁵⁸ Auditing documents obtained by a South African newspaper revealed that the number of jobs (retained or created) was miniscule – and that most of the funds were pocketed by government cronies that liquidated the operations set up by the offset program and absconded with the proceeds.⁵⁹

⁵⁸ “MAN Ferrostaal says bribery claims risk scaring off offset partners.” 25 August 2008. Deutsche Presse-Agentur. Accessed 25 October 2009. <http://www.defenceagainstcorruption.org/news/in-the-news/220-man-ferrostaal-says-bribery-claims-risk-scaring-off-offset-partners>.

⁵⁹ Sam Sole. 28 October 2011. “The arms deal’s big deceit: The great submarine rip-off.” *The Mail & Guardian Online* (South Africa). <http://mg.co.za/article/2011-10-28-the-great-submarine-riporff/>

Even when illegal activity is uncovered, offset programs are frequently spared further inspection because those under investigation claim further scrutiny would be a danger to national security. The only serious investigation into the infamous *Al-Yamamah* arms deal between BAE (on behalf of the UK) and Saudi Arabia – which included hundreds of millions in offset investment and alleged bribes – took place in the U.S. Department of Justice, which claimed jurisdiction over the case because U.S. banks were utilized to transfer funds from BAE to Prince Bandar.⁶⁰ The UK Serious Fraud Office (SFO) was forced to drop its own case in 2006 after Saudi officials threatened to cease cooperating with the British in the ‘Global War on Terror.’⁶¹ As a result, BAE admitted to ‘accounting irregularities’ and paid about \$440 million in fines to settle with both the British and American authorities – a sum that represents less than 1% of the profit BAE made from the *Al-Yamamah* deal.⁶² It is likely that Bandar’s bribes were uncovered only because he was Saudi Arabia’s Ambassador to the U.S., so unlike other members of the Royal Family who also received bribes, he had frequent occasion to utilize U.S. financial institutions. The evidence available to the SFO, which was much more extensive, centered on Prince Turki bin Nasr, the son-in-law of the Crown Prince.⁶³

⁶⁰ Until BAE’s recent indictment on bribery charges in connection with sales to South Africa, Romania, Hungary and the Czech Republic the government had never brought suit against a single UK corporation despite anti-bribery laws dating back to 1906.

⁶¹ Bandar left his ambassadorial post in 2005 when King Abdul Aziz appointed him Secretary General of the National Security Council – a largely irrelevant government agency that has taken no serious decisions or actions since its creation.

⁶² Despite all the negative publicity, BAE Systems is currently in an acquisition spree. Joel Johnson (former VP of the trade group Aerospace Industries of America) remarked at an industry conference that “BAE is buying everything that’s not nailed down.” CTO Newsletter, 22 February, 2010. 28(4).

⁶³ Ewen MacAskill and Rob Evans. 28 September 2005. “Britain ‘agreed in secret’ to expel Saudis during £40bn arms talks.” *The Guardian* (UK). <http://www.guardian.co.uk/uk/2003/sep/12/freedomofinformation.saudi-arabia>. Accessed 18 October 2009. The documents included mountains of BAE receipts for various goods and services provided to members of the Saudi royal family. For details see PBS Frontline transcript, which includes interview material with

Defense Offsets and the Permissive Legal and Regulatory Environment of the Arms Market

“Those things [offsets] need to be business deals among businessmen . . . government has no business overseeing offsets.”

---- James McInerney Jr., then-executive vice president of the American League for Exporting Security Assistance, 1991.⁶⁴

“Good commercial agents are better placed than an official to dispense the less orthodox inducements.”

---- Advice of industrial magnate Sir Donald Stokes (1965), hired by then-Labor defense secretary Denis Healey to advise the government on how best to achieve greater competitiveness in the arms export market.⁶⁵

The character of the legal and regulatory environment surrounding the arms trade is, of course, related to the increasing centrality of military production in the manufacturing activity of the post-industrial western economies, which will likely increase as civilian manufacturing continues to contract. In addition to the prevailing domestic conditions in procuring countries, the policies and practices of weapons-exporting states and international institutions with jurisdiction over global trade flows also facilitate the use of offsets for political patronage. The international legal and normative structures that allow for state subsidies and non-transparency in areas of trade deemed crucial to ‘national security’ have the effect of aiding defense firms in exporting their products by overtly

CIA Agent Robert Baer. <http://www.pbs.org/wgbh/pages/frontline/blackmoney/etc/script.html>. Accessed 18 October 2009. In addition to dropping the SFO inquiry, the Saudis also demanded that Downing Street deport two prominent Saudi dissidents living in London and resume direct British Airways flights from London to Riyadh, which had been suspended over fears of a possible terrorist attack.

⁶⁴ Lumpe, Lora. September/October 1994. “Sweet Deals, Stolen Jobs.” Bulletin of the Atomic Scientists. <http://www.fas.org/asmp/library/articles/sweetdeals.htm>

⁶⁵ This particular historical exchange is credited with launching the legacy of corruption that now pervades the British arms industry. Rob Evans, Ian Traynor, Luke Harding and Rory Carroll. 13 June 2003. “Web of state corruption dates back 40 years.” *The Guardian* (UK).

limiting oversight and regulation – which facilitates the use of offsets in patronage politics. The most notable legal example is the exemption on the ban in offsets granted by the WTO (and included in all bilateral trade agreements) for trade classified as essential to ‘national security,’⁶⁶ similar to the WTO exemption granted for government subsidies to domestic defense industries. Although the WTO ruled that the U.S. provision allowing American firms to establish overseas Foreign Sales Corporations (FSCs) – subsidiaries that enable the parent company to avoid taxation and other regulations related to corporate transparency – amounted to unfair subsidies, this WTO ruling was not extended to defense firms – which have dozens (if not hundreds) of such entities.⁶⁷ And because these FSCs are frequently established in OECD-designated “tax haven” locations where financial transparency and regulation are absent, they are ideal vehicles for the surreptitious movement of money. Nor is information on offset transactions likely to show up in corporate profiles or quarterly reports; one former industry trade group executive remarked in a speech at an offset conference that,

My industry probably has billions of dollars of offset obligations. They don’t show anywhere on our balance sheets because no auditor knows what to do with an offset. When you start asking us for performance bonds and penalty clauses, that’s going to show, and that makes people [ie, investors and shareholders] very nervous. I am aware of some recent cases where companies simply weren’t willing to put that on their books.⁶⁸

Potential sources of regulation at the supranational level are largely irrelevant; they are either part of informal voluntary guidelines (such as the European Defense Agency’s

⁶⁶ WTO exemption: http://www.wto.org/english/docs_e/legal_e/gpr-94_01_e.htm. NAFTA exemption: <http://www.sice.oas.org/Trade/nafta/chap-101.asp>.

⁶⁷ GAO. 2 February 2004. “International Taxation: Information on Federal Contractors With Offshore Subsidiaries.” GAO-04-293. www.gao.gov/new.items/d04293.pdf

⁶⁸ CTO Newsletter. 28 May 2008. 26(10).

‘Code of Conduct on Offsets’ which is legally non-binding); restricted in their scope (the OECD Convention Against Bribery only pertains to ‘public officials,’ not private agents or intermediaries who may be acting on their behalf); or attempts to extend commercial regulations that are ill-suited to controlling military offsets due to the wide range of ‘national security’ exemptions. These potential sources of regulation include international codes of conduct for military sales, WTO rules governing official procurement and state investment (also superseded by the exemption for national security trade), and a U.S.-specific prohibition against offsets in sales financed by U.S. military aid – a ban that is consistently circumvented.⁶⁹

Congressional attempts to impose prohibitions on “incentives” in arms deals have also met with significant resistance from both industry and the Department of Defense (DOD). In 1989, Congress included a mandate in the National Defense Authorization Act requiring that contractors notify the Pentagon of any offset exceeding \$50 million. Two years later, having received only three voluntary notifications on offset requirements, the Pentagon claimed the new law duplicated existing regulations at DOD.⁷⁰ In response, Congress passed an amendment to the Defense Production Act requiring that contractors notify the Department of Commerce of any offsets over \$5 million. But it was another two years (1994) before Commerce secured the necessary

⁶⁹ Although formal US policy is never to fund offsets using FMF, the 1994 study by the General Accounting Office (GAO) referenced several times above examined 48 sales worth \$11.6 billion to Israel, Egypt, Turkey and Greece (the four largest recipients of U.S. military aid). These contracts – all paid for with U.S. military aid – included offsets worth at least \$4.7 billion.

⁷⁰ Lumpe, Lora. September/October 1994. “Sweet Deals, Stolen Jobs.” Bulletin of the Atomic Scientists. <http://www.fas.org/asmp/library/articles/sweetdeals.htm>.

executive order to draft guidelines on implementing the regulation.⁷¹ Industry advocates continued to demand definitional clarifications of what constituted incentive payments and narrower definitions of those parties affected by the amendment.

For its part, DOD insisted that specific regulations needed to be implemented before their agency could uncover incentive payments in contracts, while the State Department insisted that the stipulations of the amendment were already being adhered to under existing oversight processes. State also insisted that in the two years since the passing of the amendment in 1994 no offset agreements had even been included in FMS agreements, although an independent investigation by the Congressional Research Service found more than 20 cases of offset agreements included in FMS contracts during that same period.

The fact that the arms trade is increasingly carried out under conditions of Direct Commercial Sale (DCS) rather than Foreign Military Sale (FMS), has also removed an element of oversight. The conditions prevailing in the global arms trade have empowered customers to demand better terms, which includes a preference for DCS arrangements that do not include the 2.5% fee levied by the DOD on FMS contracts, which pays for the services of government contracting officers. Once an export license has been granted, DCS contracts are carried out without U.S. government oversight, which removes even the limited oversight that government contracting officers have in FMS agreements.

The purchase of large weapons systems (known as “all-up complete weapons systems”) are also more difficult to monitor, which is especially problematic for the Middle East

⁷¹ Government Accountability Office. 26 June 2008. “Defense Production Act: Agencies Lack Policies and Guidance for Use of Key Authorities” GAO-08-854

precisely because the region represents such a large share of the market for these big-ticket, technologically advanced systems. When drawing up contracts for “all-up” systems the contracting officer in the U.S. government is prevented from requesting submission of certified cost or pricing data from the firm, based on the assumption that the procuring country conducted a fair and open price competition for the weapon system. Given the difficulties the U.S. State Department and DOD encounter in conducting competitive tenders on their own turf, it is unlikely that procuring governments can be expected to meet such requirements.

Domestic Oversight in Arms Exporting Countries

Oversight from the exporting firms’ host country governments is limited, despite the relatively large funds involved. For example, the dollar value of offset contracts signed by U.S. defense firms in 2007 is equivalent to 70% of all economic and military aid provided to all the countries of Sub-Saharan Africa in 2007 by all agencies of the U.S. government.⁷² But there is no central body responsible for all offset-related monitoring. Instead, one agency collects data (the Bureau of Industry and Security), another monitors overseas co-production facilities (the State Department), and yet another investigates bribery allegations connected to offset transactions (the Department of Justice) – and rarely do these agencies coordinate or share information.

U.S. defense and export policy ties the hands of federal regulators and contract specialists. Official DOD policy is “not to get involved,” in offset contracts, and to place

⁷² Figures from 2009 BIS annual report and U.S. Agency for International Development “U.S. Overseas Loans, Grants, Obligations, and Loan Authorizations, annual.”

responsibility for administering and enforcing the offset agreement solely with the procuring government. Specifically, DOD policy prohibits any agent of the U.S. government from:

involvement with the negotiation of the offset agreement itself between the company and the FMS [Foreign Military Sale]⁷³ customer, and no role in judging the merits of these agreements. In addition, the Letter of Offer and Acceptance (LOA) between the U.S. Government and the FMS customer and the contract associated with that LOA (between the U.S. Government and the contractor) *do not include any of the terms of the offset agreement (such as the delivery schedule, acceptance criteria, etc.)* even though the LOA and the contract may include costs associated with the offset.⁷⁴ [my italics]

Defense Procurement and Acquisition Policy (DPAP) justifies withholding this information because, “foreign governments as a rule do not want offset costs isolated/highlighted.”⁷⁵ The non-inclusion of this information allows officials in the procuring government to justify the approval of higher-cost contracts that funnel investment to domestic firms with high-level political connections, transferring what should be public money into private hands. This slow erosion of visibility regarding offsets parallels the disappearance of ‘commissions’ as line items in the contract proposals submitted by U.S. contractors in previous decades. Only after Watergate and the Iran-Contra Affair did the U.S. Government prohibit defense firms from reporting such payments in their contract budgets (which would allow them to recover the costs of

⁷³ Foreign Military Sales (FMS) are bilateral contracts concluded between the U.S. Government and the procuring country government, with the U.S. Government negotiating with the contractor on behalf of the purchasing government. FMS contracts generally involve substantial oversight. Direct Commercial Sales (DCS) are negotiated directly between the contractor and the procuring country government, usually after the firm has acquired an initial license approval to export a particular weapons system. DCS contracts do not involve much oversight.

⁷⁴ U.S. Defense Procurement and Acquisition Policy (DPAP). http://www.acq.osd.mil/dpap/epic/ic/offsets_of_foreign_military_sales.html#q1. Accessed on April 29, 2009.

⁷⁵ *ibid.*

the bribes in the event that the purchasing country defaulted on their payment, in which case the firm was paid by the U.S. Government under as stipulated by the export loan guarantee program). Thus, it is not that these commissions are no longer being paid – just that they are being paid under the umbrella of investing in the projects of crony elites and state-allied institutions.⁷⁶ In addition to remaining at arms-length from the offset contract itself, contract specialists working for the U.S. Government can tell procuring country officials *if* projected offset costs have been added to the contract, but now how much money those projected costs represent:

It is inappropriate for USG personnel to discuss with the purchaser the nature or details of an offset arrangement. However, *if known*, the fact that offset costs have been included in the P&A or LOA price estimate will be confirmed should the purchaser inquire. The purchaser should be directed to the US contractor for answers to all questions regarding its offset arrangement, including questions dealing with cost.⁷⁷ [my italics]

The above phrase – ‘if known’ – is important, because in practice U.S. Government personnel do not know whether offset costs are included in the price, or the amount of those costs. And, if what the U.S. Defense Security Cooperation Agency terms “adequate price competition”⁷⁸ exists, then it is assumed that further information on the offsets contained within the contract is unnecessary. In reality, adequate price competition through competitive bidding is difficult to achieve, since the equipment is

⁷⁶ Thomas W. Hill, Jr. November 1989. “Foreign Representatives: Saudi Law and the Foreign Corrupt Practices Act.” *Arab Law Quarterly*. 4(4): p298.

⁷⁷ Defense Security Cooperation Agency memo. DSCA 00-01. 19 January 2000. “Inclusion of Offset Costs in Letter of Offer and Acceptance (LOAs).” Policy I-012655/99. www.dsca.mil/samm/policy_memos/2000/DSCA%2000-01.pdf

⁷⁸ U.S. contracting officers determine whether adequate competition occurred by consulting with the foreign government’s security assistance personnel. See Defense Security Cooperation Agency memo. DSCA 00-01. 19 January 2000. “Inclusion of Offset Costs in Letter of Offer and Acceptance (LOAs).” Policy I-012655/99, p4.

often so technologically advanced and capital-intensive that only one company manufactures it.

The criteria that offsets must satisfy (under U.S. law) in order for the exporting firm to seek full cost recovery is also incredibly vague and broad. DOD considers offsets “allocable” (and therefore a legitimate component of the overall contract that can be charged to the procuring country) if they are, “necessary to the overall operation of the business, although a direct relationship to any particular cost objective cannot be shown.” In support of this policy, defense industry spokespersons contend that dis-allowing cost recovery would make the provision of offsets prohibitively costly – something we know to be false.⁷⁹ These advocates claim that rising costs would preclude them from offering offsets, rendering them incapable of securing any sales contracts.

Information and Resource Asymmetries in U.S. Agencies

Information asymmetries between U.S. Government agencies and the practice of allocating more resources to those departments whose traditional role has been to promote, rather than monitor, defense exports further exacerbates the problem of lax oversight. Although contracting officers within DOD and the State Department have direct access to arms export contracts and are therefore privy to information on specific offsets, they are restricted from disseminating that information, while employees of the

⁷⁹ Chapter 2 outlines many of the accounting mechanisms that firms use to minimize their investment outlay while satisfying the demands of procuring country offset policies. South Africa provides a good example, where the German firm Ferrostaal invested €62 million and received credits for €3.1 billion from the South African Government’s defense offset agency. Sam Sole. 28 October 2011. “The arms deal’s big deceit: The great submarine rip-off.” *The Mail & Guardian Online* (South Africa). <http://mg.co.za/article/2011-10-28-the-great-submarine-ripoff/>

BIS, who are charged with collecting, analyzing and reporting on offsets, are not privy to those contracts and therefore must rely on data provided by the firms. The result is that reports coming from BIS rely largely on information provided by firms, industry trade groups, industry-affiliated think tanks and other organizations concerned with putting a positive spin on the offset business. An example of this appears in almost every annual report on offsets issued by the BIS. The language used in a section of the bureau's report that stresses the centrality of the defense industry to the economic health of the US *and* in the execution of the country's foreign policy was lifted – nearly verbatim – from a report compiled by the *National Defense Industrial Association* (a defense industry trade group) justifying the use of offsets in defense contracts. Attempts by other government agencies to investigate offsets are similarly frustrated. The GAO consistently asserts that available data is insufficient to allow any firm conclusions on the impacts of offsets, and routinely criticizes both DOD and the State Department for neglecting their mission of contract oversight by failing to address the issue of offsets.⁸⁰

Defense firms have likewise lobbied hard to limit public access to the data collected by government agencies, demanding to have the information classified as 'proprietary' and therefore inaccessible to the public.⁸¹ The European Defense Agency (EDA) – which reports to the European Council – has followed suit, requesting that information on offset

⁸⁰ A GAO report found that the nature of data provided to BIS made it difficult to analyze offsets in terms of their economic effect. Government Accountability Office. "Defense Production Act: Agencies Lack Policies and Guidance for Use of Key Authorities." 26 June 2008. (GAO-08-854). www.gao.gov/products/GAO-08-854

⁸¹ Joel Johnson, former VP for international affairs at the Aerospace Industries Association of America (an industry trade group) remarked of the BIS report, "We in the industry don't like that report . . . we would like it ended or classified." CTO Newsletter 28 May 2008. 26(10).

guidelines and practices be reported to the EDA but not made available for public release.⁸² Trends in industry consolidation have also made it easier for firms to conceal their offset activities.⁸³ For instance, the BIS figure for U.S. offsets to Saudi Arabia was marked “proprietary” in 2007 (before subsequent changes removed all country-specific data points) reportedly because all the sales to the kingdom that year came from just one or two firms, which could then be identified as the offset providers. This was a full two years before the industry succeeded in convincing law-makers that all offsets should be deemed proprietary, meaning the only information currently available are global aggregates.⁸⁴ Industry spokespeople contend that if more detailed information was available, competitors could use it to fashion their own more attractive offset packages, which would give them an advantage in upcoming negotiations; or conversely, that making the information available would encourage procuring countries to demand ever increasing offsets if they knew a neighbor was getting more than them. This is unlikely to be the real source of their opposition, however, since offsets are almost always publicized by procuring countries in order to justify defense expenditures, and many countries’ offset requirements are collected in subscription-only databases whose sole

⁸² CTO Newsletter. 9 February 2008. 27(3).

⁸³ Analysts at Price Waterhouse Cooper suggested that the wave of consolidation in the 1990s is being repeated, with M&As (mergers and acquisitions) averaging a value of \$10-20 billion per year. In addition to prime contractors absorbing smaller outfits, private equity funds are increasingly active buyers of small and medium-sized defense firms (Cerebus’ purchase of Dyncorp being one of the most well-known). The troubling aspect of this is that because such funds are privately held the firms they purchase are no longer subject to SEC filings requirements, making it difficult to exert oversight. “Merger Market Heats Up Again.” 29 March 2010. <http://www.defensenews.com/story.php?i=4557511>

⁸⁴ Section 36(b)(1)(g) of the Arms Export Control Act (22 U.S.C. 2776) requires this information to be treated as “Confidential Information” in accordance with section 12(c) of the Export Administration Act of 1979 (50 U.S.C. App. 2411(c)). This information is exempt from disclosure under section 552 of title 5, United States Code, and shall not be published or disclosed without a determination that withholding is contrary to the national interest. See Defense Security Cooperation Agency memo. DSCA 00-01. 19 January 2000. “Inclusion of Offset Costs in Letter of Offer and Acceptance (LOAs),” Policy I-012655/99, p6. www.dsca.mil/samm/policy_memos/2000/DSCA%2000-01.pdf

customers are the defense firms themselves and industry consultants. If they want information on their competitors' practices, they pay private sector business intelligence firms to collect that information for them, they do not rely on government documents. Offset programs are also frequently promoted by the firms themselves, who have an interest in appearing 'generous' in their offset fulfillment in order to secure future export contracts.⁸⁵ It is telling that, although the BIS is in charge of collecting data on offsets, the agency is not granted a budget to acquire subscriptions to these databases.

Addressing an industry conference on offsets shortly after release of the 2009 BIS report, William Hawkins, then-Senior Fellow for National Security Studies at the U.S. Business and Industry Council (which represents many of the suppliers and smaller firms whose business has been outsourced under offset arrangements) stated that the real reason for truncating the BIS report was that, "they [the prime contractors] didn't want the American public to read the report."⁸⁶ Yet, the trend is toward continued restriction in the information that must be submitted to the BIS. A rule change under current consideration would cut out reporting requirements for some types of offsets (barter, counterpurchase and buyback); eliminate the reporting category "cash payment" – transferring such transactions into the "other" category; eliminate the requirement that the offset recipient be identified; and require that firms only report those offset transactions for which they are directly responsible, making it easier for prime contractors to avoid

⁸⁵ A more logical motivation for not publicly disclosing aggregated data is that it makes analysis of the political and economic impact of offsets more difficult, since researchers must cull through press releases, industry trade magazines, and official government correspondence to produce any data suitable for analysis.

⁸⁶ "Reviews of SMI's Ankara Conference." CTO Newsletter. 9 March 2009. (27)5.

reporting offset transactions by farming them out to smaller subcontractors who might themselves sign multiple offset agreements with foreign entities below the \$5 million reporting threshold.⁸⁷ The change also suggests a serious shortcoming in previous annual figures by clarifying that companies *must* report offset agreements even if the offset itself does not include defense articles. Many (in fact, most) offsets are investments such as joint ventures or start-up capital for private enterprises that are not defense-related. That the rule change had to single these out suggests that in the past many such transactions went unreported. This is especially worrisome since these indirect transactions are concentrated in the developing world and constitute the overwhelming majority of offsets in the Gulf.

The earliest BIS reports are based on figures provided by an average of 25 firms, a number that gets increasingly smaller in subsequent reports as industry consolidation has resulted in fewer and larger firms. In 2007, the entire universe of (reported) offset agreements associated with defense sales were made by only 10 firms.⁸⁸ Yet one company that provides services to defense firms to ‘streamline’ the offset process reported that for the month of May 2009, 60 prime contractors and 1,500 SME’s (small-to-medium enterprises) were simultaneously involved in 245 offset projects in 17

⁸⁷ A 1992 amendment to the Defense Production Act lowered the reporting requirement from \$50 million to \$5 million. A 1985 report by the U.S. International Trade Commission reported that \$108 million (1.1%) of the \$8.7 billion in military offsets reported for the years 1980 through 1984 were for transactions less than \$2 million. If we assume that transactions are equally distributed across the cost spectrum, then we can estimate that perhaps 2.5% of transactions are under \$5 million. This would indicate that a significant dollar amount of offsets goes unreported each year. U.S. International Trade Commission. October 1985. “Assessment of the Effects of Barter and Countertrade Transactions on U.S. Industries.” Report on Investigation No. 332-185 Under Section 332 of the Tariff Act of 1930. Publication 1766.

⁸⁸ Bureau of Industry and Security (BIS). 2009. “Annual Report on Offsets in Defense Trade.” 2009. Department of Commerce.

countries.⁸⁹ This suggests that prime firms probably break up offsets into smaller components and distribute them across the subcontractors or suppliers in order to evade reporting requirements.⁹⁰ In his 1999 testimony to a House Subcommittee on the impact of defense offsets, Joel Johnson, Vice-President of Aerospace Industries International, suggested as much by stating that he and other industry experts, “urge offset managers,” in the prime contracting firms to “spread about” indirect offsets.⁹¹

Getting Paid: The Evolution of U.S. Government Offset Policy and How Defense Firms Recoup the Cost of Offsets

Moves to restrict U.S. agencies from collecting data and exercising oversight paralleled the withdrawal of official DOD support and involvement in negotiating and implementing offset contracts. Once the DOD was no longer in the business of financing and/or guaranteeing offsets, the firms themselves – increasingly on the hook for paying for offsets – needed to find some other way to offload their considerable costs. The policy of allowing contractors to pass-on the costs of their offsets emerged incrementally; first firms were allowed to recover “administrative costs” incurred in implementing offsets, this was later expanded to include all costs.⁹²

⁸⁹ Epicos.com (subscription required).

⁹⁰ The 1992 legislation was an amendment to the Defense Production Act that lowered the reporting requirement from \$50 million to \$5 million. For a pre-1992 perspective on the threshold see Government Accountability Office. 17 December 1990. “Military Exports: Implementation of Recent Offset Legislation.” GAO/NSIAD-91-13. www.gao.gov/products/NSIAD-91-13

⁹¹ Testimony of Joel Johnson. 29 June 1999. “Defense Offsets: Are They Taking Away Our Jobs?” Hearing before the Subcommittee on Criminal Justice, Drug Policy, and Human Resources of the Committee on Government Reform. U.S. House of Representatives. Serial No. 106-114, p143.

⁹² Government Accountability Office. 18 December 1998. “Defense Trade: US Contractors Employ Diverse Activities to Meet Offset Obligations.” GAO/NSIAD-99-35, p2-3. www.gpo.gov/fdsys/pkg/GAOREPORTS...99.../content-detail.html

In 1999 the Defense Federal Acquisition Regulation Supplement (DFARS) was changed to reflect this reality:

A U.S. defense contractor may recover all costs incurred for offset agreements with a foreign government or international organization if the LOA [Letter of Offer and Acceptance] is financed wholly with customer cash or repayable foreign military finance credits.⁹³

This means that the actual cost of whatever offset is requested by the purchasing country will be included in the contract as the (inflated) price of the equipment – a fact alluded to several times above.⁹⁴ When this inflated price is paid, the contractor uses this excess income to provide offsets. Although anecdotal evidence from individual cases reported in the media suggests that the amount added on by the firm greatly exceeds the eventual sum they pay out in offset projects, the secrecy accorded arms transactions, the U.S. government’s abdication of oversight of offsets, and extensive use of offshore havens makes isolating the actual cost of the offset virtually impossible. This is especially true since the contract cost for material, support, training and maintenance for the same weapons system can vary significantly depending on current supplier prices, transport costs and personnel costs.

It is clear that officials in (some) procuring countries are aware of the accounting mechanisms employed by defense firms, as the comments of one member of the UAE’s

⁹³ Section 225.7303 of the U.S. Defense Federal Acquisition Regulation Supplement (DFARS).

⁹⁴ Ironically, in a series of internal DSCA memoranda, Defense Procurement Director Eleanor R. Spector stated, “Contracting officers should treat all offset costs as allowable FMS contract costs. To disallow such costs means that U.S. companies must absorb offset costs that are required by the foreign government as a condition of making the sale. It is only reasonable that foreign governments that require offsets should bear the costs of those offsets.” See Defense Security Cooperation Agency memo. DSCA 00-01. 19 January 2000. “Inclusion of Offset Costs in Letter of Offer and Acceptance (LOAs).” Policy I-012655/99, p5. www.dscamilitary.com/samm/policy_memos/2000/DSCA%2000-01.pdf

official offset bureaucracy make clear:

If we look at the procurement and try to find the offset cost you will not find it. There are a lot of ingenious ways to hide that cost. They are charging also for offset fees from countries that don't have offsets for their procurements, just to take that extra money and try to invest it in a country that does have an offset program. And we know that this is true.⁹⁵

This awareness lends credence to the substantive claim of my research: mainly that offsets are a covert tool regimes use to deliver benefits to privileged actors, not an effort to derive economic benefit from arms procurement. If there are a handful of countries that could act as “price-makers” on the global arms market, the UAE is certainly among them, and thus it should be able to demand that offset costs *not* be included in potential sales – something it has never done.⁹⁶ Even if we acknowledge that the UAE has put more bureaucratic resources into designing and managing its offset program than most – and is therefore more likely to be cognizant of the costs of offsets – there are sources of information accessible to all procuring country officials. A DSCA (Defense Security and Cooperation Agency) memorandum detailing offset pricing practices is publicly available online, and therefore accessible to officials from any country. And if the memo's legalese is daunting, a postscript from the U.S. director of defense procurement provides more than adequate clarification:

Contracting officers should treat all offset costs as allowable...[t]o disallow such costs means that U.S. companies must absorb offset costs that are required by the foreign government as a condition of making the sale. It is only reasonable that

⁹⁵ Comments of Saif Al Hajeri, Director of the UAE's Offset Venture Group at the 2007 Middle East Regional Offset Conference held in Abu Dhabi. CTO Newsletter. 12 March 2007. 25(5).

⁹⁶ During the speech cited above, Hajeri suggested that the UAE did in fact have the necessary data to single out the added costs of offsets, and hinted that the government might even publish these figures in a general report. But this report was never compiled. CTO Newsletter. 12 March 2007. 25(5).

foreign governments that require offsets should bear the costs of those offsets.⁹⁷

Richard Aboulafia, a defense industry analyst at *Teal Group*,⁹⁸ was even more blunt in a June 2010 article in the *Financial Times*, “There seems to be a massive confusion about who pays for offsets. It’s the buyer, not the seller.”⁹⁹ In addition to official policy and the observations of analysts and foreign officials, the financial performance of offset agencies within the major defense firms also indicates that the firms reap significant financial rewards from the offset system. *Thales International Offsets, SAS* – the industrial participation arm of the French defense firm – has an annual net income of \$5 million.¹⁰⁰ If the purpose of a defense firm’s industrial participation department is to invest ever-larger sums in the domestic economies of arms importers, it is difficult to see how they could turn a consistent profit.

Despite the gravity of this revelation, strikingly few reports produced by the media or defense watchdog groups acknowledge the reality that offsets are financed by purchasing governments. Aside from the above statements and memo excerpts referenced here, I have found only one article (an op-ed in an online English-language daily in India) that divulged this actuality.¹⁰¹ It is likely that this reference only exists because offsets had

⁹⁷ See Defense Security Cooperation Agency memo. DSCA 00-01. 19 January 2000. “Inclusion of Offset Costs in Letter of Offer and Acceptance (LOAs).” Policy I-012655/99, p5. www.dsca.mil/samm/policy_memos/2000/DSCA%2000-01.pdf

⁹⁸ Joel Johnson, former VP of the industry association Aerospace Industries of America, is also at *Teal Group*.

⁹⁹ Sylvia Pfeifer. 10 June, 2010. “Overseas defence clients get tougher.” *Financial Times*.

¹⁰⁰ Hoover’s Profile. (subscription required). Accessed 10 May 2011.

¹⁰¹ The (anonymous) blogger writes, “There is an economic cost to offsets. Depending on the economic conditions prevalent in the offset [recipient] country...vendors hike the cost of their product to compensate.

recently become a hot news topic in Delhi after *Lockheed Martin* began initial delivery of C-130J transport vehicles and it was revealed that most of the offset projects on which the Indian government signed off either consisted of tertiary support equipment that should have been included in the original contract or named joint venture partners who denied ever having been approached by the firm or Indian defense officials.¹⁰² Just days later, confidential documents detailing the offset proposals of *Lockheed* and a handful of other firms for an \$11 billion acquisition of multi-role fighter jets were found on a roadside in South Delhi.¹⁰³ These unusual news items intensified public scrutiny of the revised offset requirements just passed by India's legislature – most likely prompting the revelatory op-ed.

Yet even under such conditions of enhanced scrutiny, the fable that offsets are a legitimate component of economic development programs continues, allowing firms to promote offsets as cost-saving and/or developmental measures – often using them as a pretense to chastise countries that attempt to trim their defense bill. When Romania decided to purchase secondhand F-16s from the U.S. as opposed to issuing an international tender for new fighters, spokespersons for *EADS* (France-Germany), *BAE* (UK), and *Alenia/Finmeccanica* (Italy) issued a joint statement condemning Bucharest's decision and lamenting the loss of investment and jobs that their offset packages would

Therefore, an offset [recipient] country pays more for the import of defense items than it would otherwise have to if it did not impose mandatory offset obligations.” 8 January 2011. “Muddled defence offsets policy.” *Pragati: the Indian National Interest Review*.
<http://pragmatic.nationalinterest.in/2011/01/08/muddled-defence-offsets-policy/>

¹⁰² Ajai Shukla. 10 December 2010. “Lockheed offsets mock MOD norms.” *Business Standard* (New Delhi).

¹⁰³ “Secret IAF file goes missing, probe ordered.” 31 December 2010. PTI (Press Trust of India) wire service.

have provided in this “period of economic crisis.”¹⁰⁴ Offset service providers also continue to characterize their projects as tools designed to “balance budgets” and “keep defense spending substantially down.”¹⁰⁵

This confusion is reflected in a confidential procurement document from the South African Ministry of Defense, which surfaced during an investigation into alleged corrupt payments funneled through offset contracts,

In the case of the NIP (national industrial participation) projects [offsets], the assessment of ‘contract risk’ is much more controversial. One side of the argument suggests that it is possible (or even probable) that suppliers have priced into their weapons contracts some or all of the penalties payable for non-performance . . . It may therefore be in their interests to accept this cost rather than to take on the additional risks and potential costs of NIP projects.¹⁰⁶

Significance of Study and Contribution to Existing Literature

The theoretical framework for this project draws largely from the most recent work on the rentier state. Divergent findings by those working within this framework have produced calls to “push rentier theories in a more contextually sensitive research direction,” a task to which defense offsets are uniquely well-suited.¹⁰⁷ Not only do offsets exhibit meaningful variation between cases that appears to map onto our understanding of how different types of authoritarian regimes seek to reproduce their support networks, they are also indicative of a class of trade-based rents that are of increasing interest to

¹⁰⁴ CTO Newsletter. 12 April 2010. 28(7).

¹⁰⁵ Comments of Grant Rogan, CEO of offset services firm Blenheim Capital, at the 2010 Global Industrial Cooperation Conference in Budapest. CTO Newsletter. 24 May 2010. 28(10).

¹⁰⁶ CTO Newsletter. 13 October 2008. 26(19).

¹⁰⁷ Moore, 2004, calls for scholars to supplement Large-N studies with less parsimonious “messy” case studies, specifically focusing on different rent types, individual rulers’ strategies, contrasting sociopolitical antecedent conditions and other case-specific variables.

comparative political economists.¹⁰⁸ The capacity of offset projects to constitute a new form of distributive institution has been completely overlooked by regional specialists, and has received only minimal treatment from political economists. I believe this scholarly oversight stems from the opacity of data sources, itself a manifestation of efforts by both industry and governments to obscure this form of exchange.¹⁰⁹

Many works that utilize the rentier approach are criticized for an overly generalized focus on macro-economic or structural processes and related data sources, and (consequently) an inadequate treatment of variation in their impacts on individual rentier states. When such generalized phenomena as “Dutch Disease” produced dramatically different results in different sociopolitical contexts (think Norway vs. Saudi Arabia) critics of the approach questioned its explanatory leverage. Within-case variation presented a similar problem, as researchers demonstrated (or postulated) contradictory claims based on supply-side fluctuations. The wild oscillations in oil prices, erosion of Cold War-era arms giveaways and sustained pressure to liberalize their statist economies prompted scholars to predict changes in Middle East politics ranging from political decompression to liberalization to outright democratization. Many convincingly argued that as dwindling patronage resources threatened the distributional basis of the authoritarian bargain, regime legitimacy would similarly erode (Brynen 1992; Brynen, Korany and

¹⁰⁸ Scholars have identified selective privatization, loan forgiveness, credit assistance, managed or ‘protocol’ trade and income from previous investments of oil concessions as politically important rents that are understudied.

¹⁰⁹ Shana Marshall. November 2009. “Money for Nothing? Offsets in the U.S.-Middle East Defense Trade. *International Journal of Middle East Studies*.

Noble 1995; Salamé 1994; Geddes 1999).¹¹⁰

However, what area scholars observed was a period of politics that was remarkable for its stasis rather than any significant indicators of change. Discussions of authoritarian ‘endurance,’ ‘resilience,’ and ‘robustness,’ soon dominated the literature, which sought to identify and examine those institutions responsible for reproducing the structures of regime maintenance.¹¹¹ An emerging critique concerned the rentier state theory’s “lack of a conceptual avenue of how rent saturated economic structures are managed by state policies following a sharp decline of rent revenues.”¹¹² The role played by exogenous shocks – the oil and debt crises in particular – in authoritarian breakdown in Latin America, Eastern Europe and elsewhere prompted scholars to ask what it was about the regimes of the Middle East that made them somehow immune to such tectonic forces.

In response, regional scholars concentrated on the ways in which regimes were able to ‘upgrade’ and ‘innovate’ their traditional methods of authoritarian rule through carefully calibrated institutional changes and superficial modifications that paid lip-service to democratic ideals but left underlying configurations of political power fundamentally unchanged. These came in many forms, including the introduction of political

¹¹⁰ Barbara Geddes proves that this logic was not restricted to area scholars of the Middle East. In her well-known 1999 article “What do we know about democratization after twenty years?” she observed that, “various economic reforms were cutting profit opportunities out from under rent seekers all over the world. Economic reform reduced benefits to regime supporters at the same time that the crisis itself reduced acquiescence among ordinary citizens.” *Annual Review of Political Science*. 2: p139.

¹¹¹ King 2007; Pripstein-Psousney and Penner-Angrist 2005; Bellin 2004; Heydemann 2004; Brownlee 2002; Perthes 2004.

¹¹² Richter, Thomas and Christian Steiner. November 2007. “Sectoral Transformations in Neo-Patrimonial Rentier States: Tourism Development and State Policy in Egypt.” German Institute of Global and Area Studies Research Unit, Institute of Middle East Studies. Working Paper, No. 61: p8.

contestation controlled through constitutional mechanisms and electoral engineering, increased ties with non-democratic states - especially the “emerging” economies – that were less vocal about the need for reform, the formation of an alternate discourse of economic justice and collective rights to serve as a counterweight to prevailing definitions of democracy and individual human rights (Heydemann 2007), flooding emerging communications platforms with state discourse to drown out opposition voices, undermining the credibility of international legal and political bodies (Windsor, Gedmin and Liu 2009), extending state control over informal markets (Elyachar 2005; Boone 1994) and by harnessing emergent rent sources such as selective privatization, loan forgiveness, credit assistance, and protocol trade (Moore and Peters 2009). Similarly, researchers are examining specific sectors of the economy – such as tourism – to uncover how new forms of rents are created and distributed (Richter and Steiner 2007). This project is meant to contribute to this research agenda by informing our understanding of how changing economic conditions drive innovations in patronage politics.

Scholars’ increasing focus on a broader and more diverse body of rents is in response to two (related) phenomena, one empirical and one theoretical. First is the process of economic liberalization taking place in the Middle East and throughout the world, which has shifted the forms of economic exchange open to exploitation for the purpose of generating patronage resources. Defense offsets provide a good example here: the increasingly competitive defense market, driven by military budget cuts after the end of the Cold War, have enabled major arms importing countries to demand ‘sweeteners,’ including informal bribes as well as formal offset programs, which they then steer to

supportive domestic power brokers. Unlike traditional patronage resources, offsets appear to be generated (and distributed) through apolitical market channels. Second is the spate of work by Middle East scholars questioning key aspects of how the rentier paradigm has been applied (Herb 1999, 2003, Okruhlik 1999, Smith 2007). Although these critiques have not fundamentally challenged the utility of a rent-centric approach, they have succeeded in forcing Middle East scholars to better document the processes through which regimes have utilized rents to secure their coalitions, and to better demonstrate the full range of available rent types and how these have differential impacts on regime etiology.

Defense Offsets as an Economic Instrument

Although research on the political impact of defense offsets is sparse, there are several studies by economists that seek to evaluate the effect offsets have on economic growth, diversification, and development. However, the paucity of available (and reliable) cross-national or time-series data means that most of these are single case studies that address relatively limited time periods. This literature approaches defense offsets as a subcomponent within the larger category of barter or ‘countertrade,’ which (by one estimate) accounts for anywhere between five and thirty percent of current global trade.¹¹³ The simplest form of barter frequently entails the exchange of raw materials such as oil, timber or lithium from developing nations in exchange for capital goods like weapons, transportation equipment or telecommunications equipment from the

¹¹³ Brauer, Jurgen and J. Paul Dunne. June 2004. “Arms Trade Offsets – What do we know?” Paper presented at 8th annual International Conference on Economics and Security, University of the West of England, Bristol UK. 26-28 June.

industrialized countries. Yet sophisticated barter arrangements have also become commonplace, promoted by the increasing number of firms specializing in designing and insuring barter transactions and the variety of financial instruments available to facilitate them. Bartering their natural endowments enabled many developing countries to import finished products despite shortages of hard currency and chronic levels of indebtedness.

Defense offsets follow this same basic logic: in order to ameliorate the political and economic costs of purchasing foreign-made weapons (which many within the procuring country are likely to argue should be produced domestically) purchasing governments can point to offsets as concessions they managed to secure from their wealthy trading partners. Because sustaining production lines and reducing the per unit cost of equipment for the home-country military necessitates securing substantial export orders, exporting country governments have similarly supported the practice of offsets. This is despite the potential long-term losses in technological superiority when transfers of sensitive technology are involved.

Although defense firms portray offsets as purely economic phenomena generated by rigorous market competition, the capacity of offsets to contribute to development in the procuring country is extremely limited. Based on theoretical models and historical assessments, the preponderant view of economists is that offsets are detrimental to development in importing countries for a range of reasons, many of which are unrelated to the fact that the countries are paying for the offsets in inflated contract prices.¹¹⁴ In

¹¹⁴ Brauer, Jurgen and J. Paul Dunne. June 2005. "Arms Trade Offsets and Development." *Africanus* (South Africa). 35(1): 14-24. See also Dumas, Lloyd J. September 2002. "Weapons Procurement and

addition to contributing to suboptimal procurement policy and the inefficient allocation of state resources,¹¹⁵ when countries barter prime commodities for arms the price they get is usually below the prevailing market price. And when defense firms provide export assistance to fulfill their offset obligation, this prevents the emergence of an indigenous capability to process, market and/or transport the procuring country's own goods, reproducing the relationship of dependency. Economists at the consulting firm *Deloitte* estimate that the redundancy and duplication necessary to engage in defense offsets (such as the construction of multiple facilities, subassembly travel costs, transporting personnel back and forth, etc.) is in the range of 20-30% of the overall offset value.¹¹⁶

As Cold War imperatives faded and military budgets shrank, offsets became an increasingly important tool in a "race to the top" among governments seeking to subsidize their domestic defense industries and increase arms exports. In this sense, offsets are part of a broader package that includes export loan guarantees, public financing, energy subsidies, government-financed trade shows, diplomatic salesmanship and other methods used to encourage purchases by foreign countries in an increasingly competitive international market. This competition has done more than merely boost innovation, it has encouraged defense firms to engage in 'regulatory capture.' In this case, defense industry advocates succeeded in repealing or weakening legislation aimed

Development: Do Offsets Mitigate or Magnify the Military Burden?" Paper delivered at the International Conference on Offsets and Economic Development. Cape Town, South Africa. 25-27 September. See also Taylor, Travis K. July 2001. "An Empirical Evaluation of Offset Arrangements." Proceedings of the International Society for New Institutional Economics 2001 Annual Meeting.

¹¹⁵ Banks, Gary. 1983. "The Economics and Politics of Countertrade." *The World Economy*. 6(2): 159-182.

¹¹⁶ Thomas R. Captain. "Offset Agreements Don't Have to be Necessary Evils." *Aviation Week & Space Technology*. 164(12): p86.

at limiting the scope of offset agreements, including regulations governing the outsourcing of defense manufacturing, the transfer of sensitive technologies, and the inclusion of incentives in defense contracts that aid foreign companies that are in direct competition with American firms.¹¹⁷ As outlined above, they were also successful in securing an amendment to U.S. procurement and acquisition policy authorizing firms to bill procuring countries for *all* the costs associated with their offset activities.¹¹⁸

Political economists have shown that, with respect to large transactions such as arms exports, natural resource exports and large civilian infrastructure projects, international competition has actually *increased* the prevalence of corruption, precisely because each single contract is so lucrative.¹¹⁹ The high potential profits – and small penalties for those found guilty of malfeasance – mean that companies are willing to risk prosecution in order to secure contracts.¹²⁰ This is reflected in the large number of corruption suits centered on defense offset projects. These large contracts not only guarantee a company's profitability for long periods, but are also important to local politicians in the

¹¹⁷ A bill that would have prohibited defense firms from offering assistance to help foreign companies compete in the U.S. was introduced by former Senator Russ Feingold in the early 1990s, but did not achieve passage.

¹¹⁸ This is explored at length later in this chapter. Initially firms could only recover the costs associated with 'administering' the offset program (so, not the costs of equipment, etc.). This was eventually expanded to include any cost the firm could associate with the provision of defense offsets. This of course is only germane to those export contracts over which the U.S. Government has some jurisdiction in the first place, which would be those concluded as FMS (Foreign Military Sales) agreements, not those concluded under commercial terms, in which the U.S. Government does not intervene to ensure adequate price competition, etc.

¹¹⁹ Carolyn Warner. 2007. *The Best System Money Can Buy: Corruption in the European Union*. Ithaca, NY: Cornell University Press.

¹²⁰ The World Bank estimates that about \$80 billion in bribes and pay-offs are generated by the defense trade every year. Transparency International's Corruption Perception Index shows that arms manufacturers are perceived to be the industry most willing to pay bribes.

firm's host state, who are seeking to maintain production lines, increase employment or raise campaign funds from large corporations.¹²¹ Consequently, many large defense firms, especially their aerospace divisions, are shifting resources to focus less on the traditional pillars of economic competitiveness and more on the business of politics.

Authors of a study published in the *Journal of Operations Management* conducted interviews with 260 individuals in industry, government and academia to uncover the major drivers of current defense industry planning. They found that the large prime contractors were focused on reforming their governance structures by trying to divest themselves of some technical capabilities associated with machining, workforce management and manufacturing control whilst investing in others, including “systems integration, *offset*, mergers, politics and contracts.”¹²²

This shift is also reflected in the speech of a former industry trade group executive, who criticized delegates attending an offset conference for what he perceived as their perverse prioritizing of offset contracts over the actual military equipment, stating “you tend to hear more about offsets than the weapons system itself” and “you have heard a couple of talks this morning in which I never heard the words ‘weapons system’ spoken once.”¹²³

While industry critics tend to characterize the presence of offsets as a nuisance and a

¹²¹ BAE is currently under investigation for its offset programs in South Africa, which funneled money to African National Congress (the ruling party) campaign coffers through front companies and local suppliers that ostensibly participated in the firm's offset activities.

¹²² T. Williams, Roger Maull and Bruce Ellis. 2002. “Demand chain management theory: constraints and development from global aerospace supply webs.” *Journal of Operations Management*. 20: p703.

¹²³ CTO (Counter Trade & Offset) Newsletter. 28 May 2008. 26(10).

distraction, those outside industry contend that the increasing centrality of offsets may be driving unnecessary military acquisitions – not only straining state budgets but contributing to global arms races as well.¹²⁴

There is one study that suggests offsets might provide some concrete economic benefit. Published in the *Journal of Policy Modeling*, the study relies on observations taken from a bi-weekly newsletter called the *Countertrade & Offset Newsletter*.¹²⁵ The author creates a binary typology of offsets based on whether they are designed to minimize the cost of the transaction [ie, the price the procuring country pays for the defense materiel] or to supply a ‘package enhancement’ that can be diverted to critical actors and/or institutions. Although the ‘package enhancement’ offsets are found to be of no economic value, the author finds that offsets like sub-contracting, licensed production, co-production and buyback [all direct offsets] can *theoretically* reduce the cost the purchasing country must pay for the equipment. The potential discount comes either through sourcing some portion of the material or labor in the procuring country (which presumably has lower production costs),¹²⁶ or by creating a real incentive for the foreign

¹²⁴ Such critics include Transparency International as well as academics studying the economics of arms trade offsets.

¹²⁵ A subscription to this newsletter is quite expensive (over \$1,000/year). Consequently, even the U.S. Bureau of Industry and Security – the only U.S. government agency that systematically reports on defense offsets – does not have a subscription. Instead, the BIS relies solely on annual reports provided by the defense firms themselves, which are not required to provide any supporting documentation, such as invoices or delivery schedules, to verify their figures.

¹²⁶ Offset-driven outsourcing has been particularly unpopular among lower-tier firms that supply basic components for the prime defense firms. As demand for their product dwindles, so does the number of manufacturing jobs they are preserving, and the protectionist policies they can elicit from local politicians. Because lower-tier suppliers that provide specific components to be used in the construction of defense equipment are the most likely to lose out under offset schemes (which outsource this construction to the procuring country), prime contractors are frequently at odds with suppliers over U.S. offset policy. Thus the continued growth of offsets is driven not only by demand-side requests for offsets, but also by the potential economic benefits prime contractors get from outsourcing their supply-chain. The Aerospace Industries

defense firm to improve the efficiency of its domestic offset partner. Because the foreign firm must rely on the quality of that partner's inputs to maintain the integrity of its branded weapon system, the assumption is that the firm will act to improve management and cut back on waste and fraud.

However, this logic is flawed for a number of reasons. First, the defense firm's imperative to secure future contracts probably surpasses concerns over efficiency and transparency in the domestic partner – especially if the collaborative project is limited in scope and will not be exported. And since it is the reigning political class that dictates decisions on future arms procurement *and* identifies the domestic partners with which foreign defense firms must collaborate, these firms are likely to privilege the satisfaction of political elites over productive concerns. Furthermore, in certain cases there may be no incentive for the defense firm to 'discipline' its domestic production partner. A series of GAO reports published in the late 1990s/early 2000s found that co-production agreements with Egypt dramatically *increased* the per-unit cost of tanks and other jointly manufactured equipment. But because the program was administered through official U.S. military assistance channels, *General Dynamics* was paid the same amount regardless of the number (or quality) of units Egypt produced. From the perspective of the Egyptian Military, the increased opportunities for employment, the provision of dual-

Association lobbies on behalf of the large prime contractors and is an avid proponent of free-trade (including lessening export restrictions and diluting the 'Buy American Act' that requires the U.S. Government to give preference to domestic manufacturers. Many of the primes are partnered with European firms on major weapons systems; these lucrative partnerships are more difficult to maintain in the face of the protectionist policies promoted by their smaller counterparts, including the National Association of Manufacturers. For example, Northrop Grumman funded an intense campaign against Boeing and in support of its partner the European Aeronautic Defense and Space Company (EADS) to build the U.S. Air Force refueling tanker. The Joint Strike Fighter is another example, financed by the U.S. and several European governments it involves Lockheed Martin, Northrop Grumman and BAE, the latter of which now employs more workers in the US than in the UK.

use equipment, and the prestige of manufacturing the most technologically sophisticated main battle tank available outweighed concerns over cost. This was especially true as most of the project was being financed by U.S. military aid, and because the military's budget is a state secret, cost overruns could be easily (and discreetly) financed from other ministerial budgets without raising eyebrows.¹²⁷

Despite the fact that the majority of current research concludes offsets produce no benefit to the domestic economy, arms purchasers continue to pay significantly more for weapons contracts that include offset provisions.¹²⁸ A survey of British defense firms conducted in the mid-1990s revealed that although offset requests at the time were generally equal to about 60% of the contract cost, the contract price was increased 100% by the defense contractor (ostensibly) to cover the costs of the offset.¹²⁹ This supports the claim that offset requests by procuring countries are not based on economic concerns, but instead are politically motivated.¹³⁰ One U.S. State Department official admitted as much, stating "it is rare in today's international economy that offsets can be demonstrated

¹²⁷ Government Accountability Office (GAO). July 1993. "Military Aid to Egypt: Tank Coproduction Raised Costs and May Not Meet Many Program Goals."

¹²⁸ Brauer and Dunne, the foremost academics currently studying the economics of offsets conclude, "Extant evidence suggests that offset arrangements do not yield net benefits for a country's economic development . . . Arms trade offset deals are more costly than 'off-the-shelf' arms purchases, create little by way of new or sustainable employment, do not appear to contribute in any substantive way to general economic development, and with very few exceptions do not result in significant technology transfers, not even within the military sector." Jurgen Brauer and J. Paul Dunne. "Arms Trade Offsets: What do we Know?"

¹²⁹ Martin, S. and Hartley, K. 1995. "UK Offsets: Survey Results." *Defence and Peace Economics*. 6(2): 123-39.

¹³⁰ Peter Batchelor and Paul Dunne. September 2000. "Industrial Participation, Investment and Growth: The Case of South Africa's Defence-Related Industry." *Development Southern Africa*. 17(3), p4.

to have purely economic advantages for the customer. More often the real gains are found in the political arena.”¹³¹

In addition to economic treatments of offsets, scholars have also evaluated their strategic implications. These studies most often focus on the security implications of relocating defense production, transferring sensitive technologies, and the potential loss of in-house capabilities. Conclusions frequently differ along industry-government lines; researchers employed by defense firms or coming from a private sector background frequently dismiss concerns over offsets. These researchers claim that offsets are beneficial because they enhance interoperability among allies, or are at worst benign, since industry innovation outpaces the export of technology.¹³² Critics counter that offsets drive the need for excessive research and development (R&D) spending, not that speedy innovation enables risk-free offsets.¹³³ Although my project does not explicitly deal with the security implications of defense offsets, the transfer of capabilities and materials to the defense and security institutions of repressive states is certainly an issue of concern.

Defense Offsets as a Political Instrument

As observed above, there are very few studies of the politics of defense offsets. Even

¹³¹ Stephanie G. Neuman. Spring 1985. “Co-production, Barter and Countertrade: Offsets in the International Arms Market.” *Orbis*. 165-181.

¹³² Of course, Veblen’s insight that ‘invention is the mother of necessity,’ an inversion of the proverb ‘necessity is the mother of invention,’ suggests that an activist approach to the exporting of weapons technology allows defense firms to demand public funds and other forms of government assistance to support continued research and development efforts.

¹³³ Markusen, Ann. November 2002. “The Arms Trade as Illiberal Trade.” Unpublished manuscript. Council on Foreign Relations.

paired case comparisons that might give us some basis for deducing the role of political influences are scarce. Reports and studies commissioned by trade groups or governments also tend to obscure the political components of offsets, as both parties have an interest in reinforcing a false boundary between their economic and political motivations. One notable exception is a survey conducted by the U.S. Bureau of Industry and Security, which consulted “foreign and domestic entities” and concluded that “subsidizing interest groups” was primary among the rationales for offsets.¹³⁴ Official surveys notwithstanding, firms and industry advocates characterize offsets as manifestations of objective market conditions, insisting that government regulation or oversight is unnecessary because offsets are commercial tools devoid of politics.¹³⁵ Researchers likewise frame their puzzles in terms of economic, rather than political, imperatives. After discerning that importing states realize that the efficacy and social benefits of mandatory offset programs are dubious at best, and that defense firms price offset costs into their bids as a matter of course, two authors observe that: “Against this, buyers with any market power at all can negotiate price discounts as easily as package enhancements – and their preference for offsets remains to be explained.”¹³⁶ However, if we examine

¹³⁴ BIS Offsets, 11th Annual Report, p182. I take the term ‘interest groups’ to be synonymous with ‘political coalition’ or ‘elite network,’ expressed in the peculiar language of public choice scholarship in the American tradition.

¹³⁵ Joel Johnson, former VP of Aerospace Industries of America, a prime contractor trade group, has been the most vocal proponent of this perspective. In conference appearances and in Congressional testimony he has consistently stated that offsets should remain the concern of private industry, and that government involvement is unnecessary and detrimental to trade. CTO Newsletter. 22 February 2010. 28(4). He has also referred to offsets as a “nuisance,” suggesting that both their economic and political impact is minimal. See Johnson’s 29 June 1999 statement to a House Subcommittee on the impact of defense offsets. “Defense Offsets: Are They Taking Away Our Jobs?” Hearing before the Subcommittee on Criminal Justice, Drug Policy, and Human Resources of the Committee on Government Reform. U.S. House of Representatives. Serial No. 106-114.

¹³⁶ Stefan Markowski and Peter Hall. 2004. “Mandatory defense offsets – conceptual foundations,” p52. In Arms Trade and Economic Development: Theories, Policy and Cases in Arms Trade Offsets. Jurgen Brauer and J. Paul Dunne. (eds). London: Routledge.

offsets from a *political* perspective, then the origins of this preference become plain. The costs are diffuse because payment comes from the government's defense budget, whereas the benefits can be delivered by the regime to targeted groups in its support coalition. As a result, offsets have concrete political implications for procuring countries, as they confer real political power on recipient individuals and firms.

The Legalization of Bribery?

As the above section makes clear, companies price the entire offset into their contracts – not merely the price they may pay in penalties, which themselves are rarely imposed.¹³⁷

For such ambiguity to persist requires at least a minimum of intentional deception by selling firms, procurement officials or both. The fact that offsets are paid for by procuring countries with public funds and disguised as development initiatives or security imperatives makes them even more attractive to regimes facing scrutiny over their procurement policy in the age of privatization, restricted social spending and trade liberalization. Kuwait, the UAE and India have, to varying extents, initiated policies designed to make it more difficult for firms to pass-on the costs of offsets.¹³⁸ Kuwait

¹³⁷ See Congressional testimony of Joel Johnson (below) regarding imposition of penalties for non-fulfillment of offset obligations.

¹³⁸ A 2009 article in India's *Business Standard* relates the following: "They [arms vendors] fulfill their offset obligations superficially and add the costs to their bill. That this is happening in India's civil aviation sector (where, as in defence, vendors are liable for offsets) was evident from what former Civil Aviation Secretary Ajay Prasad told a gathering in Delhi last week. Revealing that Kingfisher Airlines had paid \$50 million less than Indian Airlines for similar Airbus aircraft, Mr Prasad explained that was because offsets were mandatory in the purchases by the government carrier. Evidently, the costs of those offsets were added on to Indian Airlines' bill. Such subterfuge can be minimised through responsive policy-making, creating benefits for India's defence economy without unduly taxing vendors. The MoD's first offset policy, promulgated in the Defence Procurement Policy of 2005 (DPP-2005), has gradually evolved, mainly at the instance of Indian and foreign defence suppliers." "Offsets Take Off: Time To Go From Banking to Trading." 25 November 2009. <http://www.business-standard.com/india/news/offsets-take-off/20/30/377532/>. The UAE approach has been to make offset fulfillment dependent on the profits generated from offset projects, rather than the investments made by defense firms. Kuwait announced in

went so far as to initiate a unilateral effort to cease offsets, though this was frustrated by government ministers and powerful domestic businessmen who had benefited by playing the roles of facilitators and middlemen.¹³⁹ The network of prime contractors, subsidiaries, subcontractors, suppliers, domestic investment partners, offset brokers, and the financial and legal entities involved in offset advisory services form a parallel structure of power and authority that disperses responsibility and complicates the enforcement of standards of accountability – further contributing to the use of offsets as instruments of patronage and to the importance of offsets as a source of economic profit for these intermediary actors. These networks often incorporate organizations that one would not expect to see. The Swedish defense firm *Saab*, for example, has utilized the powerful global business networks of one of its largest shareholders – the Wallenberg charitable foundation – to design offset business opportunities that appeal to procuring governments.¹⁴⁰ Similarly, technocrats working in regional development banks are investigating the capacity of offsets to finance domestic infrastructure spending – and presumably advising procuring country governments on how to maximize their offsets.

Ironically, the efforts of procuring country governments to exclude offset costs from arms contracts bear a striking resemblance to their previous attempts to ensure that the cost of bribes paid to individual ‘agents’ were not passed on in the price of arms contracts. This

2004 that it would halt offsets in government contracts after ‘discovering’ this practice of price hiking, although offsets were resumed shortly thereafter.

¹³⁹ “Kuwait to halt offset projects in new government contracts.” 6-12 September 2004. *GulfWire Digest*. Accessed 25 October 2009. http://www.arabialink.com/Archive/GWDigests/GWD2004/GWD_2004_09_06.htm#BK3.

¹⁴⁰ Smith, Keri. 1 December 2007. “Offsets in Europe: A matter for debate.” *Jane’s Defence Industry Briefing*, p4.

practice was so pervasive that many states in the Middle East passed strict laws prohibiting such activity. In 1969 a decree by the Saudi Arabian Council of Ministers required a clause in all contracts specifying that no agent had been paid to secure the sale of the equipment in question, and that if any agent fees had been paid, an amount equal to those fees must be removed from the Kingdom's bill. Similar agency restrictions are in place in Iraq, Egypt, and elsewhere. Author Ronald Kessler documents how the agency restriction is circumvented in his book on the infamous arms broker Adnan Khashoggi, who pocketed billions by working as an agent for Western defense firms doing business in Saudi Arabia. He describes a meeting where a Western defense executive responds to Saudi inquiries about the participation of paid agents in the firm's successful bid to sell equipment to the Kingdom:

The next day at 1 P.M., Prince Sultan [then-Defense Minister] strode into his office at the defense ministry in Riyadh. After thumbing through the contract, he [Sultan] turned to Gonzalez, the senior Northrop official at the meeting. "Do you have any agent in Saudi Arabia?" he asked. Khashoggi had prepared Gonzalez for this question. He said Sultan would ask it, and he told Gonzalez to answer in the negative. As instructed, Gonzalez answered, "No, not in Saudi Arabia."¹⁴¹

The ruse was possible because Khashoggi promised to be out of the country, thus "not in Saudi Arabia," when the questioning took place for each contract.¹⁴² Although defense firms claim such practices are remnants of a corrupt past, they maintain the same foreign subsidiaries and domestic intermediaries that facilitated this earlier process of bribery, of which offsets can be seen as a logical extension. Consider these two accounts: in order to facilitate his network of bribery, Khashoggi set up a number of 'front' companies,

¹⁴¹ Ronald Kessler. 1986. *The Richest Man in the World: The Story of Adnan Khashoggi*. New York: Warner Books, p78.

¹⁴² Jim Hougan. 1978. "The Business of Buying Friends." In *Crime at the Top: Deviance in Business and the Professions*. John M. Johnson and Jack D. Douglas. (eds) New York: Lippincott Books.

including *Triad Corporation, Lauvier* and *Cantona*. These were incorporated in tax haven countries in order to process his payments – which showed up on the books of the major defense firms as “marketing contingency funds” or similarly innocuous line-items. These costs made a quick stop-over at a U.S.-based subsidiary on their way to Khashoggi so the defense firms could qualify for a tax break from the U.S. government.¹⁴³ Former CIA operative Robert Baer characterized the *Al-Yamamah* offset deal between BAE and Saudi Arabia as “a huge commission-generating machine” with BAE overcharging for its hardware and spare parts, “with the difference going to commissions.”¹⁴⁴

The excess funds generated by including the offset cost in the contract can be transferred to a subsidiary of the contractor (frequently a Foreign Sales Corporation, or FSC) located in a jurisdiction with sufficient banking secrecy, and the money can then be deposited in the appropriate account. According to a 2004 GAO report, the top five U.S. defense contractors have 44 foreign subsidiaries in OECD-classified “tax-haven” countries, whose legal systems can be used to avoid taxation and other forms of financial regulation, including requirements for corporate transparency.¹⁴⁵ Traveling through these

¹⁴³ Jim Hougan. 1978. “The Business of Buying Friends.” In Crime at the Top: Deviance in Business and the Professions. John M. Johnson and Jack D. Douglas. (eds) New York: Lippincott Books.

¹⁴⁴ <http://www.corpwatch.org/article.php?id=9008>. It is generally well-recognized within the armaments industry that the U.S. has the most comprehensive legal guarantees against bribery, notably the Foreign Corrupt Practices Act (FCPA) passed in 1977. This is reflected in the relative frequency with which reports of bribery by British, French, German and Italian arms manufacturers appear in the press, as well as frequent cases brought by U.S. manufacturers against European competitors for unfair business practices. For a first-hand account of this discrepancy between European and U.S. firms see Said K. Aburish. 1985. Pay-Off: Wheeling and Dealing in the Arab World. London: Andre Deutsch.

¹⁴⁵ These numbers exclude Lockheed Martin, which reported no subsidiaries. In fact, Lockheed Martin does have an unknown number of subsidiaries, but none of these qualify as ‘significant’ according to the SEC’s definition. These numbers also exclude BAE Systems (the U.S. arm of British Aerospace), which as of 2008 was the second largest defense contractor in the U.S., but was not yet designated as a ‘U.S. contractor’ when the GAO conducted the study in 2003. The five companies referred to here are those that

opaque channels makes it impossible to exercise oversight of offset contracts. There are numerous anecdotal cases illustrating this process. In Zimbabwe, BAE made payments to John Bredekamp – a prominent businessman, former arms dealer, and ally of the ruling ZANU-PF – by moving the funds from a London-based Lloyds TSB account into *Red Diamond Trading*, a BAE subsidiary registered in the British Virgin Islands, which then deposited the money in *Kayswell Services* (also registered in the British Virgin Islands), whose company records list Bredekamp as a primary beneficiary.¹⁴⁶ A similar role was played by *RLI (Robert Lee International)* and *Travellers World Ltd.*, two companies that became waystations for BAE payments made to Saudi Royals as part of the Al Yamamah deal.¹⁴⁷

These accounts are strikingly similar to what we see today, wherein offset costs are included in the inflated contract price, their “cost” to U.S. firms cited as evidence of intense competitive pressures necessitating continued government subsidies, and the resources are later distributed according to the designs of regime officials in the procuring countries – often through domestic firms that are little more than local agents importing foreign goods. Indeed, today Adnan Khashoggi’s brother Amr operates just such a firm – *Amkest Group* – which acts as a domestic distributor of defense and security systems in Saudi Arabia.¹⁴⁸

were the largest defense contractors in 2008 that were also covered by the GAO study (Boeing, Northrup Grumman, General Dynamics, Raytheon and L-3 Communications).

¹⁴⁶ Christopher Thompson and Michael Peel. 31 July 2008. “UK-Zimbabwe: BAE linked to Zimbabwean arms dealer.” *Financial Times (UK)*.

¹⁴⁷ David Leigh and Rob Evans. 4 November 2004. “Dismay at BAE as fraud office comes calling.” *The Guardian (UK)*.

¹⁴⁸ Zawya Business Profile. (subscription required).

Procuring countries will also frequently express (at the outset of contract negotiations) that price may not be the decisive factor in the bidding process – but rather that the firms’ respective offset packages may be determinative.¹⁴⁹ Because offset agreements are confidential as well as legally and economically complex, they are able to conceal subsidies and payments to regime allies as legitimate contract costs – ensuring that the offset business is steered toward a local firm with the right political contacts. For example, the offsets contained in *BAE*’s 1989 jet sale to South Africa were widely criticized as being a major pipeline for corrupt transfers.¹⁵⁰ In addition to payments to the ruling African National Congress (ANC), which were used to fund the party’s 1999 election campaign,¹⁵¹ *BAE* also made payments to the late South African Defense Minister Joe Modise and other procurement officials who steered coproduction and subcontracting work to companies owned by their families and political cronies.¹⁵² Although the *BAE* tender was nearly twice as costly as its competitors’ bids,¹⁵³ Modise requested that a “non-costed” option be included in the evaluation criteria – otherwise the *BAE* bid would have been disqualified.¹⁵⁴

¹⁴⁹ Catherine Courtney. “Corruption in the Official Arms Trade.” April 2002. Policy Research Paper 001. *Transparency International (UK)*.

¹⁵⁰ “*BAE* Investigation: Prosecution to have political impact.” 2 October 2009. *Financial Times*.

¹⁵¹ One former ANC member told the U.K.’s Special Fraud Office that the commissions from the *BAE* deal were “how we [the ANC] funded the 1999 election campaign.” “*BAE* Investigation: Prosecution to have political impact.” 2 October 2009. *Financial Times*.

¹⁵² Catherine Courtney. “Corruption in the Official Arms Trade.” April 2002. Policy Research Paper 001. *Transparency International (UK)*, p12-13.

¹⁵³ Chris McGreal. 12 November 2007. “Former MP claims ANC killed *BAE* bribery inquiry.” *The Guardian (UK)*. <http://www.guardian.co.uk/world/2007/nov/12/bae.southafrica>

¹⁵⁴ Catherine Courtney. “Corruption in the Official Arms Trade.” April 2002. Policy Research Paper 001. *Transparency International (UK)*, p12-13. The legal and economic complexity of the bidding process provides corrupt procuring officials with a credible excuse for accepting the higher cost contract from which their side payments originate. This reality is reflected in the Tanzania case, which included an alleged payment of \$11 million (30% of the contract cost) to a company controlled by the Tanzanian

The absence of any supranational guidelines or independent third party able to verify any aspects of offset deals has led many NGOs (including Transparency International and the Federation of American Scientists) to demand changes to the practice of offset provision. *Transparency International* reviewed two major offset deals as part of a civil society oversight program, one for the Colombian Air Force and another for the Polish Ministry of Defense. TI concluded that the Colombian offset program was such a high corruption risk that it should be cancelled.¹⁵⁵ TI also pointed out a number of specific red flags in the tenders it reviewed that suggested the offset contract would end up being a vehicle for corrupt payments, including inadequate legal oversight; offset options outside the expertise of potential bidders; a shortage of individuals qualified to evaluate or oversee the offset program; and non-existent penalty mechanisms. In his 1999 testimony to a House Subcommittee on the impact of defense offsets, Joel Johnson, Vice-President of Aerospace Industries Association, which represents the major defense contractors, revealed just how arbitrary offset contracts are:

Offset agreements will frequently have some financial penalty that will be imposed on a company for not completing its offsets. Quite frankly, I don't know of any U.S. company that has paid such liquidated damages . . . Companies do have contractual legal arrangements which would involve financial penalties. But, in point of fact, I don't know of any company that has ever paid one.¹⁵⁶

official who oversaw the deal. Now, in the wake of the SFO investigation, the Tanzanian President is promising to pursue damages from BAE if it is revealed that the price tag was inflated in order to supply commissions. The 2003 sale of two frigates to Romania also included a suspiciously high price that led to an international inquiry. Numerous other NGOs have identified offsets as an instrument of bribery in the arms trade, including the Centre for International Cooperation and Security, the Federation of American Scientists, and the Stockholm International Peace Research Institute.

¹⁵⁵ Mark Pyman. "Offsets and Corruption Risk." Global Industrial Cooperation Conference: European and U.S. Views on Offsets – Panel Session. Seville, Spain. 12-14 May 2008. Pyman was representing Transparency International's Defence Against Corruption Programme.

¹⁵⁶ See Johnson's 29 June 1999 statement to a House Subcommittee on the impact of defense offsets. "Defense Offsets: Are They Taking Away Our Jobs?" Hearing before the Subcommittee on Criminal Justice, Drug Policy, and Human Resources of the Committee on Government Reform. U.S. House of Representatives. Serial No. 106-114, p143. The political sensitivities surrounding defense offsets in the US (especially regarding their implications for domestic employment) have the curious effect of encouraging

The spotty history of offset programs suggests that procuring governments may desire them precisely because they are opaque and their economic impact is difficult to pinpoint. Because the value of the offset differs depending on the source of information, and offset fulfillment can take years if not decades, it is difficult if not impossible to determine to what degree the offset program was implemented, exactly where the funds went, and how many potential jobs or exports they generated. As one former employee in an offset services firm explained, due to the complexity of offset agreements, many procuring country agencies tasked with overseeing offset implementation lack the tools to enforce compliance, and as a result, many obligations are merely fulfilled through the use of “confidential payments.”¹⁵⁷

Keeping track of offset progress can be very difficult, even in countries with fairly sophisticated bureaucracies. In Saudi Arabia, for instance, responsibility for certain offset projects has been transferred between different defense firms, contractors have been given credit for “moral” offsets, “best endeavors,” or for “encouraging” investment by third parties, and offset target deadlines for program completion are routinely missed without penalty. Available data suggests that the success rate for Saudi offset programs is much lower than in many other procuring nations, yet Saudi Arabia ranks as either the first or second largest importer of arms, depending on the time period under

executives and industry advisors to remark on how ineffective they are as instruments of development for procuring countries. No doubt such spokespeople must walk a delicate line between dismissing and praising the impact of their own business practices to different audiences.

¹⁵⁷ “Countertrade Outlook.” 19 May 1986, p1.

examination.¹⁵⁸ It would stand to reason that Saudi Arabia's market power would enable it to compel defense contractors to meet deadlines and value targets, but it is much more likely that because offset programs involve corrupt practices, defense contractors are able to push back against Saudi demands for penalty payments.

Such accounts lend credence to the argument that offsets are nothing more than the institutionalization of a complex system of informal bribery that dominated the arms trade for much of the 20th century. The channeling of offsets through many of the same structures as bribes (including the front companies) and by many of the same actors (including former intermediaries and official firm agents) facilitates their transmission and makes them useful tools for authoritarian elites to dispense assets to privileged members of their support networks – whether formally by investing in their business enterprises, or informally by direct payments. The organizational logic of this earlier system of bribery created the scaffolding upon which offsets are now exchanged.¹⁵⁹

The Layout of Remaining Chapters

The following chapter will provide a more thorough history of defense offsets, putting

¹⁵⁸ Matthews, Ron. 2002. "Saudi Arabia: Defense Offsets and Development." In Arming the South: The Economics of Military Expenditure, Arms Production and Arms Trade in Developing Countries. Jurgen Brauer and J. Paul Dunne (eds). New York, NY: Palgrave. Also see Leo G. B. Welt and Dennis B. Wilson. October 1998. "Offsets in the Middle East." *Middle East Policy*. 6(2): 36-53.

¹⁵⁹ Peter B. Evans makes reference to this 'organizational logic' and its creation of forward linkages in his discussion on the role of large bureaucratic monitoring mechanisms (intelligence and internal security apparatuses) in facilitating the nationalization of extractive industries in the Middle East. See "Transnational Linkages and the Economic Role of the State: An Analysis of Developing and Industrialized Nations in the Post-World War II Period." 1985. In Bringing the State Back In. Evans, Dietrich Rueschemeyer, and Theda Skocpol (eds). Cambridge: Cambridge University Press, p198. Today, the national oil companies and domestic intelligence agencies are probably the two most efficient and effective bureaucratic institutions in many Arab States.

their origin and evolution in context with reference to: (1) global trading patterns; (2) the transformation of methods of bribery and trends in government corruption; (3) shifting narratives of economic development; and (4) changes in how subsidies are provided to domestic arms producers. Chapter 2 will also investigate some of the sources of offset data discrepancies, and ask what these divergent figures may reveal about the interests and actions of exporting countries, defense firms, middlemen and procurement officials. Chapter 3 will examine offsets in three Gulf States: Kuwait, Saudi Arabia, and the UAE, where offset obligations have been used to finance joint ventures between defense firms and the private businesses of regime allies, and also to fund new domestic ventures launched by state-owned investment funds. Chapter 4 will examine the cases of Egypt and Jordan, where military interests have been the beneficiary of offsets, through investment in military owned factories, and – in the case of Egypt – also through generating supply and subcontractor work for the business enterprises of high-ranking military officials. The final chapter will clarify the theoretical goals and conclusions of this project, address some emergent trends that hint at the future trajectory of defense offsets in the Middle East, touch on some comparative cases outside the region, and explore areas of future research.

Chapter 2: Defense Offsets in Context: The Origin and Evolution of Offsets and the Political Significance of Data Discrepancies

“From an industry perspective, offsets are certainly a nuisance.”

Joel Johnson, Vice President of Aerospace Industries International,
1999 testimony to a House Subcommittee on the impact of defense offsets¹

“It just seems to me when something is an inconvenience, seldom do you see people hire entire staffs and fill ballrooms full of people that deal with this inconvenience.”

Congressman John Tierney (D) Massachusetts,
in the same 1999 House Subcommittee hearing

This chapter provides a brief background history of defense offsets, putting their appearance and evolution in context with reference to: (1) global trading patterns; (2) the transformation of international norms regarding corporate governance and public corruption; (3) shifting narratives of economic development promoted by international institutions; and (4) how changes in the global arms market have impacted the way subsidies are provided to domestic arms producers. This chapter will also examine recent innovations in offset programs, including the application of multipliers, offset investment funds, offset swapping, pre-performance offsets and the proliferation of offset service and investment firms, and examine how these contribute to systems of government patronage. Finally, this chapter will lay out some of the incongruence in available offset data, not only to demonstrate the challenges presented by these divergent estimates, but also to inform our understanding of the unique interests and institutional affiliations of their

¹ “Defense Offsets: Are They Taking Away Our Jobs?” 29 June 1999 Hearing before the Subcommittee on Criminal Justice, Drug Policy, and Human Resources of the Committee on Government Reform. U.S. House of Representatives. Serial No. 106-114.

sources, and how their respective representations of offset data serve to further these interests.

The Origin of Offsets

Formal offsets made their first appearance under President Eisenhower's Administration, which sought to balance the high cost of maintaining American troops in West Germany by requiring the German government to purchase U.S. defense materiel, thereby "offsetting" U.S. costs.² The Cold War imperative of arming Europe and ensuring interoperability of allied weapons systems in the shadow of an ascendant Soviet Union promoted the spread of offsets throughout the transatlantic defense trade. The advent of offset demand in the developing world can also be traced to U.S. efforts to rearm and reconstruct Europe's defense industrial base, as these new national industries sought export markets to maintain production levels that had previously been financed by U.S. assistance. Facing stiff competition not only from one another, but also from the 'free' transfers of weapons from the U.S. and Soviet Union, the European manufacturers added perks such as technology transfer and co-production in order to maintain their production lines. Subsequent innovation – driven by both economic and political imperatives – has transformed this original program of modest government subsidies into a sophisticated industry that oversees tens of thousands of individual transactions and tens of billions in public and private funds each year. Industry analysts estimate that about 150 countries have some sort of defense offset requirements – but almost half of those countries have

² Verzariu, Pompiliu. March 2000. "The Evolution of International Barter, Countertrade, and Offset Practices: A Survey of the 1970s through the 1990s." US Department of Commerce, International Trade Administration, Office of Finance. Office of Finance Publications and Papers, p6.

drafted their policies in just the last 15 years.³ This recent intensification suggests that offsets are indeed highly adaptable instruments that can be designed to conform to the political requirements of almost any procuring country – including those that have little or no defense industrial base to absorb them.

Early offsets were overwhelmingly of the “direct” type – meaning they were *directly* related to the equipment being procured – and focused on co-production, licensed production and subcontracting in order to enhance the interoperability of weapons systems used by the US and allied states. These agreements necessarily benefited domestic military and industrial actors – who reaped the windfall of increased local production. However, the popularity of “indirect” offsets – those *not* related to the military equipment being purchased – has increased substantially since the U.S. Office of Management and Budget (OMB) began collecting data in the 1980s. During the period 1980-1987, the OMB reported that 53% of offsets were indirect.⁴ By the first year the BIS collected data (1993), this figure had risen to 63%.⁵ This transition reflects a number of changing realities.

In the past, Cold War geopolitics meant that many developing countries received their weapons for free or at a reduced price due to preferential financing terms, access to excess stockpiles, loans, and other arrangements. For instance, the Soviet Union supplied

³ John O’Doherty. “Local pressure on defence groups’ global sales.” 12 October 2011. *Financial Times* (UK).

⁴ “Impact of Offsets in Defense-Related Exports: A Summary of the First Three Annual Reports”. December 1987. U.S. Office of Management and Budget.

⁵ BIS Annual Report, 2009.

weapons to many states in exchange for commodities rather than hard currency – Egypt, for example, paid Moscow in cotton. Demanding offsets would have been politically unfeasible for these countries. However, now that the free arms spigot has slowed, developing countries that must pay in hard currency are demanding offsets from sellers. Additionally, the military was often the largest source of infrastructure and manpower in developing countries, many of which sought to use military production to support strategies of import-substitution and indigenous industrialization more generally. However, the abandonment of import-substitution industrialization as a development strategy – and the requisite lowering of protectionist barriers that shielded domestic military producers – means that a great deal of production has shifted to the civilian sector. As a result, these procuring countries prefer indirect offsets.

Since the 1970s, when the average offset requirement stood at about 15% of the overall contract value, offsets have experienced a meteoric rise in magnitude. Industry analysts put the figure at about 100% of the contract value as early as 1990,⁶ in some cases reaching as high as 300%.⁷ For example, in 2010 Lockheed Martin granted a \$2.3 billion offset on a \$1.4 billion Canadian purchase of C-130J tactical airlifters. Similarly, Saab

⁶ It seems counterintuitive that offsets can exceed the contract value. Yet they frequently do, for a number of reasons. First, individual transactions in a sector considered more significant by the procuring country can be granted multipliers, whereby the value of the actual investment is multiplied by a pre-determined factor and the seller is given credit for this higher value. Second, defense contractors are often asked to invest in certain companies in the procuring country. As a shareholder or investor, the defense contractor is entitled to a certain share of that company's profits – which enables the contractor to commit to offsets in excess of the profits it makes from the initial sale. See C.G. Alexandrides. September 1990. "Countertrade and Global Strategies." *Contract Management*. 30:5-6. Also, as is pointed out several times in this paper, firms can recover most (if not all) of their costs associated with implementing an offset, usually by inflating the price of the original contract.

⁷ Competition between France's Dassault (which makes the Eurofighter) and Sweden's Saab (which makes the Gripen) to supply Switzerland with fighter aircraft is predicted to drive offsets as high as 400%. CTO Newsletter. 22 March 2010. 28(6).

offered Romania a 100% offset on the purchase of new Gripen fighters to lure Bucharest away from purchasing (cheaper) second-hand F-16s.⁸ U.S. firms seem to have been subject to less onerous offset requirements, which may be a function of product value (since U.S. defense goods are considered superior, U.S. firms have some advantage in negotiating smaller offset obligations) but could also be the result of under-reporting. The average offset reported by U.S. firms to the BIS for the period 1993-2008 is 71% of the contract value, from a low average of 34% in 1993 and to a high of 81% in 2007.⁹

This increase is easy to explain, if we recognize offsets as a type of rent. As a factor of production, rent increases as prices increase – and the ‘price’ individual defense contractors are willing to pay to gain access to markets in procuring countries has gone up considerably.¹⁰ Post-Cold War budget cuts have created incredibly competitive conditions for defense exporters, and Western firms can no longer rely solely on domestic demand. Nor can Russia, which signed offset agreements of \$1.7 billion in 2009.¹¹ Offsets are thus a reflection of the high value of gaining access to a procuring country’s defense import market. Each individual contract is highly valued because companies’ survival often depends on a handful of extremely large, and infrequent, contracts. Offsets are growing in magnitude and sophistication in the Middle East because the region alone counts for nearly half of all weapons sales to the developing world, making access to

⁸ Andrew Chuter. 18 April 2010. “Nations Seek More Offsets From Suppliers.” *DefenseNews*.

⁹ BIS 14th annual report. 2009, p5.

¹⁰ Adam Smith points out that, “High or low wages and profit are the causes of high or low price; high or low rent is the effect of it [price].” 1925. An Inquiry into the Nature and Causes of the Wealth of Nations. p412.

¹¹ CTO Newsletter. 8 February 2010. 28(3).

their defense markets comparatively more valuable than access to other regional markets.¹² Also, because parliaments and other formal institutions of government in the region are weak, regional leaders face few veto points concerning issues of arms procurement. Objections based on price or equipment specifications that come from these weak institutional actors are, therefore, unlikely to be salient. This makes it especially important for exporting firms to establish close relationships with the regimes' power brokers, who may be the sole decision-makers. This concentration of decision-making power also manifests itself in the increasingly central role that a small number of Western defense firms play in the economies of many arms-importing countries. Although offsets have existed for decades, certain trends in offset requirements suggests these linkages are becoming increasingly dense. An international survey conducted in the mid-90s showed that countries were beginning to demand more formal linkages with vendor firms for their local enterprises and more long-term investment strategies.¹³ Also, as countries witness the rising offset demands in neighboring states and regional rivals, this spurs a tit-for-tat spiraling of demand.¹⁴ Today, offsets are a nearly ubiquitous feature of global arms deals, and many countries in the Middle East have formal government agencies that oversee offset contracts, including the UAE, Saudi Arabia, Kuwait, Turkey, Israel, Oman and Bahrain. Several others implement them on an ad-hoc

¹² For the period 2005-2008, the Middle East accounted for 55% of arms transfers in the developing world. Richard F. Grimmet. September 4, 2009. "Conventional Arms Transfers to Developing Nations, 2001-2008." Congressional Research Service.

¹³ Martin, S. and Hartley, K. 1995. "UK Offsets: Survey Results. *Defence and Peace Economics*. 6(2): 123-39.

¹⁴ This phenomenon was used by defense firms to encourage the U.S. Government to stop publishing country or region-specific offset figures. Although individual firms were never identified in the BIS reports, the intensity of industry consolidation made it relatively easy to infer what particular firms were providing in offsets. Industry argued that access to this information would only continue to drive up offset demands.

basis (Egypt, Jordan) or are currently drafting official offset guidelines (Libya, Tunisia and Algeria).¹⁵ The total value of offsets in the region is virtually impossible to estimate, as there is no supranational repository for information on offset contracts, and although a large proportion of the Middle East trade originates from U.S. companies, data collected by the U.S. government is problematic at best.¹⁶ The U.S. agency that collects information on offset activity (BIS) must rely solely on figures supplied by the defense firms themselves, and has no access to any documentation – such as invoices or delivery schedules – that might verify or contradict these figures.¹⁷ The implications of offset expansion and innovation, as well as data concerns, will be examined later in this chapter.

Offsets in Context: The Evolution of Global Trading Patterns

Offsets are a subcategory of special trading arrangements based on the bartering model; “offset” is merely the technical term used to denote the practice of “countertrade” when it is carried out in the context of military sales. However, countertrade has largely vanished from the vocabulary of economists and policy-makers because global trading regimes

¹⁵ CTO Newsletter. (various issues).

¹⁶ Data issues are explored in detail in the subsequent section on data discrepancies.

¹⁷ The source of BIS data is made plain in this exchange between Joel Johnson, Vice President of Aerospace Industries International, and Congressman Tierney in a 1999 hearing by a House Subcommittee on the impact of defense offsets:

Tierney: “Mr. Johnson, right now, as I understand it, U.S. companies are not required to provide copies of their [offset] transaction papers to the Commerce Department. Is that accurate?”

Johnson: “What we provide to the Commerce Department on an annual basis is a record of every transaction over \$100,000 to help implement an offset agreement.”

Tierney: “But you needn’t provide copies of those transaction papers’ it is just whatever you say it is in the form that you want? So that none of the sales contracts, none of the written offset agreements or the related paperwork ever goes to Commerce?”

Johnson: “That is correct.”

such as the WTO have dramatically reduced its use as a trading strategy. Offsets – because they fall under the security exemption included in all multilateral and bilateral trading arrangements – have not been subject to a similar fate. In addition to being classified as “direct” or “indirect,” according to the materials and sectors involved in the offset project (ie, civilian vs. military) offsets can be carried out under different countertrade schemes, including barter, switch-trading, counter-purchase and buyback. These trading arrangements are – at least partially – a product of their historical time period, characterized by import-substitution industrialization schemes, debt crises and Cold War geopolitics. In 1984, the U.S. Department of Commerce estimated that as much as 30% of world trade was subject to some form of countertrade, and estimated that this could reach 50% by the year 2000.¹⁸

Current evaluations suggest this was a liberal assessment, and that perhaps 20% of world trade is now subject to some form of countertrade, and even this is mostly carried out by private companies without formal government involvement.¹⁹ Nonetheless, an examination of these arrangements – and how they were used in the context of the arms trade – is instructive. Barter is generally employed to facilitate trade that might not have taken place otherwise, usually owing to financial illiquidity. For example, the UK may agree to sell Sri Lanka armored personnel carriers in exchange for regular rice shipments over the next five years. The UK prefers this commodity to payment in the local currency, which may be unstable; likewise Sri Lanka prefers to part with its commodities

¹⁸ Cohen, Stephen and John Zysman. 1986. “Countertrade, offsets, barter, and buybacks: A crisis in the making.” *California Management Review*. 28(2): p3.

¹⁹ Dan West. 1 April 2001. “Countertrade.” *Business Credit*. A publication of the FCIB, a trade association for executives in finance, credit and international business.

rather than drawing down its hard currency reserves. Switch-trading is similar to barter, in that it primarily occurs in situations where liquidity is an obstacle, but involves more than two parties. For example, the UK may agree to sell fighter jets to India, but is unwilling to accept payment in rupees and already has a stable inflow of rice (one of India's primary commodity exports) from Sri Lanka. However, India has built up a trade balance with Sri Lanka, so arranges to have Sri Lanka supply the UK market with tea for five years. India gets the jets, Sri Lanka pays off its trade deficit with India, and the UK receives payment in tea.

Unlike bartering and switch-trading, counterpurchase and buyback involve the exchange of money. Under the conditions of counterpurchase, the purchasing country pays for the defense goods, but a parallel contract requires the selling country to purchase specified commodities from the purchaser's domestic economy (presumably because the selling country might have purchased this commodity elsewhere, thus this arrangement benefits domestic producers in the buyer country). Buyback is similar, except that under this arrangement, the commodities purchased by the selling country are directly related to the equipment in the original contract. For example, the selling country might be obligated to include in its finished product a certain number of components produced domestically in the purchasing country.

Although such trading arrangements certainly enabled countries to overcome currency restrictions, they were also politically expedient. Because advanced defense materiel and technologically equivalent commercial goods were unavailable on the domestic market in

most developing countries, they had to be imported. But diverting scarce resources to purchase weapons and industrial machinery that many within the developing world thought they should concentrate on producing domestically was politically risky. Offsets provided political cover, as purchasing governments could identify them as concessions they had managed to secure from the rich, industrialized countries of the West. The advantages included: acquiring new technologies and capabilities, supporting key industries, gaining access to new markets, generating export earnings, and forming strategic alliances with MNEs (multinational enterprises).²⁰ Similarly, the wealthy, industrialized states usually agreed to these arrangements because of the desire to cement alliances and favorable commercial relations in the context of the Cold War.²¹ The industrialized countries were especially eager to conduct countertrade with those countries rich in natural resources like oil and minerals. They were less eager about opportunities for countertrade with resource-poor countries, although many of these were NME's – 'non-market economies' in the nomenclature of the day – and a positive trading relationship was highly coveted in the Cold War context.²²

²⁰ Taylor, "Using Offsets in Government Procurement as an Economic Development Strategy," p6.

²¹ For a list of reasons companies would engage in countertrade transactions see U.S. International Trade Commission. October 1985. "Assessment of the Effects of Barter and Countertrade Transactions on U.S. Industries." Report on Investigation No. 332-185 Under Section 332 of the Tariff Act of 1930. Publication 1766.

²² A 1985 report by the U.S. International Trade Commission reports that both Iran and Iraq countertrade oil in exchange for military equipment. Trading partners included Japan, the USSR, Brazil, Pakistan, Taiwan, France, Korea, Italy and India. Saudi Arabia and the UAE are also cited in the report for requiring industrial investment from companies wishing to obtain petroleum concessions. The report also indicated that in 1984, Saudi Arabia concluded a deal that exchanged \$1 billion in petroleum for 10 aircraft from a U.S. company. U.S. International Trade Commission. October 1985. "Assessment of the Effects of Barter and Countertrade Transactions on U.S. Industries." Report on Investigation No. 332-185 Under Section 332 of the Tariff Act of 1930. Publication 1766, p45.

However, such trading arrangements were (and continue to be) seen by free trade advocates as an unacceptable form of state intervention in the free market. This was especially true during the Cold War, when a great deal of non-defense related international trade was conducted under barter-like terms, and even more so in the case of the Soviet Union, which employed countertrade to facilitate trade relationships and cement alliances even when the terms were unfavorable to Moscow.²³ Countertrading schemes pursued by the Soviets (and their allies) were viewed with great suspicion by Western economists and intelligence agencies,²⁴ as were similar schemes employed by the ‘developmental states’ of East Asia, including Japan.²⁵

Economists have largely condemned such agreements for a number of reasons. First, because they allowed developing countries to postpone developing their own capabilities to process, market and transport goods since these terms were included in the countertrade contract rather than arrived at through the disciplining force of the market. Second, the price developing countries got for their commodities was usually on the low

²³ Robert L. Waller, United States Air Force. 1990. “Soviet Countertrade.” *United States Air Force Academy Journal of Legal Studies*. Colorado Springs: Air Force Academy.

²⁴ Robert L. Waller, United States Air Force. 1990. “Soviet Countertrade.” *United States Air Force Academy Journal of Legal Studies*. Colorado Springs: Air Force Academy. However, Soviet countertrade schemes with the developed economies, and even many of the newly-industrializing states, were frequently derailed because trading partners were unwilling to accept Soviet-made products as payment (with the exception of vodka, which Brazil famously accepted in payment for a large shipment of coffee in 1989). Accepting commodities as payment also exposes the trading partner to potentially huge losses due to price volatility. One countertrader in London told *The Economist* that the Russians had offered him goods ranging from snake venom to mouse skins in exchange for construction equipment and books. “East-West Countertrade.” 1989. *The Economist*.

²⁵ Cohen and Zysman, “Countertrade, Offsets, Barter, and Buybacks: A Crisis in the Making.” This article is particularly interesting, as it takes a strongly derisive tone toward countertrade and other “government efforts to shape market outcomes,” seemingly on principle, but simultaneously recognizes the extraordinary success many governments have achieved through such policies.

end because developed country firms were better positioned to utilize certain trading tools – like international trading companies – that could find the most profitable buyer for whatever commodity the firm had purchased. And third, because participating firms preferred payment in raw commodities over payment in manufactured components – which might not be sellable on the global market – thus discouraging indigenous efforts to industrialize. This is intuitive, since such trades were frequently executed within a developed country – developing country dyad, where the developed country possessed more political and economic leverage to impose favorable terms.²⁶ This is distinct from the case of other economic instruments such as tariffs, quotas and subsidies, which may also target key domestic sectors but are policies states can craft independently.²⁷

However, unlike offsets and some forms of countertrade for developing countries, these simpler instruments are prohibited in the WTO as well as in the bilateral trade agreements to which most countries are signatories. This has helped shift the locus of protectionist policies onto the trade in defense goods, which not only contributes to growth in offset activity, but also signifies efforts made by developing countries to find alternative ways to pursue protectionist policies that are not subject to WTO prohibitions.

However, it seems clear that offsets – and countertrade in general – are even less beneficial than traditional protectionist policies. Because the offset negotiations are

²⁶ One example would be the superior ability of developed countries to access the skills of international trading companies, which could peddle whatever commodity the firm had bought internationally in order to find a buyer that provided the firm with a net profit.

²⁷ Taylor finds that, in some instances, such independent trade tools may be more efficient and cheaper in protecting infant industry than countertrade strategies. Taylor, “Using Offsets in Government Procurement as an Economic Development Strategy” p7. It is interesting to note that, while such independent tools have been largely stripped from the economic policy arsenals of developing states, the less efficient forms of countertrade and offset – which frequently redound to the benefit of wealthy industrial exporters – are still exercised through various exemptions in WTO and bilateral agreements.

conducted under the strictures of arms procurement (rather than with respect to the requirements of the industry or firms designated to receive the investment generated by the offset) the inefficiencies and administrative burdens are multiplied. For instance, the offset obligor firm may be asked to train a new cohort of indigenous managers at an aluminum smelting facility. However, if that firm merely outsources this training requirement to a third-party vendor (as often occurs) the procuring country is paying not only the fees the third-party vendor would have charged it directly for the service (through inflated costs contained in the original arms contract), but also the administrative costs incurred by the obligor firm in its effort to locate, evaluate and transport these trainers. The outcome may be better – the offset obligor may be better able to identify and recruit the most suitable third-party vendor – but this is by no means certain.

The capability of offsets to deliver protectionist benefits to designated sectors of the economy also confers additional institutional power on the procuring-country officials responsible for negotiating defense offsets. As a result, other government officials – those in the ministry of the economy, agriculture, etc. – may increasingly rely on them as a source of market power. For example, ministries within procuring countries will frequently agree to budget trade-offs in order to facilitate arms purchases that may be beyond the budget allocated to the defense minister. Thus, the minister of agriculture might consent to shifting some of his department's budget to the defense minister in exchange for the income arising from a counterpurchase sale of agricultural commodities included in the offset agreement. However, this entails the transfer of funds from a

ministry whose activities might fulfill a very pressing social need (food) in exchange for benefits that may never materialize.²⁸

Offsets in Context: The Evolution of Bribery

“The tendency of the pecuniary life is, in a general way, to conserve the barbarian temperament, but with the substitution of fraud...in place of that predilection for physical damage that characterizes the early barbarian.”

Thorstein Veblen, The Theory of the Leisure Class, 1899

Exogenous forces – notably the evolution in norms regarding bribery and corruption – may also be contributing to offset growth. Indeed, offsets have evolved in concert with changes in norms and legal regimes regarding corporate governance and the accountability of public officials. The combined force of initiatives aimed at enhancing the accountability of corporations and public officials, the increasing political power of watchdog groups such as Transparency International, the wide availability of data on weapons transfers from SIPRI and similar organizations, and the extant legal regimes dealing with international bribery, have almost certainly made the business of bribing more difficult. Most notable are the FCPA (Foreign Corrupt Practices Act) passed in 1977, which prohibits U.S. companies from paying bribes;²⁹ the OECD Convention on Bribery; and the UN Convention on Bribery, as well as the increasing focus international organizations have placed on corruption and its detrimental impact on economic

²⁸ This observation is based on a speech given by the Deputy Director General of *Rosoboronexport* (Russia’s state-owned commercial defense firm) who stated, “Sometimes, the defense ministries of customer countries have a very low budget, so they write an agreement between themselves whereby different ministries – such as the ministry of agriculture – would partition the budget by way of the counterpurchase income.” CTO Newsletter. 8 February 2010. 28(3).

²⁹ The FCPA only applies to U.S. companies. The U.S. Department of Justice has pursued charges of bribery against European companies, but only has jurisdiction when these companies are either publicly traded on U.S. exchanges or when some of the bribe money is spent in the U.S.

development. Offsets are well-suited to replace bribery as a mechanism for facilitating the arms trade. Not only are the agreements themselves either completely inaccessible or purposefully opaque, but they also achieve many of the same goals as bribes – primarily by rewarding the loyalty of procurement officials and intermediaries with material privileges. In this way, offsets may signify the evolution – or institutionalization – of bribery in the arms trade. Not only are they legally-sanctioned instruments of trade, but they are also preferred by both firms and buyers. Firms prefer them because they are able to recover their expense by including the cost of offsets in the original contract, and buyers prefer them because they allow regime officials to direct benefits to individuals and institutions they choose without the stigma of corruption. However, allegations of offset-related bribery have been extensive, and have led to efforts like the EDA’s (European Defense Association) “Code of Conduct on Offsets” – although compliance is voluntary and there is no associated enforcement mechanism.

During the Cold War, the U.S. Government was directly involved in offset agreements – negotiating, designing, funding and implementing them as a tool to enhance cooperation and cement security alliances. However, at the end of the Cold War in 1990, President George H. W. Bush implemented legislation that prohibited U.S. Government agencies from participating in offsets at any level. By cutting contracting agents out of the process, firms are granted more space to execute offsets that may run afoul of anti-bribery legal regimes.

The UK has achieved a similar outcome with respect to many of its offset programs. As

explored in the chapter on the oil-exporting cases, Saudi Arabia's first offset agreement with the UK – the Al-Yamamah contract – has been plagued by accusations of corruption. Wafic Said, the Syrian-born son of an ophthalmologist-turned Saudi arms broker, relayed to another Syrian expat living in London that, in the expat's words, he was “involved in arranging only the nonmilitary, commercial side of the [Al Yamamah] deal – the construction of schools and hospitals and that sort of thing,”³⁰ that is to say, the offset side of the deal. Said reiterated this point to the UK's Guardian newspaper, stating that he benefited from Al Yamamah because the agreement led to construction in Saudi Arabia that involved his companies.³¹ It was Said's Swiss accounts that were initially the focus of the British SFO investigation; although the Swiss courts authorized the release of his records the UK government shut down the probe before any of the information could be made public.³²

In an effort to defend the legality of specific payments made by BAE to Saudi officials that were made using US banks (thus coming under the jurisdiction of the US Department of Justice), former FBI Director Louis J. Freeh stated,

The British government was paid a 2 percent fee. That's a 2 percent fee of an \$83 billion treaty to administer that contract and make sure that the money flowed accurately and properly with accounting. So it's more complicated than just a statement of money flowing through those accounts. He [Prince Bandar, former Ambassador to the US] was allowed to use those funding streams with

³⁰ “The Saudi Invasion of American Banks.” 1 February 1993. *New York Magazine*, p28. The Syrian expat is Ghassan Sakharia/Zakaria, whom the New York Magazine refers to as “editor of a gossip Arab-language magazine that is published in London.”

³¹ David Leigh and Rob Evans. 7 June 2007. “Biography: Wafic Said.” *The Guardian (UK)*.

³² David Leigh and Rob Evans. 29 November 2006. “BAE secret millions linked to arms broker.” *The Guardian (UK)*.

authorization to make whatever expenditures the Foreign Ministry or the Minister of Defense and Aviation wish to occur.³³

The ‘authorization’ Freeh (who at the time of this statement was acting defense counsel for Bandar in the case brought against him by the U.S. Department of Justice) references here was facilitated by the fact that the arms deal was concluded as a bilateral treaty between Saudi Arabia and the UK rather than as an export contract, which effectively exempted the agreement from oversight by relevant UK Government agencies.³⁴ Here we see that the simple act of labeling a fund transfer as an administrative “fee” rather than a bribe imparts (or is meant to impart by the agent) a sense of legitimacy.

Offsets in Context: Economic Development Narratives

Those theorists who suggest that offsets can positively impact a procuring country’s economic development frequently base their predictions on the ability of obligor firms to ‘discipline’ a foreign workforce or industry – exposing it to the strictures of market competition and training its employees in more efficient management techniques.³⁵ However, this is predicated on the assumption that the firm will pursue this path in order to maximize the benefit from its own investment, or to ensure that any inputs produced in the buyer country and included in the firm’s final product are of sufficient quality to insulate the obligor firm from negative fallout. However, because obligor firms recover most – if not all – the costs associated with the offset, there is little reason to believe

³³ CTO Newsletter. 27 April 2009. 27(8).

³⁴ CTO Newsletter. 27 April 2009. 27(8).

³⁵ Travis Taylor. 2003. “Modeling offset policy in government procurement.” *Journal of Policy Modeling*. 25: 985-998.

these costs are sufficient to spur the obligor firm to expend time and resources rehabilitating or streamlining unprofitable foreign operations.³⁶ Also, because the final products that include domestically-produced inputs seldom become major exports for developing countries, the risks to the firm's global reputation is minimal. Developing countries that do have significant arms exports resulting from previous offset programs - like South Africa, Turkey and Egypt - are frequently major sources of weapons sales made to 'rogue' or pariah states under international arms embargoes who have little choice in terms of suppliers.³⁷

The political - rather than economic - appeal of offsets explains not only their longevity (as similar trading arrangements have been scrapped in favor of liberalized trade) but also how they have evolved over time. For instance, rather than employ the term "offset" - which suggests a one-side cost-saving measure, vendor firms increasingly use the phrases "industrial cooperation," "industrial participation," or "economic enhancement."³⁸ This

³⁶ Section 225.7303 of the 1999 Defense Federal Acquisition Regulation Supplement authorizes firms to recover all costs associated with implementing offset contracts. Additional evidence comes from statements made by industry executives and analysts. Richard Aboulafia, an analyst at the *Teal Group* - where Joel Johnson, former VP of the aerospace industry's largest trade group *Aerospace Industries Association* also works - told the *Financial Times* in a June 2010 interview, "There seems to be a massive confusion about who pays for offsets. It's the buyer, not the seller." Sylvia Pfeifer. "Overseas defence clients get tougher." *Financial Times*. 10 June 2010.

³⁷ For information on South Africa's exports to conflict zones see <http://www.irinnews.org/report.aspx?Reportid=87967>. Egypt's only significant export markets were North Korea in the early 1980s; Iraq during its decade-long war with Iran; and potentially now Hamas in the Gaza Strip. Likewise, Turkey is a major source of small arms shipments to regimes accused of grave human rights abuses, including Indonesia, Malaysia, Iraq and Pakistan.

³⁸ From *Summit's* website: "The concept of Economic Enhancement as pioneered by Summit, is based upon deriving the maximum benefit from the enormous leverage over potential suppliers during the procurement process of large government contracts. The additional value created as a result of implementing Economic Enhancement policies needs to be closely aligned with existing government objectives and yet at the same time derive benefit from capabilities, expertise and contacts that the supplier is able to provide." <http://www.summitcs.com/background.html>. Accessed 26 October 2010.

last phrase was introduced by the offset services firm Summit Corporate Services (the forerunner to Blenheim Capital), which is briefly profiled later in this chapter.³⁹ Such language not only highlights the partnership aspect – which is important to procuring regimes that want to demonstrate the presence of international firms in their domestic economies in order to encourage additional foreign investment – but downplays the source of the investment as well. By affixing the adjective “industrial” the defense-related origin of the offset project is minimized. This language has proven quite persuasive, and some development agencies now promote offsets as a powerful force for economic growth. For example, a paper issued by the Asian Development Bank characterized offsets as “an alternate means of financing infrastructure.”⁴⁰

Offsets in Context: Defense Industry Subsidies

Offsets can also be understood within the larger context of a “race to the top” among governments seeking to subsidize defense exports. In this sense offsets are just part of a broader package that includes loan guarantees, preferential financing, export subsidies, government-financed trade shows, diplomatic salesmanship and other methods for encouraging purchases by foreign countries in an increasingly competitive international market. In the UK, for example, the Defense Export Services Organization (DESO) is a government department within the Ministry of Defense charged with promoting British

³⁹ Interestingly, this language was also picked up by the Asian Development Bank to describe the ability of offsets to finance infrastructure and other large public procurement projects. <http://www.adbi.org/discussion-paper/2007/09/27/2364.infrastructure.challenges.south.asia/role.of.multilateral.institutions.in.supporting.infrastructure.development.in.the.region.and.alternate.forms.of.financing.infrastructure/>.

⁴⁰ Geethanjali Nataraj. 27 September 2007. “Infrastructure Challenges in South Asia: The Role of Public-Private Partnerships.” Asian Development Bank Institute (ADBInstitute). Discussion Paper No: 80.

arms sales. However, its members are drawn entirely from among acting defense industry executives, who retain their titles while serving at DESO. In 2007, the organization had over 450 employees in 17 countries. The Special Fraud Office, which is charged with prosecuting violations of anti-bribery laws committed by British corporations – including DESO members’ firms – only had 317 personnel.⁴¹

These and other subsidies are partly driven by the concern of the military service branches that they cannot afford the purchases and upgrades they believe they need unless firms are able to achieve ever-increasing economies of scale by exporting their products – and the offsets that accompany them. Studies conducted by service members suggest such economic imperatives have resulted in a shift from concerns over the proliferation of weapons and sensitive technologies to a concern with making sales – and that procurements specialists in each branch therefore view themselves less as guardians of American technological superiority than as agents for foreign buyers.⁴²

The confusion over exactly who pays for offsets – whether it is firms or procuring country governments – has been a useful tool for industry advocates, who argue that rising offset figures are indicative of competitive conditions in the global arms market, which necessitate additional subsidies. According to the BIS, for example,

Whether direct or indirect, offset transactions return funds to the purchasing country. The offset funds spent in the foreign country to fulfill offsets are, therefore, a means by which the foreign government redirects public expenditure back into its own country.⁴³

⁴¹ <http://www.sfo.gov.uk/media/27429/lods%20departmental%20report%202007.pdf>

⁴² Major Isaiah Wilson. 20 April 2001. “The Commercialization of Foreign Military Sales Reform: Implications on U.S. Military Preparedness and Regional Security.” Paper presented at the Council on Foreign Relations, Roundtable on the Geo-Economics of Military Preparedness.

⁴³ BIS 6th annual report. 2001, p9.

Yet, analysts periodically admit that procuring countries – not the arms exporting firms – are doling out the dough for offsets. Richard Aboulafia of the aerospace industry analysis firm Teal Group, told the *Financial Times* in a June 2010 interview, “There seems to be a massive confusion about who pays for offsets. It’s the buyer, not the seller.”⁴⁴ An Indian defense analyst made a analogous statement in an unpublished study, “offsets result in increased cost of equipment – though with no significant benefits for the purchasing country.”⁴⁵ Conventional logic further confirms this. Members of the EU recently passed a (voluntary) code of conduct on defense offsets, prohibiting member-states from requiring offsets in excess of 100% of the contract value. If the firms were financing these offsets themselves, they would be bankrupt. Although a 2003 *NYTimes* article called offsets a “well-kept military secret,” the U.S. Government has formed numerous special commissions to investigate them, including one that was discontinued by the newly-elected President Bush – a move the GAO characterized as “a breach of duty.”⁴⁶ Dozens of OMB and GAO reports have been commissioned to investigate the impact of offsets on numerous issue-areas: domestic employment; the sustainability of in-house expertise in critical defense competencies; the transfer of sensitive technology; and the creation of competing defense industries.

Continued Congressional opposition to offsets in the U.S. demonstrates this confusion. If

⁴⁴ Sylvia Pfeifer. “Overseas defence clients get tougher.” *Financial Times*. 10 June 2010.

⁴⁵ Laxman Behera of the Institute for Defence Studies and Analyses (India). Cited in Sandeep Verma. Summer 2009. “Offset Contracts Under Defense Procurement Regulations in India: Evolutions, Challenges, and Prospects.” *Journal of Contract Management*, p17.

⁴⁶ Leslie Wayne. “A Well-Kept Military Secret.” February 16, 2003. *New York Times*. Also see CTO Newsletter. 2004. 22(2).

procuring governments are in fact financing their own offsets – and this is not purposefully obfuscated by both the firms and the procuring governments – then why would such opposition persist? Surely allowing firms to charge more for equipment they export would be viewed as beneficial by U.S. policy-makers. Yet, the majority of reporting – in the media, by NGOs, think tanks, etc. – characterizes offsets as the outstanding financial obligations of the firms, not procuring country governments.⁴⁷ The magnitude of outstanding offset obligations is large – estimated between \$75 and \$100 billion as of 2009.⁴⁸ Lockheed and Boeing reported outstanding offset obligations of \$11 billion and \$10 billion, respectively, while BAE indicated it had obligations of “several billion pounds.”⁴⁹ The perception of such large obligations can weaken the firms’ financial images, with all the secondary negative effects that entails. This narrative provides a strong incentive for policy-makers in arms-exporting countries to continue devising new forms of subsidies for defense manufacturers and safeguarding those that already exist.

The partnerships generated by offset obligations may also help firms obtain investment from various actors in the procuring country – a sort of ‘reverse offset.’ The UAE – the largest customer for Airbus’s A380 superjumbo jet – purchased a stake in Airbus’s parent company, EADS (European Aeronautic Defence and Space Company), through the state-

⁴⁷ See aforementioned NYTimes article and FT article, also Daniel Pearl. April 20, 2000. “Arms Dealers Get Creative with ‘Offsets.’” *Wall Street Journal*.

⁴⁸ Sylvia Pfeifer. 10 June, 2010. “Overseas defence clients get tougher.” *Financial Times*.

⁴⁹ Sylvia Pfeifer. 10 June, 2010. “Overseas defence clients get tougher.” *Financial Times*.

owned Dubai Investment Company in 2007.⁵⁰ The UAE also reportedly considered a major investment into the Russian defense industry in 2002-03 as part of a \$4 billion purchase of Antei-Antey surface-to-air missiles and air defense sensors that was later cancelled.⁵¹ In the past, the UAE cancelled Russian debts in exchange for 50 Pantsir S-1 air defense units. The UAE financed the process of redesigning the units to its specifications – boosting interoperability with western equipment and bolstering export prospects. But the work was carried out in Russia.⁵²

This capital flow (both in type and direction) is especially interesting if we view the global economy in structural terms. These companies are representative of the forms of economic exchange that sociologist Jacques Delacroix predicted would prevail between rentier states and the industrial democracies in the decades after 1980:

Rentier states' investments must be concentrated in the old industrial countries in preference to the periphery where both entrepreneurial experience and large domestic markets may be lacking. *Core bourgeoisie must then either accept to be turned into partial managers of periphery rentier state capital or change the legal superstructure of capitalism [my italics].*⁵³

This, Delacroix states, “involves the transformation of the industrial core into a partial macroproleteriate exploited (in the literal Marxist sense) by the rentier states.”⁵⁴ Many

⁵⁰ <http://www.arabianbusiness.com/properties/article/495866-zabeel-says-part-of-eads-purchase>. Accessed 1 November 2009.

⁵¹ http://www.acig.org/artman/publish/article_399.shtml

⁵² http://www.acig.org/artman/publish/article_399.shtml

⁵³ Jacques Delacroix. Fall 1980. “The Distributive State in the World System.” *Studies in Comparative International Development*, p16.

⁵⁴ Delacroix is worth quoting just a bit more, since his theoretical ruminations seem to find a literal expression in the recent financial innovations and commercial tours de force of the United Arab Emirates. “Since new modes of production are apt to arise from the backwaters of an existing system, this

features of economic exchange between the rentiers and the ‘core’ Western states suggests that some of these changes have indeed been made in order to allow the capital concentration in the Gulf countries to benefit the ‘core’ states – for example Saudi Arabia’s commitment to peg its currency to the U.S. dollar. However, perhaps most notable is the willingness of the Gulf States to serve as “the dumping grounds for surplus production” – in this case arms production – of the core countries.⁵⁵ Although much of the industrial activity that gave the Western countries their ‘core’ designation has moved abroad, military industrial production remains an important (and protected) domestic industry. Despite the economic power of the emerging economies, many of which are attracting significant investment from the Gulf countries, U.S. treasury bonds are still the likeliest destination of Gulf sovereign wealth fund dollars, and (as Delacroix predicted) the Western financial capitals are where ‘core bourgeoisie’ become ‘partial managers of periphery rentier state capital’ by establishing offset-related firms and funds.

Evolution in Offset Design

All the above changes: the evolution of bribery; the shift in global trading strategies; the growth in defense industry subsidies; and changing narratives of economic development, have been coincident with the growing complexity of offset arrangements. This complexity is reflected in the proliferation of offsets varieties; the introduction of multipliers – which award firms additional fulfillment credits for offsets in areas deemed

transformation, rooted in the peculiarities of the distributive state, might be the principal motor of progressive change. Thus might a new world economy emerge whereas, in paradoxical accordance with Lenin (1917), a part of the old periphery would turn itself into a new core through the medium of its capital export,” p16-17.

⁵⁵ Yates. *The Rentier State in Africa*, p27.

strategically important by procuring governments; offset banking and swapping; the advent of pre-performance offsets – where firms perform offsets as a requisite for participating in the bidding process; as well as the advent of a complementary industry composed of financial companies and consultants offering offset-related services to obligor firms and procuring governments. Because these complementary companies must innovate – and add some value to the offset process – in order to survive, offsets themselves have become increasingly complex and tailored to specific country requirements.

As with previous innovations in forms of economic exchange (such as the era of countertrade which saw the formation of numerous firms specializing in all types of barter) the proliferation of offset firms is dependent on, but most likely also contributes to, the dramatic increase and growing complexity of the offsets themselves.⁵⁶ For example, Greece – a pioneer of indirect offsets – has been criticized by defense industry advocates for its “tortuous” offset demands, including guidelines that are considered “the most convoluted and detailed of any country.”⁵⁷ Not surprisingly, the Greek capitol is home to *Epicos* – one of the largest and most successful offset service providers. The

⁵⁶ In 1985, the U.S. International Trade Commission wrote in its report on countertrade and barter in the international economy that, “The increasing expertise and expanding contracts of countertraders (ie, trading houses specializing in countertrade, and the inhouse countertrade units of multinational corporations) may themselves have become a factor contributing to the growth of countertrade.” New companies cited in the report include the Countertrade Data Center established by Batis International Business Services, which provided a “counter-purchase credit exchange” as well as “detailed economic and trading reports on those countries with countertrade policies.” Banks such as CitiCorp (U.S.), Midland Lloyds (U.K.), Barclays (U.K.) and National Westminster (U.K.) all announced the establishment of countertrade specialists around this same time. See Gray, Frank. 24 October 1984. “Countertrade Data Centre Established in London.” *Financial Times*, p8. International Trading Certificates (ITCs) were also created around this time to facilitate countertrade. See U.S. International Trade Commission. October 1985. “Assessment of the Effects of Barter and Countertrade Transactions on U.S. Industries.” Report on Investigation No. 332-185 Under Section 332 of the Tariff Act of 1930. Publication 1766, p45.

⁵⁷ CTO Newsletter. 9 June 2008. 26(11).

formation of these companies also creates another layer of private businessmen (and their allies within the regime, the military establishment and the domestic economy) who have a vested interest in the maintenance of defense offsets, and by extension, the large defense transactions upon which they depend. The following section will investigate the dramatic evolution in offsets and the industry that has coalesced around them, and ask what implications this may have for politics in arms-importing countries.

The Increasing Diversity of Offsets

As stated previously, the earliest offsets were relatively straightforward arrangements between the U.S. and its European allies, which focused on reconstructing Europe's defense base and enhancing interoperability. However, in the mid-1980s, procuring countries began treating offsets as an economic tool rather than a strategic military one. For example, in 1984 three U.S. prime contractors financed a joint venture with the Greek government as part of an F-16 sale by General Dynamics. The joint venture in turn invested in companies engaged in medical diagnostics, sportswear manufacture, computerized numerically controlled wire-bending machines, software systems for the financial services industry, and textiles. This joint venture, the first of its kind, marked a watershed in the evolution of offsets; the category of "overseas investment" – which includes joint ventures, has increased three-fold since 1993.⁵⁸ The diversity of offset types, combined with the large number of individual transactions – 8,660 separate offset transactions were reported by U.S. companies between 1993 and 2006⁵⁹ – makes them

⁵⁸ From around \$40 million in 1993 to nearly \$120 million in 2006. BIS 13th Annual Offset Report. 2009, p25. 1993 is the first year for which figures are available.

⁵⁹ BIS 12th Annual Offset Report. 2007, p5-1.

appealing vehicles for delivering favors and patronage, as they can be shaped to target specific sectors, industries or firms. This diversity has also encouraged contractors to spread out offset obligations among their suppliers and subsidiaries, which often have existing investments in the procuring country for raw materials and numerous other inputs. This allows the company to gain offset credits for investments they would have made anyway – regardless of the offset commitment.⁶⁰

Defense Offset Multipliers

‘Multipliers’ – mechanisms that allow procuring countries to give defense contractors additional credit (beyond the actual dollar amount invested) for investments they make in sectors the procuring country considers critical – are another innovation that has been facilitated by the increasing complexity of offsets and the growing number of secondary firms dedicated to facilitating them. Multipliers allows firms to satisfy offset obligations more cheaply, and give the procuring country leverage to encourage offset investment in sectors that might otherwise be unattractive to the obligor firm. For instance, if the UAE is particularly interested in establishing an offshore investment fund and would like the expertise of a US financial institution, it can offer a multiplier of 3 if the defense firm is able to convince the preferred financial institution to participate. So, if the cost of establishing the fund is \$1 million the contractor gets credit for $\$1 \text{ million} \times 3 = \3 million .

The multiplier granted a procuring country is often extreme – suggesting that political,

⁶⁰ Interview. Verzariu.

rather than economic, incentives are driving this activity. In 1999, South Africa awarded a Saab/BAE Consortium \$2.4 billion in offset credits for a \$10 million investment in a joint venture with the South African defense manufacturer Denel.⁶¹ The sale and the associated offset program – along with sales to the Czech Republic, Tanzania, and Saudi Arabia made during the same period – were investigated by both the UK’s Serious Fraud Office and the U.S. Department of Justice over alleged bribes paid to procuring country officials. Both agencies settled out of court with BAE, which was fined around £300 million.⁶² However, none of the courts in the procuring countries have succeeded in bringing charges against the firms or their own officials involved in the negotiations. Granting such large multipliers reduces the incentive for the seller firm to guard their investment with tools like the conduct of due diligence, which might have uncovered the personal and political connections between the South African officials who negotiated the sale and those entities that received the offset investment dollars.

Previous BIS reports indicate that overseas investment garnered the highest multiplier of any type of offset transaction (average of 2.8), and in particular third party investment (ie, *not* investment into a subsidiary or joint venture, but into an unrelated domestic enterprise) got the overall largest multiplier.⁶³ This may occur because many procuring countries have no industries or individual firms with which the obligor firm is willing to cooperate in a joint venture – suggesting that the domestic recipient of the offset-

⁶¹ CTO Newsletter. July 10, 2006. 24(13).

⁶² “BAE Systems handed £286m criminal fines in UK and US.” 5 February 2010. *BBC News*. http://news.bbc.co.uk/2/hi/business/8500535.stm?utm_source=twitterfeed&utm_medium=twitter.

⁶³ “Offsets in Defense Trade.” Summer 2004. *The Disarmament Journal of International Security Assistance Management*. 26(4): 33-53.

multiplier package is highly inefficient. There is also an interesting relationship between multipliers and different distinctions in offset type. Economists who study offsets tend to divide them into two groups according to the likelihood that the offset will minimize transaction costs. One group – which includes subcontracting, licensed co-production and buyback – may minimize transaction costs because the obligor firm is compelled to purchase domestically-produced components for use in its own products, which forces the firm to bear some of the risk of the venture. The other type – which includes technology transfer, foreign investment, training and education, countertrade, and marketing and managements services – expose the firm to no risk.⁶⁴ This typology corresponds roughly to a distinction in the application of multipliers reported by the BIS, though not in the way that would indicate concern over costs on behalf of the procuring country. Most of the offsets that could minimize transaction costs *do not* receive multipliers from procuring countries; while the offsets from the second group – technology transfer, foreign investment, etc. receive multipliers more often.⁶⁵ This suggests that procuring countries are *less* interested in those arrangements that could compel obligor firms to increase efficiency and profitability in offset-related ventures. Instead, procuring countries grant *more* multipliers for offsets that are flexible in terms of the designated recipient.

Additionally, offset obligors can (and frequently do) increase the credit they receive for

⁶⁴ Taylor, “Modeling Offset Policy in Government Procurement.”

⁶⁵ The BIS 12th Annual Report (2007) indicates that the author’s designated “Standard Instruments” receive the highest multipliers.

offset investments through leveraging – a sort of quasi-multiplier effect.⁶⁶ That is, a firm can combine an initial investment of \$1 million in capital with investments from third parties (foreign investors, domestic firms, etc.) and borrow against this investment, re-investing the borrowed money to “multiply” their original investment. And because defense firms have privileged access to loans, credit and other public subsidies, leveraging to increase offset credit is relatively easy. Of course, attracting additional investment may be a genuine service the firm is providing to the procuring country (and suggests at least some level of confidence in the venture on behalf of domestic and foreign investors), but when this investment goes to entities chosen on the basis of political factors, it can be economically distorting.

Offset Investment Funds

Another novel development is the offset investment fund – designed to help absorb and expedite large offset obligations - frequently formed as a partnership between the defense firm and a sovereign wealth fund, or as a stand-alone fund established by the obligor firm⁶⁷ or a consortium of multiple firms with individual offset obligations.⁶⁸ Investment funds were first proposed by the U.S. Department of Commerce’s International Trade Administration in 1997 as a “convenient vehicle” to administer the large offset

⁶⁶ CTO Newsletter. 15 January 2007. 25(2).

⁶⁷ Examples include the Gripen Investment Fund in Hungary (2002); Alfia Investment Fund in the UAE (2000); the Economic Enhancement Investment Fund in Libya; and several funds in Kuwait, where offset regulations currently require that firms invest in funds not managed by a government agency. CTO Newsletter. 14 November 2005. 23(21)

⁶⁸ *Consensus Business Group* created an investment fund in 2007 in South Africa for defense contractors who had failed to meet their offset obligations. CTO Newsletter 25 December 2006. 24(24).

investments incurred by U.S. firms.⁶⁹ Since then, however, BIS, has criticized the program for the same reason that Congressional offset critics have also rebuffed the idea – mainly that investment funds would facilitate a system of granting favors and delivering bribes to procurement officials because the financial regulatory and oversight apparatus present in many procuring countries is grossly inadequate.⁷⁰ This is especially problematic in the Middle East, most notably in the Gulf, where royal family finances and state budgets are often indistinguishable, but also in the non-oil exporting states, where ‘sweetheart loans’ made to political cronies and corrupt privatization processes have left regime allies in control of much of the state’s financial infrastructure.

One example of an offset fund is Lockheed Martin’s investment of \$160 million in the petroleum-based investment portfolio of the UAE Offsets Group in 2000.⁷¹ These investment structures also tend to meet procuring country requirements for multipliers – which allows the defense firm to fulfill its obligation with the minimum dollar amount.⁷²

The Proliferation of Offset Service Firms and Brokers

“One of the practices that had occurred in the past, there were several operators who would look at normal [i.e. non-defense] companies that imported a great deal, a Pier One, for example, find out what they were importing from a country like Thailand, and

⁶⁹ Daniel Pearl. April 20, 2000. “Arms Dealers Get Creative with ‘Offsets.’” *Wall Street Journal*.

⁷⁰ Daniel Pearl. April 20, 2000. “Arms Dealers Get Creative with ‘Offsets.’” *Wall Street Journal*.

⁷¹ Suk H. Kim and Seung Hee Kim. 2006. Global Corporate Finance: Text and Cases. Malden, MA: Blackwell Publishing, p343-344.

⁷² When Poland was considering establishing an investment fund as part of its offset for the purchase of multi-role combat planes for the Polish army in 2003, analysis done by an independent business consultant who specialized in the technology sector (where the Polish government sought to channel future investments) concluded, “due to the offset multiplier effect the real size of the offset fund will be significantly smaller than the offset credit awarded, the participation of the recognized fund sponsors should attract additional investors and co-investors [which should] in turn decrease the multiplier effect and increase the financial strength of the fund.” Maciej Janiec. 7 November 2002. “Critical Offset,” p5.

[find out] who had an offset obligation in Thailand. You would go to the company [with the offset obligation] and say, 'for 2 or 3 percent, I can get you[r] large offset obligation liquidated.' They would go to Pier One and say, 'I can buy down what you are already doing for 1 percent,' and basically nothing whatsoever would happen except that a company would get a lot of offset credit."

Joel Johnson, Vice-President of Aerospace Industries International, on the role of the complementary firm in the offset industry in his 1999 testimony to a House Subcommittee.

Because offsets are such big business, an entire industry has coalesced around them, offering general industry news; country-specific reports on offset guidelines, contact points and past projects; advice on negotiation and implementation of offsets; legal counsel; offset design and fulfillment models; marketing advice and financial services such as venture capital; corporate credit, and investment banking for offset-generated funds. It is nearly impossible to provide an accurate estimate of the number of companies operating in the arena of offset services, but numerous industry trade associations and private companies offer searchable databases that promise to link up defense firms with companies the specialize in offsets.⁷³

A similar trend prevailed during previous decades in relation to the countertrade activities described earlier in this chapter. In 1985, the U.S. International Trade Commission wrote in its report on countertrade and barter in the international economy that, "The increasing expertise and expanding contracts of countertraders (ie, trading houses specializing in countertrade, and the inhouse countertrade units of multinational corporations) may themselves have become a factor contributing to the growth of countertrade." New companies cited in the report include the Countertrade Data Center established by Batis

⁷³ One is the "Offset Service Providers Directory" offered by the publishers of the Countertrade and Offset Newsletter (CTO)

International Business Services, which provided a “counter-purchase credit exchange” as well as “detailed economic and trading reports on those countries with countertrade policies.” Banks such as CitiCorp (U.S.), Midland Lloyds (U.K.), Barclays (U.K.) and National Westminster (U.K.) all announced the establishment of countertrade specialists around this same time.⁷⁴ Although many of these entities have been dismantled due to WTO restrictions on countertrade activity, the number of individuals and firms that specialize in defense-related countertrade (ie, offsets) has only increased.

A 2002 textbook on international business cites both high rates of entry into the offset services industry and high salaries for those employed in the sector, suggesting these businesses are very profitable.⁷⁵ Both private firms and industry trade groups provide services to facilitate offsets: Epicos – a private firm based in Athens, Greece that bills itself as a “one-stop offset shop” – vets offset proposals submitted to them by offset service companies, and recommends them to obligor firms seeking assistance.⁷⁶ Many of these companies are established in the countries where large offsets have traditionally taken place, such as Epicos and ALTAY Industrial Investments & Trade Inc. of Turkey. Trade groups have also emerged to promote the interests of their corporate membership. These include the U.S.-based Defense Industry Offset Association (DIOA) as well as the international Global Offset and Countertrade Association (GOCA). GOCA offers its

⁷⁴ See Gray, Frank. 24 October 1984. “Countertrade Data Centre Established in London.” *Financial Times*, p8. International Trading Certificates (ITCs) were also created around this time to facilitate countertrade. See U.S. International Trade Commission. October 1985. “Assessment of the Effects of Barter and Countertrade Transactions on U.S. Industries.” Report on Investigation No. 332-185 Under Section 332 of the Tariff Act of 1930. Publication 1766, p45.

⁷⁵ See Contractor, Farok J. and Peter Lorange (eds). 2002. *Cooperative Strategies in International Business: Joint Ventures and Technology Partnerships Between Firms*. Oxford: Elsevier Science Ltd, p441n.

⁷⁶ CTO Newsletter. April 28, 2008. 26(8).

100-plus members a sort of matchmaking service, allowing prime contractors to communicate anonymously and confidentially about the full range of offset activities from successfully implemented projects to trading offset credits.

Many law firms also have units dedicated to offset-related legal issues. Squire Sanders, whose clients include Northrop Grumman, Boeing and the offset offices of two unnamed foreign governments, advertises its “innovative solution” to offsets that “involves using our legal services to reform legislative and regulatory policies in various countries and using such projects to obtain offset credits for established clients.” The newsletter continues,

One of the appeals of this strategy is that the offset obligor may not need to employ the usual local “connected” [quotations in original] retired military official (with attendant risks and compliance issues) to generate the offset creditAn added feature of this strategy is the fact that the legal reform will be in areas that will help defense contractors in future business dealings in the host country...⁷⁷

Indeed, legal uncertainties appear to be a significant concern for many offset service firms. The law firm Frost & Sullivan has its own ‘internal think tank’ dedicated to the legalities of defense offsets – and specializes in the Middle East and Asia.⁷⁸ Blenheim Capital – one of the largest such firms – reports expending 35% of its annual budget on risk mitigation and risk management from outside counsel as a result of “instances of misconduct” in offset programs.⁷⁹ The offset bureaucracies of individual countries also

⁷⁷ Accessed 18 October 2009. newsletter available at: http://74.125.113.132/search?q=cache:rKg4ZzJ83SQJ:www.ssd.com/files/tbl_s29Publications/FileUpload5689/9785/IT3Fall.pdf+FCPA+offsets&cd=7&hl=en&ct=clnk&gl=us&client=firefox-a

⁷⁸ “Frost & Sullivan to present ‘top 20 global mega trends’ at GIL 2010.” 15 September 2010. *Khaleej Times*.

⁷⁹ CTO Newsletter. 24 May 2010. 28(10).

cater to this growth industry, often hosting their own conferences on offsets, such as the biennial Abu Dhabi International Offset Conference. These conferences also frequently coincide with defense equipment exhibitions, allowing prime contractors and procurement officials to hold offset discussions in parallel with equipment demonstrations.

A short profile of one particular firm – Blenheim Capital, founded as Summit Corporate Services in 1990 by an American named Grant Rogan – may help elucidate the range of activities these intermediary entities provide.⁸⁰ Rogan got his start at Northrop Grumman helping Swiss companies identify investment opportunities in Saudi Arabia in order to fulfill an offset obligation incurred by Northrop for its sale of F-5E/F jets to the Swiss Air Force.⁸¹ Labeled ‘Mr. Fix-it’ by *The National*, one of the UAE’s more independent newspapers, Rogan advises not only private defense firms but also a number of governments including Libya,⁸² Kuwait, and the UAE. Blenheim’s small staff of 16 employees – including a retired U.S. Major General, a Knight of the British Empire, and a former U.S. Army helicopter pilot – has handled over \$12 billion in offset projects for

⁸⁰ Rogan’s firm was originally Summit Corporate Services, but became Blenheim Capital in 2006 when it formed a joint venture with Barclays Capital to form an “offset-based structured finance boutique.” But in October 2009 Summit bought out Barclays’s shares. Shortly after, Rogan brought in Sir Nigel Knowles to serve as Blenheim’s Chairman, leaving himself as CEO. Knowles is the managing director of DLA Piper – the world’s largest law firm. Ivan Gale. “Mr. Fix-it.” *The National* (UAE). <http://www.thenational.ae/apps/pbcs.dll/article?AID=/20100422/BUSINESS/704229925/1354>. Antonie Boessenkool. “Small Firm, Big Player.” 14 June 2010. DefenseNews <http://www.defensenews.com/story.php?i=4668082>.

⁸¹ Ivan Gale. “Mr. Fix-it.” *The National* (UAE). <http://www.thenational.ae/apps/pbcs.dll/article?AID=/20100422/BUSINESS/704229925/1354>

⁸² CTO Newsletter. 22 May 2006. 24(10).

27 different defense clients since 1998.⁸³ His low profile has meant that (in his words), “people won’t know that we have had to do with something. We come in quiet, we do a bit and then we leave again.”⁸⁴ Blenheim’s own evolution is a microcosm for the offset industry overall, and reflects the dense network of personal and corporate connections that have allowed the system to expand so quickly.

Ironically, Summit Corporate Services was *itself* the product of an offset obligation, the capital to start the company came from a \$160 million offset incurred by Lockheed Martin for an \$8 billion sale of F-16s to the UAE. The money went into the investment portfolio of the UAE Offsets Group (this fund would later become Mubadala), which used some of the funds to establish Summit, whose first task was to aid the UAE in purchasing a line of petrol stations owned by Shell in the UK.⁸⁵ What appears to have started as a consultancy firm providing investment services to the UAE Offsets Group is now a fully-fledged “offset investment bank.”⁸⁶ Instead of focusing solely on coordinating offset projects – interfacing with domestic partners and identifying suitable projects – the firm now performs other functions, including a service (called “off-balance

⁸³ <http://www.defensenews.com/story.php?i=4668082>. See also Ivan Gale. “Mr. Fix-it.” *The National* (UAE). <http://www.thenational.ae/apps/pbcs.dll/article?AID=/20100422/BUSINESS/704229925/1354>. Employee profiles taken from Blenheim newsletter. 14 July 2010. “Offsets Evolved.”

⁸⁴ Ivan Gale. “Mr. Fix-it.” *The National* (UAE). <http://www.thenational.ae/apps/pbcs.dll/article?AID=/20100422/BUSINESS/704229925/1354>

⁸⁵ DISAM Journal. Fall 2001, p101. The disclaimer at the beginning of this article (which runs from page 77 through page 107) indicates that it is extracted from the 5th Annual BIS report on Offsets in the Defense Trade released in 2001. However, on the BIS webpage, the link to the 2001 report takes you to a one-page document. When I contacted an employee at BIS about this he told me the report available online *was* the full version of the report, although the DISAM report suggests this is not the case. I think this must be true for several subsequent reports as well, which only run a few pages on the BIS site.

⁸⁶ This is Rogan’s terminology. Antonie Boessenkool. “Small Firm, Big Player.” 14 June 2010. DefenseNews. <http://www.defensenews.com/story.php?i=4668082>.

sheet financing”) that leverages the potential returns of future offset projects to provide collateral to procuring countries, who can then secure a lower interest rate on debt they accrue for the purchase of additional defense equipment,⁸⁷ as well as setting up structured investment vehicles to allocate offset dollars to domestic projects.⁸⁸

Some industry analysts contend that this extension of services presents a conflict of interest⁸⁹ – since Blenheim is frequently on retainer from both the obligor *and* the procuring country. Indeed, in at least one instance Blenheim partnered with a UAE company (Waha Capital, which itself was established with offset funds from BAE) in order to form an investment vehicle (Waha Financial Services) that was then used to finance the purchase of \$3 billion in additional defense equipment in January 2009⁹⁰ - a deal that would have generated significant fees for the company, whose revenues increased nearly 37% from 2009-2010.⁹¹ In a global marketplace where large firms frequently partner together (Lockheed Martin and BAE on the Joint Strike Fighter; the partnership between Raytheon and France’s Thales – formerly Thomson CSF; and the EADS consortium that combines France’s Aerospatiale-Matra, Germany’s DASA and Spain’s CASA) offset obligors may in effect be financing future purchases of their own products. A good business model for arms manufacturers, but hardly a fair deal for procuring governments. However, Rogan claims that his firm’s dual operations structure

⁸⁷ CTO Newsletter. 13 July 2009. 27(13). This is especially ironic given the current international financial climate in which similarly exotic credit instruments based on over-leveraged assets set off a severe contraction in the global economy.

⁸⁸ CTO Newsletter. 9 November 2009. 27(21).

⁸⁹ CTO Newsletter. 22 September 2003. 21(18).

⁹⁰ CTO Newsletter. 9 March 2008. 27(5). Also see Ivan Gale. 13 January 2010. “Waha Capital Builds on Strengths.” *The National* (UAE).

⁹¹ Zawya Business profile. (subscription required).

will enhance transparency in what he readily admits is an “unregulated” industry.⁹² And like an investment bank, which manages not only its clients’ funds but also its own, Blenheim has itself become a shareholder in offset projects.⁹³

Although industry publications characterize Blenheim’s registration “in the UK” as “raising the bar”⁹⁴ the firm is in fact registered with the Guernsey Financial Services Commission (Guernsey and the other British Channel Islands providing the etymological origins for the term “off-shore” tax haven) as a “non-regulated Financial Services Business.”⁹⁵ Furthermore, the majority of its operating hubs are also in localities designated by the OECD as ‘tax-havens’ – including Abu Dhabi, Bahrain, Malaysia (which has seen a boost in its tax haven status as the recession has encouraged governments to crack down on traditional locales like the Cayman Islands)⁹⁶ and (soon in) Brunei. Rogan says his company’s advantage has been their overhead, which is much lower than that of the major banks. This is unsurprising given the firm’s total number of employees worldwide and the fact that, at least until now, it has been unburdened by compliance with legal regimes and due diligence requirements.

But Grant Rogan was not the first “Mr. Fix-it,” in his family. His father – Richard Grant

⁹² Antonie Boessenkool. “Small Firm, Big Player.” 14 June 2010. DefenseNews <http://www.defensenews.com/story.php?i=4668082>.

⁹³ Antonie Boessenkool. “Small Firm, Big Player.” 14 June 2010. DefenseNews <http://www.defensenews.com/story.php?i=4668082>.

⁹⁴ CTO Newsletter. 9 November 2009. 27(21).

⁹⁵ Blenheim Newsletter. “Offsets Evolved.” 14 July 2010.

⁹⁶ Richard C. Morais. 15 July 2009. “OutFront: The Hot Tax Haven.” *Forbes Magazine*.

Rogan – was Northrop Grumman’s ‘handler’ for the firm’s dealings with Adnan Khashoggi, the infamous intermediary who made billions in commissions for facilitating arms sales to Saudi Arabia in the 1980s.⁹⁷ Author Robert Kessler documents a 1971 meeting between Khashoggi and the elder Rogan at the Mayfair Hotel in London during which Khashoggi advised Rogan to mislead a bribe-seeking (but low ranking) member of the Saudi royal family that Northrop was getting annoyed with Khashoggi’s demands. Since this family member’s request for a ‘cut’ would have to go through Khashoggi, who would later dispense payments from his single commission via a vast network of front companies, this was an indirect way of ensuring that more of the bribe money stayed in Khashoggi’s hands instead of trickling down through the vast Royal Family hierarchy.⁹⁸

However, the offset service industry is not just a case of savvy Westerners siphoning off capital from oil-rich monarchs (of which history provides endless examples). UAE private investors are also active in offset service provision, including through a fund named “Brainstart,” designed to invest in various start ups in procuring countries and then market those investments to foreign defense firms with offset obligations in those countries.⁹⁹ Although Brainstart now appears to be defunct, it was originally a subsidiary

⁹⁷ Grant Rogan’s brother – Dr. Eugene L. Rogan – is the Director of the Middle East Center at Oxford. Before its business partnership with Barclays, Grant’s firm Blenheim Capital was known as Summit Corporate Services. According to a bi-weekly trade publication from the UK – The Countertrade & Offset Newsletter –the University of Oxford’s intellectual property and technology transfer arm ISIS Innovations Ltd., partnered with Summit Corporate Services to advise the Phillipine government on the development and management of business parks equipped with technologies and research resources transferred from defense firms with offset obligations in Manila. CTO Newsletter. 21(22): p3.

⁹⁸ Ronald Kessler. 1986. *The Richest Man in the World: The Story of Adnan Khashoggi*. New York: Warner Books, p76.

⁹⁹ CTO Newsletter. 27 January 2003. 21(2).

of Rotch Group, the UK's largest property developer.¹⁰⁰ Comprising some 600 subsidiaries with assets worth several billion £'s, Rotch is registered in Panama and owned by the Tchenquiz brothers, who dabbled in the business of offsets through two joint ventures: the Global Trade Group, which would identify investment opportunities on the ground, and Consensus International, which would raise the necessary funds from investors through vehicles like Brainstart.¹⁰¹ It is possible that Rotch got into the offset game after partnering with the UK's other largest property developer, London & Regional Properties, on a 2000 deal to buy 180 Shell gas stations, which were subsequently leased back to the oil company.¹⁰² The deal was developed by Rogan's firm in 2000 (then still called Summit Corporate Services) and included an equity stake for the UAE's Offset Program Bureau (then called the UAE Offset Group). Summit and the UOG registered a new joint venture called "Octane Properties" in order to purchase a 25% stake in the chain of gas stations.¹⁰³ It is unclear which firm got the offset credit for the deal, and whether it was Blenheim's advisory services or some of the financing for

¹⁰⁰ CTO Newsletter. 27 January 2003. 21(2).

¹⁰¹ CTO Newsletter. 27 January 2003. 21(2). The Rotch Group owns some 800 properties in the UK, and each one worth more than a few million £'s will have its own entity – hence the large number of subsidiaries. The financial crisis hit Rotch particularly hard, since the bulk of its investments were in real estate, and the firm was very highly leveraged (with loans from at least 60 financial institutions in the US alone). The brothers are currently being investigated for their role in the bankruptcy of Iceland's largest bank; Rotch was the bank's largest client, with loans around £1.7 billion. For information on Rotch and the Tchenguz brothers see these two articles: Amanda Hall. 3 November 2002. "Inside the Empire of a modern-day Genghis." *The Sunday Times* (UK). Also, Louise Armitstead. 11 March 2011. "Tchenguz brothers on bail as police probe widens." *The Telegraph* (UK).

¹⁰² Report on the Dolphin Programme in Abu Dhabi. 22 January 2001. *APS Review Downstream Trends* (an oil industry newsletter).

¹⁰³ "Quiet Bothers Continue to Rock the Property World." 8 October 2005. *The Times* (UK). The Times article makes no mention of either the UAE or Blenheim. Also see: CTO Newsletter. 27 January 2003. 21(2). Also see: Daniel Pearl. April 20, 2000. "Arms Dealers Get Creative with 'Offsets'." *Wall Street Journal, Eastern Edition*. Both the CTO Newsletter and the Pearl article cited above mention the UAE and Blenheim, but this is likely only because both pieces focus *specifically* on defense offsets – and the gas station deal is only highlighted as an example of a defense offset.

the UAE's equity purchase that fulfilled the obligation, but the UAE was able to buy into a substantial real estate deal without raising many eyebrows in the UK. Rotch and London & Regional Properties were cited as equal partners in the deal; the UAE's participation largely escaped mention in the press.¹⁰⁴

Offset Swapping

These offset-specific investment funds and banks have transformed offsets into standardized commodities that can be banked, traded or sold by procuring governments and firms in a process known as "offset swapping." For instance, if Raytheon (or one of its subsidiaries or an offset-services firm hired by Raytheon) completes an offset requirement in Oman that exceeds the original obligation (usually due to the application of multipliers) Raytheon can either bank these offset credits in anticipation of being awarded another sale by Oman; trade them with another contractor that has accrued offset obligations in Oman; or (in some cases) sell them to an offset broker working for a services firm. A real world example might help illustrate the process. BAE and Saab took over offset obligations incurred by South African defense firm Denel when the latter made a sale to the UAE and was unable to meet its offset obligations. BAE and Saab 'swapped' their outstanding obligations in South Africa in exchange for fulfilling Denel's

¹⁰⁴ The above article by Pearl is the only reference I could find in the press to the gas station deal. Rotch (via Consensus Business Group) appears to have done more offset business with Summit/Blenheim, including the establishment of some funds designed to finance technology transfers to Middle East states, with the resulting investment sold as credits to defense firms with offset obligations in those states. Rotch was in talks to partner with the investment arms of several UK universities, including Oxford, where Blenheim founder Grant Rogan's brother Eugene heads up the Middle East Studies Department. CTO Newsletter. 23 April 2007. 25(8).

obligations in the UAE.¹⁰⁵ Here again we see the domestic defense industry benefiting from the increasing complexity of offsets. Denel, which is a state-owned arms manufacturer, benefits from offloading its offset obligations in the UAE, while South Africa's economy loses the offset business already paid for out of its public funds. Because the offsets that BAE and Saab incurred in South Africa might have been dedicated to business in the non-defense sector, this is a double-blow to any economic development rationale that might have been deployed during the contract negotiations. It may be experiences like these that have led many countries (including Colombia, Turkey and India) to place limitations on offset swaps.

Pre-Performance Offsets

Pre-performance offsets are another recent innovation and a sign that offsets are increasingly central in the procurement decision-making process. Traditionally, the obligor firm would present a number of options for offset fulfillment, and collaborate with the relevant government authorities to design a program to satisfy the purchasing country's offset requirements *after concluding the sale*. However, companies are increasingly performing offsets in countries *in anticipation* of receiving future contracts – and many countries now require offsets just in order for companies to bid on military contracts.¹⁰⁶ Pre-performance offsets are usually financed through the marketing budgets of defense contractors since they are not associated with any particular sale – and critics consider them a particularly problematic arena in terms of corruption. This is certainly a

¹⁰⁵ Keith Campbell. 29 February 2008. "BAE Systems, Saab claim to have met 60% of offset obligations." *Creamer Media's Engineering News* (South Africa).

¹⁰⁶ Leon V. Sigal. (ed). 1999. *The Changing Dynamics of US Defense Spending*. Westport, CT: Praeger Publishers, p198.

concern in the U.S. context, since contractors must only report offsets made in connection with actual defense contracts. If those contracts never materialize, the reporting requirement is moot. One such example is an \$18 million investment made by McDonnell Douglas in the mid-1990s in a UAE petrochemical plant to facilitate the contractor's consideration in a scheduled UAE fighter purchase. Much to the surprise of industry analysts – and McDonnell Douglas – the UAE purchased 80 F-16s from Lockheed Martin instead.¹⁰⁷ But because McDonnell Douglas did not secure the contract, the company never had to report the offset.

In addition to the non-reporting of offsets there is also the false reporting of offsets that were never implemented. Such was the case when three employees of the German defense firm Ferrostaal were indicted for passing off investments the firm had previously made in Greece and Portugal as new investments made to fulfill the offset obligations they incurred as part of a 2010 sale of submarines.¹⁰⁸ In 2004 Libya communicated a pre-performance offset requirement to the private firm advising the government on its offset program, although the new guideline was to be communicated to the obligated firm “informally” rather than via written guidelines.¹⁰⁹ Such informal requirements – often termed “best-effort” obligations – are especially prone to facilitating corrupt transactions

¹⁰⁷ Leon V. Sigal. (ed). 1999. The Changing Dynamics of US Defense Spending. Westport, CT: Praeger Publishers, p198. For information on the Lockheed sale see the company's press release at http://www.lockheedmartin.com/news/press_releases/1998/UnitedArabEmiratesAnnouncesDecision.html. Accessed 10 November 2009.

¹⁰⁸ Valentina Pop. July 27, 2010. “Calls for EU to Halt Corrupt Defense Deals.” *BusinessWeek*. http://www.businessweek.com/globalbiz/content/jul2010/gb20100727_597244.htm. This is especially ironic given that the enormous EU bailout required to keep the debt crises in Greece and Portugal from threatening the Euro's value was largely financed by German tax-payers.

¹⁰⁹ CTO. 8 November 2004. 22(21).

because they leave little (if any) paper trail. When standards and benchmarks are nebulous (or completely absent) audits and periodic evaluations are not very useful. Relatedly, the long time that elapses between the signing of an offset contract and its fulfillment complicates the application of many laws regarding bribery of public officials, for which the statute of limitations is usually five years or less.¹¹⁰ By contrast, U.S. defense contractors report taking an average of six years to complete their offset obligations,¹¹¹ and many individual offset programs stretch into decades. The U.K.'s Al Yamamah offset program in Saudi Arabia is a good example. Initiated in 1988, the British team is still proposing new projects for fulfillment of the existing obligation. The latest effort was a \$280 million petrochemical project launched in 2009.¹¹²

Most Recent Innovations in Offsets

Given the increasing scrutiny and condemnation of offsets, not only as market-distorting but in their general failure to yield any discernible economic benefits for procuring countries, serious efforts have been made to find new vehicles for facilitating the global defense trade while mitigating the negative impact of offsets. Many industry analysts consider the F-35 Joint Strike Fighter to be a model for this new method, as likely buyers are incorporated into the production process from the very beginning. The process is similar to the extended supply chain that dominates civilian manufacturing – with final assembly taking place largely in the U.S. The JSF has thus been termed an “international

¹¹⁰ The Foreign Corrupt Practices Act (FCPA) has a five year statute of limitations, and is probably the most rigorous national legal regime dealing with bribery of public officials.

¹¹¹ According to the 12th annual BIS report, U.S. companies average 76.8 months to fulfill offset obligations.

¹¹² CTO Newsletter. 23 March 2009. 27(6).

cooperative project,” and despite the fact that the structure of production operates in the same way as an offset, the U.S. Office of Strategic Industries and Economic Security in the U.S. Department of Commerce, which has generally been critical of offsets, released a statement that “international cooperative projects should be encouraged because they currently do not include the use of offset contracts.”¹¹³ However, since production of the JSF is already being sourced in procuring countries, it is difficult to imagine any basis for the request of offsets. One industry publication echoed the confusion over what many consider to be a false distinction, pointing out that the agency offered no explanation as to the practical difference between an ‘international cooperative project’ and an offset, and that if the aspect of cooperation in production was not available then an offset (or something very similar) would no doubt be implemented.¹¹⁴

Global trends in direct vs. indirect offsets also appear to be shifting. According to the BIS, indirect offsets accounted for an average of 58% of the value of offset transactions between 1993 and 2008. However, recent figures suggest this trend may be reversing, with direct offsets climbing to 49% and 48% of the value of offset transactions in 2007 and 2008, respectively. This is also reflected anecdotally in industry publications and scholarship on international security, which point out the increasing interest shown by procuring countries in establishing or further developing their indigenous defense capacity with the aid of offset programs.¹¹⁵ This trend has been particularly visible in the

¹¹³ CTO Newsletter. 14 June 2010. 28(11).

¹¹⁴ CTO Newsletter. 14 June 2010. 28(11).

¹¹⁵ Many countries that had no domestic defense industry during the 1990s and 2000s (Algeria, the Gulf States) are now demanding the construction of factories, technology transfer and training in defense

UAE and Saudi Arabia, where defense production was nonexistent even five years ago, but where plans for the domestic production of everything from naval patrol boats to the most advanced fighter jets are currently underway.¹¹⁶

The remainder of this chapter will examine some of the incongruities of existing offset data. Although this material demonstrates the challenges inherent in producing quantitative estimates, the primary goal of these sections is to draw some insight from the nature of these incongruities. By comparing available figures, we can gain a more complete picture of the unique interests and institutional affiliations of their sources.

Data Concerns and Discrepancies

The following is excerpted from an exchange between Congressman John Tierney (D) from Massachusetts and Joel Johnson, Vice President of the Aerospace Industries Association, at a Subcommittee Hearing on the Impact of Defense Offsets held by the U.S. House of Representatives:

Tierney: “Mr. Johnson, right now, as I understand it, U.S. companies are not required to provide copies of their [offset] transaction papers to the Commerce Department. Is that accurate?”

Johnson: “What we provide to the Commerce Department on an annual basis is a record of every transaction over \$100,000 to help implement an offset agreement.”

Tierney: “But you needn’t provide copies of those transaction papers. It is just whatever you say it is in the form that you want? So that none of the sales

production in exchange for weapons purchases. Likewise, many countries that saw their domestic defense industries shrink during previous decades are using offsets to beef up production (Brazil, Indonesia).

¹¹⁶ This is examined in detail in the chapter on offsets in the Gulf States.

contracts, none of the written offset agreements or the related paperwork ever goes to Commerce?”

Johnson: *“That is correct.”*

Because the available empirical data does point to significant inconsistencies, I will briefly lay out some of the most obvious examples to lend perspective. This is not an effort to harp on the poor auditing standards of the agencies tasked with tracking offsets, rather it is undertaken to highlight the configuration of actors’ interests and how these are channeled through the relevant processes, institutions and relationships to give us these divergent figures. To paraphrase the economist Edward Nell, it is the relations *between* variables (in this case, data points) rather than the variables themselves, which yield meaningful information.¹¹⁷ For example, a prime contractor has an interest in downplaying the value of its offset obligation in any given defense sale when it reports to the U.S. Bureau of Industry and Security (BIS), both because this may represent a transfer of technological know-how to the domestic defense industry of a foreign country and because it represents the possible loss of jobs for sub-contractors and suppliers based in the U.S. Conversely, the prime contractor has an interest in inflating the offset value when dealing with the procuring government, which would like to point to large investments it secured as a result of the defense deal. The divergent interests of actors involved in offsets nearly guarantees that information will be contested – it is these contestations that reveal many of the political and economic costs associated with incentive payments in arms sales, particularly because government accountability in many procuring countries is low, and the impetus to maintain defense subsidies in

¹¹⁷ Edward Nell. 1967. “Economic Relationships in the Decline of Feudalism: An Examination of Economic Interdependence and Social Change.” *History and Theory*. 6(3): p328.

exporting countries means that these allowances may override other pressing strategic and social concerns.

Dollar Values and Bureau of Industry & Security (BIS) Data Sources

The most notable discrepancy in the quantitative data is quite simply the dollar value of defense offsets. For example, a 2000 White House Panel estimated that offsets from US defense contractors equal about \$3 billion per year,¹¹⁸ however aggregate numbers available from the annual reports of the Department of Commerce's Bureau of Industry and Security (BIS) yield estimates of about 1.5 times that, and a Treasury Department survey carried out in 1983 counted offset obligations of nearly \$10 billion in that single year for the companies that completed the voluntary (and anonymous) questionnaire.¹¹⁹

Numerous GAO reports have criticized the BIS offset database as well as the agency's collection method, which relies on contractor submissions that detail their annual offset activity, without any accompanying documentation such as invoices, receipts, delivery schedules, or the offset contracts themselves – a shortcoming made plain in the preceding exchange between Joel Johnson and Congressmen Tierney.¹²⁰

GAO has also criticized the Department of Defense and the State Department, which (at least theoretically) have access to the actual offset contracts in Direct Commercial Sales (DCS) and Foreign Military Sales (FMS), respectively, for failure to consistently report

¹¹⁸ Phillips, E.H. "Offset Threat." February 26, 2001. *Aviation Week and Space Technology*. 154(9): p15.

¹¹⁹ BIS Annual Report, 2009. U.S. Department of Commerce. "Survey of Offset/Coproduction Requirements: A Survey." U.S. Department of the Treasury Report.

¹²⁰ Government Accountability Office. 8 July 2004. "Defense Trade: Issues Concerning the Use of Offsets in International Defense Sales." GAO/NSIAD-04-954T.

on offsets.¹²¹ The Office of Management and Budget, originally charged with collecting data on defense offsets, relinquished the responsibility in 1987 because they were unable to compel the relevant U.S. Government agencies to provide them with the necessary data.¹²² Arms trade historian Leon V. Sigal of the Social Science Research Council noted that the dollar figures provided to BIS by industry sources corresponds to an average offset of around 37 percent, even though the average for offsets documented by BIS are much higher – around 54 percent. He suggests that this “may reflect incomplete reporting by companies involved in offset activities.”¹²³

Other than the BIS reports, the only other publicly-available USG documents that *might* include information on offsets are the Congressional notifications of pending sales issued by the DSCA. But, because this information is subject to the knowledge of the relevant reporting authorities (DoD or State, depending on whether the sale was under FMS or DCS guidelines)¹²⁴ who are not party to the offset contract and whose own contract officers are prohibited from discussing offsets with any entity but the private firm providing the equipment, the DSCA notification includes the statement, “There are no

¹²¹ One GAO report sites DoD and State as having reported that no offset contracts occurred during a specific reporting period, only to find later through its own independent investigation that numerous offset contracts has been signed during the time in question. Government Accountability Office. “Defense Production Act: Agencies Lack Policies and Guidance for Use of Key Authorities.” 26 June 2008. (GAO-08-854). www.gao.gov/products/GAO-08-854

¹²² This obstacle is reported in a number of venues. Including a report issued by the consulting firm *Grant Thornton*, which states that “the Office of Management and Budget could not perform the role assigned to it because ... there was neither the data nor the funding to support such [interagency] studies.” “The evolving state of offset arrangements in connection with military and other sales to foreign countries.” p1.

¹²³ Leon V. Sigal. (ed). 1999. The Changing Dynamics of US Defense Spending. Westport, CT: Praeger Publishers, p198.

¹²⁴ Government Accountability Office. 26 October 2000. “Defense Trade: Data Collection and Coordination on Offsets.” GAO-01-83R, p3.

known offsets associated with this sale,” even for contracts with countries that *as a rule* require offsets.

Although observers claim that offsets are nearly ubiquitous features of the arms trade and defense executives avoid expanded reporting requirements by pointing to excessive administrative burdens generated by the sheer number of offsets they discharge annually,¹²⁵ most DSCA notifications report no offsets associated with specific sales – a phenomenon that seems to contradict all other sources of information. Since these Congressional notifications (required by law) represent the only systematic and country-specific source of offset data available to the public since regional and country figures were excised from the BIS reports, this severely constrains the ability of researchers or other interested groups to collect meaningful data. Apparently I am not the only observer to notice this inconsistency. A lawyer for General Dynamics (one of the largest US defense firms) noted the legal inconsistencies in a 2011 article published in the *Public Contract Law Journal*,

This language [“there are no known offsets”] seems to imply that the U.S. Government, as the broker for the FMS case, has special insight into the transaction and is almost certifying that there are, in fact, no offsets. Nothing could be further from the truth...[O]ffset discussions take place outside of government earshot...[A]nd the U.S. Government supposedly remains blissfully ignorant of their [offsets] existence.

¹²⁵ When asked by the BIS to submit offset numbers according to new industrial codes, Lockheed Martin’s Director for Corporate Industrial Participation resisted, claiming that, “the sheer size in both count and volume of our offset obligations requires that we spend in excess of 100 hours collecting and formatting the data . . . the NAICS requirements will add a 33 percent burden.” CTO Newsletter. 27 July 2009. 27(14). This claim does not match up with the absence of reported offsets in the Congressional notification announcements collected by DSCA and posted on their website. http://www.dsca.mil/PressReleases/36-b/36b_index.htm

The author recommends that, “Instead of presenting a false impression that an offset transaction is not taking place, DSCA should become actively involved in offset arrangements.”¹²⁶

To further complicate matters, current offset practice in the GCC countries is characterized by add-on investments and expansions of existing offset entities, meaning there are fewer “new” entities created, which makes pinpointing offset investment even more difficult.¹²⁷ In 1995 – two years after BIS began to collect data on offsets – the DoD stopped asking contractors to indicate whether the foreign parts they used in assembling their own products were related to fulfillment of an offset obligation.¹²⁸ DoD officials claimed that they discontinued the requirement because many firms did not report the information correctly, however, if DoD had continued to collect the data it would provide a useful measure against which to check BIS figures.

These informational shortcomings are further complicated by successful industry efforts to have offset contracts classified as “proprietary,” which have resulted in the redaction of most of the quantitative data from the publicly available BIS annual reports on

¹²⁶ Mark J. Nackman. Winter 2011. “A Critical Examination of Offsets in International Defense Procurements: Policy Options for the United States.” *Public Contract Law Journal*. 40(2), p526-7.

¹²⁷ From a presentation by John V. Lonsberg of the lawfirm Fulbright & Jaworski LLP. “GIL 2010: Middle East: The Evolution of Defense Offsets in the Region: A Case Study-Saudi Arabia.” 6 October 2010. www.frost.com/prod/servlet/cpo/213016039. The presentation reports that current practice is in “further development of derivative investments and opportunities for existing offset entities.”

¹²⁸ Government Accountability Office. 26 October 2000. “Defense Trade: Data Collection and Coordination on Offsets.” GAO-01-83R, p4. Also see GAO. 13 November 1998. “Defense Trade: Weaknesses Exist in DOD Foreign Subcontract Data.” GAO/NSIAD-99-8.

offsets.¹²⁹ In 2001, a small group of Boeing shareholders put forth a proposal requiring the company to disclose the value of its offset agreements, claiming that the conclusion of private offset agreements with foreign governments amounted to the conduct of foreign policy, meaning Boeing forfeit the right to any proprietary claim.¹³⁰ Not surprisingly, the proposal was unanimously voted down by the board of directors. These circumstances have resulted in significant discrepancies between official data and figures reported by defense industry trade groups, think tanks, NGOs and media outlets, as well as between reports issued by different U.S. Government agencies, such as a GAO report that cites \$84 billion in offsets from US companies from the “mid-1980s” until publication of the report in 1996.¹³¹ Corresponding BIS reports give a figure of just \$19 billion for the five-year period beginning in 1993 (when the BIS initiated data collection) and including 1997.¹³² This divergence makes little sense if offsets have primarily been an outgrowth of an increasingly competitive defense export market, in which case the 1980s would not have been a high-water mark for offset activity.

Given that these same BIS reports indicate that offsets have continued to grow

¹²⁹ See Marshall, Shana. November 2009. “Money for Nothing? Offsets in the US Middle East Defense Trade.” *International Journal of Middle East Studies*. 41(4). Defense Security Cooperation Agency memo. DSCA 00-01. 19 January 2000. “Inclusion of Offset Costs in Letter of Offer and Acceptance (LOAs).” The memo reports that, “Section 36(b)(1)(g) of the Arms Export Control Act (22 U.S.C. 2776) requires this information to be treated as “Confidential Information” in accordance with section 12(c) of the Export Administration Act of 1979 (50 U.S.C. App. 2411(c)). This information is exempt from disclosure under section 552 of title 5, United States Code, and shall not be published or disclosed without a determination that withholding is contrary to the national interest.”

¹³⁰ 23 March 2001. “Shareholder Proposal on Offsets in Foreign Military Contracts.” www.boeing.com/companyoffices/financial/.../proposal2.html

¹³¹ Government Accountability Office. 12 April 1996. “Military Exports: Offset Demands Continue to Grow.” GAO/NSIAD-96-65.

¹³² BIS annual report, 1999.

significantly ever since their introduction into the defense trade, it is difficult to harmonize these contradictory figures. When U.S. agencies have attempted to reform the reporting process for offsets – in one case asking that defense firms use the revised industrial codes (from SIC to NAICS, first released in 1997) to report which sectors in procuring countries were benefiting from offset projects in order to facilitate analysis of the impact offsets have on U.S. trade and employment – Lockheed Martin’s Director for Corporate Industrial Participation complained that, “The sheer size in both count and volume of our offset obligations requires that we spend in excess of 100 hours collecting and formatting the data . . . the NAICS requirements will add a 33 percent burden.”¹³³ Furthermore, ‘willful’ violation of reporting requirements incurs a penalty of only \$10,000. Since those defense firms responsible for the majority of offsets have assets averaging \$30 billion each, a fine of this size is irrelevant.

Compiling independent calculations based on corporate earnings reports or SEC filings submitted by defense firms would likewise be nearly impossible given the intense merger and acquisition activity that has taken place in the defense sector since the introduction of offsets in the Middle East. Even if we were to assume that offset outlays are consistently and accurately reported by the firms, such a task would require extraordinary accounting efforts.¹³⁴ To take two examples, the Middle East Propulsion Company set up under the

¹³³ CTO Newsletter. 27 July 2009. 27(14).

¹³⁴ Stephen Martin makes this observation in his book on page 235, stating that “A large amount of accounting effort would be needed to identify which programme should receive the offset credit for exports from these [Peace Shield] companies.” In addition to the ownership changes in MEPC – AEC and AACC (also Peace Shield era companies) were also originally US offset companies that later acquired significant British investment during the Al Yamamah deal. AEC produced systems that went into equipment sold to Saudi Arabia by the UK, and Al Salaam will most likely be doing the same under recently concluded offset agreements associated with the British sale of Typhoon aircraft to the Kingdom. Likewise when an

Peace Shield offset in Saudi Arabia in 1992 originally involved U.S. contractors General Electric and Pratt&Whitney. Later the British firm Rolls Royce invested in MEPC as part of the Al Yamamah offset program, but Pratt&Whitney is now part of United Technologies International, an American company. Recently two additional defense contractors have invested in the company: the US firm Wamar International and the German firm MTU Aero. The original Saudi institutional investors: the National Industrialization Corporation and the Saudi Advanced Industries Corporation also no longer appear on the roster of investors, and have been replaced by a company called Shomokh Al Hemam, which has no discernable presence in any non-offset companies or any web-accessible profile. Likewise, Allied Defense Group – the original partner for the KADDB’s ammunition plant (Jorammo) – was dissolved in 2010 after its executives were found guilty of violating the Foreign Corrupt Practices Act.

Of course arms exporting countries have no monopoly on concealing data or publishing contradictory figures. To take one example, the BIS puts U.S. offset agreements with Saudi Arabia at \$1.4 billion between 1993 and 2005.¹³⁵ In 1997, Prince Fahad bin Abdullah, then-Chairman of Saudi Arabia’s offset committee referred to \$1.7 billion in U.S. offset obligations (with an additional \$2 billion from the UK and \$700 million from France).¹³⁶ One business intelligence source published in 2007, citing the Secretary to the Saudi Economic Offset Committee Major General Hamad Al Sugair, gives an overall

American firm that was invested in AACC was taken over by another American firm, BAE stepped in and bought the newly available shares. The Economics of Defense Offsets, p235.

¹³⁵ BIS 11th Annual Offset Report, p4-3.

¹³⁶ Lieutenant Colonel Frank S. Petty. Summer 1999. “Defense Offsets: A Strategic Military Perspective.” *The DISAM Journal*, p75.

figure of 36 established joint venture companies (50 including those pending approval), with a capital value of \$4.5 billion (which includes money from the defense obligor, state funding agencies and domestic investors) and exports of about \$1.5 billion from these companies.¹³⁷ One year later, Al Sugair provided this same publication with figures of 40 companies, a capital value of almost \$9 billion (twice as much as the previous figure) and exports of about \$1.8 billion.¹³⁸

Figures calculated by economists and other researchers using various documents also vary widely. M.A. Ramady, a professor of finance and economics at King Fahd University estimated that \$25.5 billion in defense contracts signed by the Saudi monarchy as of 2002. He further reasoned that a 35% offset requirement would yield offsets of nearly \$9 billion. However, the Saudi Ministry of Defense identified commitments of only \$3.46 billion as of 2002,¹³⁹ and if the value of projects *undertaken* (rather than merely committed to) is measured the figure is still lower – only \$2.2 billion. If we burrow down still further, separating the investment dollars provided by the offset obligor firm from the funds provided by domestic Saudi sources, then the total contribution of U.S., U.K., and French firms through 2002 is only \$668 million. This is roughly 30% of the total costs of the various offset projects, *but represents an average of only 2.6% of the costs of the arms contracts themselves*. So, although Saudi Arabia has a policy requiring

¹³⁷ CTO Newsletter. 12 March 2007. 25(5).

¹³⁸ CTO Newsletter. 9 June 2008. 26(11).

¹³⁹ M.A. Ramady. 2005. *The Saudi Arabian Economy: Policies, Achievements, and Challenges*. New York: Springer, p285.

that 35% of the contract cost be offset, in practice obligor firms appear to have ponied up less than 3%.¹⁴⁰

Contradictory Guidelines in Official Offset Policies

Inconsistencies, gaps, and contradictions in official offset guidelines established by procuring countries also makes it nearly impossible to arrive at independent calculations – since each contract may be subject to quite different offset requirements. The fact that specific offset guidelines are not well-established may reflect the shortcomings of state bureaucracies, but may also contain a strategic element as well. A good deal of opacity can be beneficial, both from the procuring government’s perspective – since this facilitates their ability to negotiate better deals by mischaracterizing existing programs or previous offset projects – and from the perspective of the offsetting firm, which may be subject to oversight and pressure from their own political leaders and/or shareholders. If guidelines are unclear and inconsistent, both firms and governments are able to avoid potential criticism.

Let us take Saudi Arabia – where even the most fundamental features of offset policy are indeterminate – as an example. Until 2008, there was no threshold price above which offsets would be required (it is now set at \$107 million), instead this was decided on a ‘case-by-case basis.’¹⁴¹ Neither is the percentage value of the offset clear: sometimes the mandatory value is set at 35% of the overall contract, and other times at 35% of the “technical content” of the project – therefore ruling out costs associated with service,

¹⁴⁰ Ramady. *The Saudi Arabian Economy*, p288-289.

¹⁴¹ CTO Newsletter. 9 June 2008. 26(11).

maintenance, administrative overhead, etc., even though these costs often exceed the actual equipment cost.¹⁴² For example the kingdom's recent Typhoon purchase, estimated at about £20 billion for 72 planes, will likely include about £10 billion in maintenance, training and support, and another £5 billion for supplemental weapons systems.¹⁴³

Previously firms were given 10-12 years to identify feasible offset opportunities, but changes to the kingdom's offset policy now requires that half of the 35% be invested within 5 years (although there are still no non-performance penalties).¹⁴⁴ Guidelines state that 60% of the investment should be made in manufacturing, although recently the government has suggested that the pool of substantial manufacturing opportunities has been depleted by previous offsets. The portion of investment that must be made in cash has been increasing, from 20% in previously published guidelines,¹⁴⁵ to 25% most recently.¹⁴⁶ Multipliers are now also restricted to 'non-return' activities (such as training Saudi nationals), although these multipliers can reach as high as 10 – securing the firm offset credits at 10 times their outlay.¹⁴⁷ Despite these inconsistencies, at least official Saudi policy recognizes the *existence* of offsets; official rhetoric in both Egypt and

¹⁴² Ramady. *The Saudi Arabian Economy*, p284.

¹⁴³ CTO Newsletter. 22 October 2007. 25(20). This was also the case with the U.S. Peace Shield I offset, which included \$2 billion in technical content but another \$3.6 billion in non-technical content. Ramady. *The Saudi Arabian Economy*, p285.

¹⁴⁴ CTO Newsletter. 9 June 2008. 26(11).

¹⁴⁵ Ramady. *The Saudi Arabian Economy*, p284.

¹⁴⁶ CTO Newsletter. 9 June 2008. 26(11).

¹⁴⁷ CTO Newsletter. 9 June 2008. 26(11).

Jordan denies the existence of offsets despite the fact that co-production, buybacks, and other common forms of offset are clearly present in their purchase agreements.

Number of Countries Receiving Offsets

Another notable inconsistency concerns the number of countries with which U.S. contractors have offset obligations. Although the most recent 2008 BIS report does not include any country-level data (for the “proprietary” reason stated above) previous reports include information for only around 40 countries.¹⁴⁸ However, the US Treasury report referred to above cited US offset obligations in 130 different countries.¹⁴⁹

Although this numerical disparity may also be due simply to underreporting by firms it may also be that shifting legal definitions, trade regulations and bilateral agreements have truncated the universe of exchanges that are legally classified as offsets. For example, a 1997 DOD sale to the Government of Egypt included,

coproduction of 50 M88A2 recovery vehicle kits, 53 M2 machine guns, 100 AN/PVS-7B night vision goggles, spare and repair parts, contractor technical support, support and test equipment, ammunition, publications, program management, personnel training and training equipment, U.S. Government and contractor technical and logistics services and other related elements of program support.¹⁵⁰ [my italics]

Despite the fact that the sale was stipulated on coproduction of the defense goods, it was not considered an offset – indeed the announcement of potential sale includes the

¹⁴⁸ SIPRI reported that the US transferred arms to 67 countries between 2007 and 2008, this would mean that 26 of those countries did not require offsets in their agreements. Given what is known about the prevalence of offsets in defense sales, this is unlikely.

¹⁴⁹ Department of the Treasury Report. “Survey of Offset/Coproduction Requirements,” p1.

¹⁵⁰ A copy of the announcement of potential sale is available through the DOD site: http://www.defenselink.mil/news/Nov1997/m11101997_m206-97.html. Accessed 31 October 2009. A later reference to the completed sale and an additional follow-up can be found: <http://www.globalsecurity.org/military/world/egypt/tank-200.htm>. Accessed 31 October 2009.

sentence, “There are no offset agreements proposed to be entered into in connection with this potential sale,” – and therefore would not be included in any aggregate data provided to the BIS by industry. Nonetheless, the sale behaves exactly as a traditional offset, in the sense that it contributes to the military production capacity of the Egyptian security forces.¹⁵¹ Additionally, a 2009 BIS rule change also clarified that “U.S. firms are required to report on all offset transactions even if the offset transaction itself does not involve a defense article or service” suggesting that indirect offset transactions often went unreported because the transaction itself was in a non-defense sector.¹⁵² The rule also defines an offset as “any activity for which a firm claims credit for full or partial fulfillment of the offset agreement,” meaning that activities like pre-performance offsets meant to aid the firm in securing a future contract will most likely not be reported.

Both possible sources of data inaccuracies (firm underreporting and changing definitions of offsets) are of concern: the first because accurate reporting is necessary to effectively evaluate the economic and political effects of offsets, and the second because offsets are a form of economic exchange whose political and economic effects remain regardless of attempts to frame them as something else. The GAO has consistently claimed that it is impossible to estimate the impact of offsets on the U.S. economy because they represent such a small percentage of economic activity. Perhaps more accurate figures would demonstrate that this is not the case.

¹⁵¹ Although specific offset contracts are not available to the public, Dr. Pompiliu Verzariu, former director of the Financial Services and Countertrade Division at the International Trade Administration (U.S. Department of Commerce) informed me during an interview that this sale would not be reported to the BIS as an offset and thus would not be included in the annual report figures.

¹⁵² “Reporting of Offset Agreements in Sales of Weapon Systems or Defense-Related Items to Foreign Countries or Foreign Firms.” 29 April 2009. *Federal Register*. 74(81): p19467.

Region-Specific Data Discrepancies

Although reliable information on offsets is difficult to obtain generally, the informational void seems particularly true with respect to official numbers on U.S. offsets in the Middle East. This is partly due to the fact that Europe and Asia accounted for the majority of offset activity through the 1980s, consequently government agencies and other interested parties focused primarily on these two regions. For example, prior to 2008 when the BIS stopped reporting any regional figures, the agency frequently left out numbers on the Middle East even though it included all the other regional categories. The 9th through the 12th editions of the BIS report (for periods 1993 through 2005) give us figures for European and Asian shares of offset contracts as a percentage of total U.S. offsets worldwide, but do not give us similar figures for the Middle East, *despite the fact that the reports tell us the Middle East percentage exceeded that of Asia for several of the reporting years*. Figures are not attainable through calculations such as subtracting other regional percentages to find the unique figure for the Middle East because the fourth and final regional category “North/South America” is also frequently left out, though the authors point out that this region’s contribution to total offsets is minimal. The reports often make statements devoid of actual quantitative value when referencing the Middle East. For example, one edition of the report reads,

In 1999, 2000, 2003 and 2005, contracts and agreements with the Middle East and Africa increased significantly from the proceeding years. In 2003 and again in 2005, the Middle East/Africa share of annual offset defense system sales and associated agreements exceeded those of Asia.¹⁵³

¹⁵³ The BIS report only includes the Middle East/Africa share of offset “transactions” rather than offset contract values. See BIS 11th Annual Report, page 4-4.

Yet the BIS report does not give us figures to inform such a comparison. It does tell us that the Middle East/Africa received slightly less than \$6 billion in offsets from U.S. companies for the twelve-year period between 1993 and 2005 (and only \$3.1 billion as of 1999).¹⁵⁴ However, it is hard to reconcile this with other figures on regional offsets, including the figure of \$30 billion in offsets in the Gulf States alone between 1990 and 1998 provided by *Jane's Intelligence Review*¹⁵⁵ and the press releases and speeches made by many Arab regimes concerning the large investment inflows they have received in fulfillment of offset obligations. For instance, Carlyle Group – the private-equity fund that advised the Saudi Offset Committee until shortly after 9/11 – reported that “outstanding” U.S. offset commitments to Saudi Arabia stood at \$1.3 billion as early as 1997.¹⁵⁶ One year later, in 1998, Prince Fahad bin Abdullah, then-Chairman of Saudi Arabia’s offset committee referred to \$1.7 billion in U.S. offsets (from the program’s inception in 1984),¹⁵⁷ while Kuwait claims \$1 billion from the U.S. as of 2007, and the UAE claims [\$X]. Since the BIS figure of less than \$6 billion also includes South Africa, Turkey and Israel – with the latter alone receiving \$4.2 billion in offsets between 1993 and 2006 – this figure seems far too small.¹⁵⁸

Industry estimates put the global value of offsets at about \$70 billion between 2005 and

¹⁵⁴ BIS 6th Annual Report on Defense Offsets. 2001.

¹⁵⁵ “Military Offsets to Grow?” 1 December 1998. *Janes Intelligence Review*.

¹⁵⁶ “Workshop on the Offset Program: A Launchpad for Joint Ventures.” <http://www.us-saudi-business.org/p96ws2.htm>. Transcript of meeting between Saudi officials and The Carlyle Group. Accessed 21 February 2010.

¹⁵⁷ with an additional \$2 billion from the UK and \$700 million from France

¹⁵⁸ BIS 12th annual report on offsets in the defense trade.

2010 and predict this figure will more than double to \$150 billion over the next five years.¹⁵⁹ Much of this increase is anticipated to come from the Gulf States, who are poised to purchase integrated air defense systems, C4ISR gear and other major equipment.¹⁶⁰ For large firms, like BAE, Boeing and Lockheed Martin, offset commitments easily exceed \$10 billion.¹⁶¹ Consequently, decision-making on offsets now frequently takes place at the boardroom level.¹⁶² Similarly, we know that a great many procurement decisions were made based not on equipment specifications or on cost, but on the proposed offset package – which is why South Africa and other countries have included “non-costed” options in their official procurement plans. So offsets are central to both buyers and sellers. Yet, offsets remain at best a peripheral concern to those who study defense, foreign policy and the arms trade, that is if they are aware of their existence in the first place. Predictably, this much resembles the marginalization of studies of corruption in the defense trade, despite official estimates that this graft accounts for almost half of all corrupt resource transfers worldwide.¹⁶³ As Roeber (2005) states,

I was given the distinct impression that talk about corruption is faintly distasteful, even déclass , servants tattle. Serious students of the industry, both friendly and unfriendly, concern themselves with strategy and materiel. They share the comfortable assumption that bribery does not affect main procurement decisions...

¹⁵⁹ Andrew Chuter. 18 April 2010. “Nations Seek More Offsets From Suppliers.” *DefenseNews*. <http://www.defensenews.com/story.php?i=4588118>

¹⁶⁰ *ibid*

¹⁶¹ *ibid*

¹⁶² *ibid*

¹⁶³ Joe R. Roeber. 2005. “Parallel Markets: Corruption in the International Arms Trade.” *Campaign Against the Arms Trade* (UK). Roeber cites CIA sources, but estimates released by the U.S. Department of Commerce are similar.

[t]his is wrong, entirely wrong. Corruption is not peripheral; it acts at the centre of procurement decision-making.¹⁶⁴

Like these ‘serious students’ who dismiss corruption, industry experts and officials likewise dismiss offsets as a mere nuisance, or at worst, the cost of doing business. Yet the dismissal of such an integral part of the dynamics of the arms trade has potentially enormous implications. Consider studies that examine whether reductions in defense spending produce beneficial economic results: if the contract prices under investigation are inflated because the selling firm has included offset costs this has serious implications for how we approach the question and evaluate the evidence. Surely such a possibility is worth examining.

Shortcomings in the data also make it difficult to discern patterns in offset activity that might overlap with exogenous forces such as shifts in geopolitical trends or increasing pressure from anti-corruption norms. The responsibility for collecting and analyzing data was moved from the Executive-level agency Office of Management and Budget to the Bureau of Industry and Security in the late 1980s/early 1990s – just when shifts caused by the end of the Cold War might also be impacting offset trends. The data collected by both agencies is incompatible – with different definitions, different source and collection methods and different measures – complicating any potential comparison. Likewise, the U.S. Foreign Corrupt Practices Act (FCPA) of 1977, which would represent the primary tool for prosecuting bribery and might have encouraged firms to transfer their kick-back activities into the more legitimate channel of offsets, was used an average of only two

¹⁶⁴ Roeber quotes Donald Stokes, an industrial magnate hired by the UK Labor government in the mid-1960s to advise the defense ministry on how to compete with the increasingly dominant US firms. “Parallel Markets: Corruption in the International Arms Trade,” p7.

times per year during the previous three decades.¹⁶⁵ Therefore drawing any conclusions about the impact of a deterrent effect on offset activity is unlikely. European and OECD rules on public corruption and offsets are substantially weaker: only two British firms have ever been prosecuted for bribing foreign officials (BAE being one of those two);¹⁶⁶ and in 2009 only four countries (the U.S., Germany, Norway and Switzerland) were recognized as “actively enforcing” the OECD Anti-Bribery Convention by Transparency International.¹⁶⁷ However, if oversight and legal prosecution are in fact responsible for some of the growth in offsets, we should expect to see huge jumps in the coming years. The U.S. Department of Justice brought more cases under the FCPA between 2005 and 2010 than during the previous 28 years combined, and the UK parliament just passed the Bribery Act of 2010, updating its legislation (dating from 1906) to mirror – and in many ways exceed – the FCPA.¹⁶⁸

The following two case chapters will examine individual offset projects in two groups of cases: first, the wealthy oil-exporting states of the Arab Gulf (Saudi Arabia, Kuwait and the UAE), and second, the more populous oil-importing states of Egypt, Jordan and Turkey. Both groups demonstrate unique patterns in offset acquisition – the Gulf States

¹⁶⁵ Jeffrey Cramer. 23 April 2010. “Commentary: The FCPA Game Has Changed: Trends in Enforcement.” Main Justice: Politics, Policy and the Law (Website of the U.S. Department of Justice). <http://www.mainjustice.com/2010/04/23/commentary-the-fcpa-game-has-changed-trends-in-enforcement/>.

¹⁶⁶ The other, Mabey and Johnson is a building contractor that was fined \$10.5 million in 2009.

¹⁶⁷ Transparency International. “Progress Report 2009: Enforcement of the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions.” http://www.transparency.org/news_room/in_focus/2009/oecd_pr_2009.

¹⁶⁸ The U.S. Department of Justice has pursued cases of bribery by European companies, but only has jurisdiction when these companies are either publicly traded on U.S. exchanges or when some of the bribe money is spent in the U.S.

overwhelming focus on indirect offsets aimed at promoting commercial ventures controlled by private business elites with close ties to the regime, while the oil-importing states have tended to use offsets to deliver particularistic benefits to the indigenous security establishment (the military and internal security forces) by exploiting both direct offset programs that steer industrial production to military-operated factories and by securing indirect offset packages that confer benefits on prominent military elites or programs such as military pension funds. The analysis of these two case groups will inform our understanding of innovations in rent-seeking behavior among Arab authoritarian regimes – extending and strengthening the rentier state paradigm – and contribute to the dominant puzzle of contemporary Middle East studies: What factors lay behind the persistence of authoritarian rule in the Middle East?

Chapter 3: Defense Offsets in the Oil-Exporting States of the Gulf: Kuwait, Saudi Arabia, and the United Arab Emirates

Despite the fact that defense offsets have been a central feature of the Middle East arms market for over two decades, there is precious little research on the topic. Political economists working in the field of the arms trade seldom mention offsets, focusing instead on the macro level impacts of defense spending, while those in the field of security studies examine offsets only when they include the transfer of military technologies, which has been rare in the Gulf. As a result, academics have overlooked an entire system of exchange that supplies billions of dollars in subsidies to economic elites in the Arab Gulf. The first half of this chapter will be spent detailing the features of defense offsets in Saudi Arabia, the UAE, and Kuwait – the Gulf’s three largest arms-importers – including the relevant policies and institutions that shape regional offset practices, as well as the economic elites that participate in them as domestic investment partners.

The second half of this chapter will explore some more general observations about defense offsets in the Arab Gulf, including an exploration of defense offsets in the context of the regional arms trade; an examination of how offsets fit into the overall market strategy of defense firms and the role played by external institutions – such as offset consultants – in the expansion of defense offsets in the region; an examination of the characteristics of the Gulf economies that make offsets such an appealing source of political patronage; and a brief interrogation of the economic fundamentals of defense offsets in the Gulf. This final section is important to the mechanics of my argument, as

the weight of evidence indicates that defense offsets are an inefficient means of subsidizing domestic development – the avowed goal of official offset policies. The Gulf region remains weak on measures of attracting FDI, figures on jobs generated by offsets are extremely low in relation to the overall costs borne by state budgets, and there is no evidence to suggest that defense offsets speed up the process of technology transfer or enable procuring countries to import technologies that are more desirable or suitable to their domestic economies. The primary area where defense offsets *do* have a discernable impact is on the investment portfolios of influential domestic elites, which, I argue, is the real driving force behind this new form of defense-generated investment.

A Brief Historical Overview of Defense Offsets in the Gulf

Saudi Arabia was the first Gulf State to request offsets in tandem with military procurement in 1984, followed by the UAE in 1991, Kuwait in 1994 and Oman in 1998.¹ Early offset agreements were concluded on an ad-hoc and largely informal basis, although today each state possesses formal agencies and sophisticated legislation pertaining to defense offsets. Nonetheless, many aspects of individual offset agreements vary depending on the type of equipment sold, the firm doing the selling, and diplomatic relations between the importing and exporting countries. Other features of specific offset agreements – such as Saudi Arabia’s “good faith” clause governing offsets with the U.S. – impart an arbitrary character to negotiations and resulting projects, making trends difficult to pinpoint. Offsets in the Gulf have historically been “indirect,” meaning that

¹ Although Bahrain and Qatar have no formal offset policies, in practice Qatar has required offsets in the past and is currently drafting offset guidelines. Meanwhile, Bahrain maintains a seat on the GCC-wide offset committee, sends delegates to make presentations on offset practices at regional conferences, and is host to an office of Blenheim Capital, the largest offset broker in the business.

the majority of investment has flowed into civilian business ventures – and therefore seldom involved the transfer of technology or production facilities related to military hardware, as has been the case in the non-oil exporting states of the Middle East.² Official rationales have focused on increasing employment opportunities for Gulf nationals, attracting new technologies and foreign investment, and reducing the Gulf economies' reliance on oil and gas exports through strategies of diversification and modernization.³ However, as I hope will be made clear in the following pages, these stated goals are illusory; the pursuit of defense offsets is fundamentally aimed at providing economic elites with subsidized investment opportunities.

‘The Shield’ and ‘The Dove’: Defense Offsets in Saudi Arabia

As of 2008, the Kingdom has signed ten offset agreements, each of which has yielded numerous individual projects. These agreements were with Boeing in 1984; General Electric also in 1984 (these were part of the Peace Shield I deal); the British Government in 1988 (the *Al Yamamah* deal, Arabic for “the dove”); the French Government in 1990 (the *Al Sawari* I and II deals, Arabic for “the masts” – these were large naval contracts); General Dynamics also in 1990; Hughes Aircraft Company (now Raytheon) in 1991 (these were part of the Peace Shield II deal); McDonnell Douglas (now Boeing) in 1993 (also an extension of Peace Shield II); Lucent Technologies in 1994; United

² There is some evidence that the Gulf states are beginning to incorporate requests for direct (or military-related) offsets into their negotiation strategies, although this has taken place only within the last few years. This trend is explored in a section later in this chapter.

³ In a 2008 general assembly meeting, the Chairman of Kuwait's offset committee stated that the objectives of the program were, “transferring and settling modern technology, creating job opportunities for Kuwaitis, and reinforcing training and education.” See “First General Assembly of (Kuwait) National Offset Committee Takes Place.” 16 April 2008. Kuwait NOC website. Abu Dhabi's 2030 plan also cited employment for nationals and technology transfer as the two key goals of the UAE's new offset guidelines.

Technologies in 1995; and again with the British Government in 2008 (the *Al Salaam* deal, Arabic for “peace”). *Al Salaam* was initially branded the *Al Yamamah* II deal, but due to the highly publicized allegations of corruption surrounding the previous *Al Yamamah* deal, officials renamed the project. Additional offset contracts were signed between the period of 1995 and 2008, but Saudi officials reported that because some were “specific,” while others were more “general” in nature, they were appended to previous agreements concluded with obligor firms that already had active offset contracts.⁴ This has been an emerging trend among all the Gulf States – integrating new offset agreements into existing ones, and directing new investment to extant domestic firms – a phenomenon which further complicates the ability of researchers and industry observers to track regional offset activity.

Saudi Arabia’s offset bureaucracy consists of three hierarchical agencies, which fall under the umbrella of the EOP (Economic Offset Program). At the top is the Ministerial Committee, a sort of royal steering committee headed by Prince Sultan, who is also the Deputy Prime Minister and Minister of Defense & Aviation.⁵ Second is the Economic Offset Committee, headed by Prince Fahad bin Sultan, the Assistant Minister of Defense & Aviation, with representatives from the Public Investment Fund and SABIC (the Saudi Basic Industries Corporation) and deputy ministers from both the Commerce & Industry

⁴ CTO Newsletter 9 June 2008. 26(11). Yes, this is confusing, since “specific” and “general” have opposite meanings, it is hard to see why offsets of both types would be kept off the books. However, the official that made the comment did so to the newsletter’s publisher, and when asked by him to elaborate, declined.

⁵ Five other Ministers also sit on this committee, including the Minister of Commerce & Industry, the Minister of Finance, the Minister of Economy & Planning and two Ministers of State with Cabinet Status (these positions are usually staffed by well-connected elites with significant technocratic credentials chosen to oversee important regulatory or planning bodies).

and Economy & Planning ministries; this committee provides final approval to individual offset proposals submitted by foreign obligors.⁶ Under these two agencies sits the Economic Offset Secretariat (EOS), in charge of administrative tasks and acting as a liaison between the Saudi government, foreign defense contractors and the domestic private sector. The EOS is currently headed by Brigadier General Ibrahim Mishari, a former project officer for the U.S.-Saudi Peace Shield Deal. Mishari's experience is illustrative of the revolving door phenomenon that exists between the Saudi bureaucracy, foreign firms and the domestic private sector. When Mishari retired from the military in 1999, he founded his own company called Aquad for Commerce, which currently owns large stakes in two offset-generated ventures: the Arabian Shrimp Company, in which Mishari owns 18.3%, and the Saudi Communications Development Company, in which he owns 50%. Mishari also owns a 45% stake in DevCorp, a private venture capital firm that manages a \$35 million investment fund financed by offset obligations from the defense firms Raytheon and Thales.⁷

There are other examples as well. One is Abdulaziz Al Sugair, the chairman of a joint venture created under the Peace Shield deal,⁸ whose brother – Major General Hamad Al Sugair – is Secretary to the Saudi Economic Offset Committee, while another brother,

⁶ Thompson, p3. The specific offices are the Secretary General of the Public Investment Fund, the Deputy Minister for Commerce & Industry, the Deputy Minister for Economy & Planning, the Vice Chairman of SABIC, and an advisor to the Minister of Commerce & Industry.

⁷ This is the Saudi Offset Limited Partnership (SOLP), which is explored in more detail below.

⁸ This company is Advanced Electronics Company, which has also benefited from subsequent procurement contracts with foreign companies; AEC became the primary subcontractor for AT&T (Lucent Technologies) when the latter incurred offset obligations as part of its \$6 billion contract to overhaul the kingdom's communications infrastructure. AEC has also recently secured contracts to work on military aircraft sold to the kingdom by BAE. This is examined in more detail below.

Faisal Al Sugair, sits on the board of the Saudi British Bank Takaful (SABBT), which provides financing and coordination for the UK's offset obligations in the Kingdom. Another is Khalid Al Gosaibi, who currently sits on Saudi Arabia's Ministerial Offset Committee in his capacity as Minister of Economy and Planning,⁹ and whose family-owned conglomerate (the Ahmad Hamad AlGosaibi & Brothers Company) is the joint venture partner for at least two BAE offsets, including the Saudi British Electronics Institute and the Saudi Development and Training Company.¹⁰

Although the Saudi government agencies involved in the state's offset program primarily consist of representatives from ministries other than the MOD, the agencies and meetings are held under the authority of the MOD, which ultimately controls the program.¹¹ This conclusion is backed up by the statements of those whose positions have brought them into sustained contact with Saudi Arabia's offset bureaucracy – officials acting on behalf of BAE and the UK in discharging offset obligations under the Al Yamamah contract claim that the EOS has *never* responded to project proposals.¹² It is more likely that individuals higher up in the bureaucratic hierarchy have already issued informal decisions

⁹ The family featured prominently in the financial news during 2009-2010 due to a very public feud between its members over \$10 billion of misappropriated funds. Among the allegations (which were issued at proceedings in London, Geneva, New York, the Cayman Islands and throughout the Gulf) was misuse of corporate funds by a son-in-law, who allegedly kept the proceeds of billions in loans he had issued to imaginary entities through a Bahraini shell bank owned by the Al Gosaibi family. "A Mystery in the Gulf: The bizarre mechanics of a huge financial scandal." 18 February 2010. *The Economist*.

¹⁰ CTO Newsletter. 8 August 2005. 13(15).

¹¹ Prince Sultan has held this post since 1962, and he and his associates have benefited a great deal from arms deals and the offsets associated with them. The U.S. Department of Justice prosecuted Sultan's son, Prince Bandar, for accepting bribes from BAE under the Al Yamamah deal, which allegedly amounted to some \$2 billion. David Leigh and Rob Evans. 7 June 2007. "BAE accused of secretly paying £1bn to Saudi prince." *The Guardian* (UK). The payments, made in increments of £30 million per quarter over ten years, were made via U.S. banks, which gave the DOJ jurisdiction under the FCPA.

¹² CTO Newsletter. 8 August 2005. 23(15).

regarding the nature of projects and appropriate domestic partners, making EOS's actual participation unnecessary.

Early offset initiatives in the kingdom centered on increasing state industrial capacity by requesting the provision of basic technologies, capital equipment and training. Saudi Arabia's first offset agreement – the U.S. brokered Peace Shield I signed in 1984 – resulted in the creation of six industrial firms: the Middle East Propulsion Company (MEPC), the Middle East Battery Company (MEBC), Al Salaam Aircraft Company (Al Salaam), the Aircraft Accessories and Components Company (AACC), the Advanced Electronics Company (AEC), and International Systems Engineering (ISE).¹³ Estimates of the cost of these projects vary widely, but they likely carried a price tag somewhere between \$800 million¹⁴ and \$1.4 billion.¹⁵ These projects necessitated sustained collaboration with the foreign defense obligor firms in order to ensure adequate access to technology and personnel training, a model that ultimately proved unsuccessful.¹⁶ As a

¹³ The first Peace Shield deal created MEPC, MEBC, AlSalaam, AEC and AACC; while the second (with Hughes) created ISE. See Efraim Inbar and Benzion Zilberfarb. 1998. *The Politics and Economics of Defence Industries*, p191. The degree of consolidation in the defense industry means that many of the firms originally responsible for the creation of these ventures have been subsumed by competitors. As a result, sources written at different times list different U.S. firms as offset partners. The original partners included: Hughes Aircraft Company (now Raytheon), McDonnell Douglas (now Boeing), General Electric, Pratt & Whitney (now part of United Technologies), General Dynamics, and Rolls Royce.

¹⁴ Inbar and Zilberfarb (sited above) give a figure of \$600 million (in 1998) for four of the firms.

¹⁵ This represents a 37.5% offset of the original \$3.8 billion contract. Matthews, 2002.

¹⁶ One of the major problems was the absence of highly-skilled Saudi nationals, which necessitated the recruitment of foreign workers with all the associated delays in processing visas, permits, etc., as well as delays in constructing the necessary facilities. Wilson, Peter and Douglas Graham. 1994. *Saudi Arabia: the Coming Storm*. New York: M.E. Sharpe, p218-220. Ownership of these firms has also been shuffled back-and-forth. Boeing was pulled from the projects by the Saudi government in 1991 and replaced with Hughes aircraft, whose eventual demise meant that the Saudi state was forced to assume a larger role in financing the operations. Initially there were two nominally private Saudi firms involved: Saudi Amoudi (owned by the Al Amoudi family of Sudanese origin – the patriarch ranks as the fourth richest Arab in the world) and the Saudi Overhaul & Maintenance Co., which appears to have been owned by the Saudi Royal

result, these ventures struggled to maintain operations until subsequent offset agreements – many of them quite recent – compelled exporting firms from the U.S. and Europe to revive the companies with MRO (maintenance, repair and overhaul) contracts and other mechanisms designed to infuse capital into the companies.¹⁷ For instance Boeing, one of the primary contractors for a pending \$60 billion U.S.-Saudi arms deal, has become a major shareholder in the Al Salaam Aircraft Company in recent years, and the latter’s new manufacturing facilities now produce several components for both civilian and military aircraft.

The initial struggles encountered by the Peace Shield companies may have influenced successive Saudi offset plans, which sought partnerships with non-defense firms, under the patronage of the foreign defense obligor firms. For example, under the UK’s *Al-Yamamah* offset agreement, the prime contractor British Aerospace (BAE), brought in several large non-defense related European firms, including agribusiness giant Tate & Lyle and Glaxo Wellcome, which set up the United Sugar Co. refinery and a pharmaceutical plant, respectively. The agreement also spawned two contracting

Family, perhaps via their Unified Holdings company. Today there are a number of government entities invested in the Peace Shield companies, including the Gulf Investment Corporation (GIC); the state-owned Saudia Airlines; National Industrialization Company, in which several government entities hold shares; and the National Commercial Bank (NCB), which the Saudi government has bailed out on at least one occasion.

¹⁷ Recent contracts – notably the huge Saudi purchase of Eurofighter Typhoons – have included co-production elements. This is striking for two reasons: first, it signals a break with the previous pattern that showed a preference for indirect offsets – something that will be addressed in the concluding section of this chapter – and second, it may explain the drop-off in offsets reported by the DSCA and DOD. As with Egypt – where co-production in military hardware became a liability because U.S. grants were being used to fund overseas production facilities – it may be that government agencies and exporting firms are collaborating to camouflage offsets in the original contract. This allows sales agreements with Egypt to bear the phrase, “there are no known offsets in relation to this sale,” a phrase that has also appeared on these most recent U.S.-Saudi arms deals, despite the fact that the primary contractors are directing significant business to the existing Peace Shield companies. See *Al Salaam Horizons*, a monthly company newsletter, which details some of these new contracts.

companies to provide personnel services for domestic firms,¹⁸ and seven petrochemical ventures. Petrochemicals proved an ideal sector for offsets, since restrictions on foreign investment only applied to *upstream* petroleum activities like exploration and extraction.¹⁹ Petrochemical partners brought in by BAE and the UK government included British Petroleum, Honeywell UOP, Phenolchemie, Harlow Chemical, Flover, Bassel, Huntsman, and Davy Process Technology.²⁰ These ventures included large-scale facilities that produced multiple petrochemicals for export as well as projects like *Plastbau Saudi Arabia*, which utilizes a specific petrochemical (polystyrene) in the production of trademarked building materials.²¹

Despite the shifts in sectors targeted for offset investment, the practice of subsidizing Saudi economic elites has remained fairly consistent. The domestic partners for the British sugar refinery mentioned above included Savola – a huge Saudi conglomerate owned by some of the wealthiest families in the region²² – and 13 individual Saudi sugar

¹⁸ Ironically, much of the business of these two firms is performed by its foreign managers or outsourced to foreign firms. One of the two companies – Saudi Development & Training Company – is managed by a cadre of British expatriates, and a recent deal outsourced SDT’s procurement to Xchanging, a UK-based ‘procurement services provider.’ “Xchanging Wins a Two Year Outsourcing Contract with Saudi Development and Training Company (SDT).” 13 July 2010. Marketwire (UK).

¹⁹ This is despite the fact that the decades-long negotiations on establishing bilateral FTAs between the EU and GCC have stalled due to EU insistence on protecting its own domestic petrochemical sector by blocking imports from the GCC States.

²⁰ Ramady, p284-6. These offsets included the transfer of technology for a Cyclar plant operated by the SABIC, a Cumene manufacturing facility, Dhahran Harco Chemical Industries Ltd., Rezayat Flover, UNILUBE (a waste oil recycling facility), the Saudi Polyolephins Company, and the Gulf Advanced Chemical Company.

²¹ Plastbau technology is registered to the Swiss company Plastedil, and involves pouring expanded polystyrene into concrete forms to produce insulated walls, which are then used in building construction.

²² Board members include Ammar Al Khudairy; Ghassan Al Sulaiman (Ghassan Ahmad Al Sulaiman Development Company); Ibrahim bin Mohammed Al Issa; Yousef Alireza; and Mosa bin Omran Mohammed Al Omran.

traders.²³ Likewise, the major shareholders of the U.S.-funded Middle East Propulsion and Battery Companies mentioned above included the uber-wealthy Al Jomaih, Al Zamil, Al Mutlaq, Al Issa and Bulabaid families,²⁴ whose merchant histories predate the founding of the modern Saudi state.

Offset projects resulting from French sales to the Kingdom followed the British model by avoiding the direct participation of the defense firms, which now served as deal-facilitators and investors rather than technology partners, but followed the same precedents in terms of elite patronage. French projects under the first *Sawari* deal included a gold refinery, a firm specializing in the construction of metering and measuring devices used in the mineral/mining sector, and two additional petrochemical companies, the Saudi French Chemical Company and Al Bilad Catalysts Company Ltd,²⁵ - all of which involved the Alireza family as primary shareholders.²⁶ Several other pharmaceutical and medical equipment companies were also formed under subsequent agreements with U.S. and European firms.²⁷ Other notable ventures include the Middle

²³ In addition to controlling nearly 2/3 of the Saudi market for sugar and edible oils, Savola operates in three additional sectors: retail – including a large grocery store chain; plastics; and real estate. It also has a franchising unit with exclusive rights to import a number of foreign brands. Savola Group, company webpage: http://www.savola.com/savolae/About_The_Savola_Group.php. Accessed 4 January 2011.

²⁴ Ramady.

²⁵ This list of projects is taken from a textbook chapter on technology transfer in Saudi Arabia by M.A. Ramady. Ramady also identifies some of the individual investors (although, interestingly only in the *unpublished* manuscript version of the chapter). Other investor information came from publications like Hoovers, BusinessWeek, Zawya and MEED, as mentioned above.

²⁶ This family's merchant pedigree is aptly demonstrated by the commercial license number issued to them by the Saudi State: number 1.

²⁷ These include CAD Middle East pharmaceuticals, Deef Pharmaceuticals, Arabian Diagnostic & Medical Company, Olayan Baxter Company Ltd., and GE-El Seif Healthcare Arabia.

East Power Company, a joint venture with General Electric, and several vocational training centers with large defense-related maintenance and training programs.²⁸

Two Saudi merchant families in particular provide illustrative examples of the mechanics of offset programs: the Alireza and Zamil families. The Alireza family²⁹ was a domestic partner for at least two of the 11 projects generated by the UK's Al-Yamamah offset in 1986: the United Sugar Company (Yussef Alireza sits on the board of *Savola*, which owns 51% of the venture), and Rezayat Flover, a joint venture between the British electronics manufacturer Flover, and Rezayat Group, one of the Alireza family's two conglomerate companies, which has a U.S. subsidiary – Rezayat America – and 19 other subsidiary companies operating in Saudi Arabia.³⁰ Their activities stretch across the entire spectrum of the Saudi economy, from distribution of foreign imports, construction and real estate to tourism and telecommunications. The Alireza family was also the primary partner for a project implemented by the French under the Sawari II offset, which was linked to the \$3.6 billion sale of 3 La Fayette F3000S frigates to the Royal Saudi Naval Forces concluded in 2002.³¹ This project was the creation of the Al Bilad

²⁸ Many of the largest defense firms – Boeing, BAE, Thales and United Technologies – have committed substantial funds to set up research facilities, finance scholarships, and fund exchange programs for Saudi students interested in careers in the defense industry. Some of the institutions that have received the most funds include Dar Al Faisal University, King Saud University, King Abdulaziz University, the King Abdulaziz City for Science & Technology, and the King Abdullah University for Science & Technology.

²⁹ Like the Ghosaibi family, the Alireza family was powerful well before Ibn Saud managed to extend his rule over the peninsula. They held important government posts under the Hashemite ruler in the Gulf – Sherif Ali – who reigned (rather feebly) under the protection of the British until it was clear that Ibn Saud and his Nejd army were going to unseat him, at which time he promptly set sail on a British ship bound for Egypt. Field, p13-28.

³⁰ The two conglomerate companies are the Rezayat Group and the Haji Abdullah Alireza & Co. Ltd (HAACO).

³¹ Like the earlier Saudi-UK deals, a portion (15%) of the price was paid in oil. Janes Defence Weekly. "Sawari II Offsets Well Underway." 6 May 1995.

Catalyst Company, a petrochemical firm, in which the Alireza family held a 40% stake through two of its subsidiaries: 20% through its National Contracting Company, part of Rezayat Group, and another 20% through its Al Bilad Trading and Economic Establishment, an engineering and construction company.

The Zamil Group has also been a key recipient of offset largesse, and has been intimately involved with the program since its inception; Abdul Rahman Al-Zamil – the family patriarch – was labeled “one of the real architects of the [Saudi] offset program,”³² in a 1996 speech by Carlyle Group Chairman and former U.S. Secretary of Defense Frank Carlucci while the latter was serving as an offset advisor to the Saudi government.³³ The Zamil Group is the domestic partner for the Gulf Advanced Chemical Industries Company (GACIC), one of the first (and largest) offset projects initiated under the UK’s Al Yamamah Offset program,³⁴ and is also one of the primary shareholders in the Saudi International Petrochemical Company (SIPC or Sipchem), which is itself the product of an offset obligation incurred by the French defense firm *Thales*. The cost of establishing Sipchem – and another firm Sahara Petrochemicals, also a *Thales* offset – is estimated at about \$1.8 billion.³⁵ Most recently (in 2007), Sipchem initiated a joint venture with *Helm*

³² Speech by Frank Carlucci. “Workshop on the Offset Program: A Launchpad for Joint Ventures.” <http://www.us-saudi-business.org/p96ws2.htm>. The Carlyle Group made its name during the 1990s rehabilitating floundering defense companies and selling them to the largest firms. The group was also the official advisor to the Saudi Offset Committee from 1992 until 2001.

³³ www.zamil.com. Company website. Accessed 14 January 2011.

³⁴ John Presley, Economic Advisor to the Saudi British Bank (SABB). Date unknown. “The Al Yamamah Economic Offset Programme: A Guide to Business Procedures in Saudi Arabia: Helping Business in Saudi Arabia Series.” *The Saudi British Bank*, p4. The petrochemical company Huntsman Corporation (US) was one of the major foreign partners for this venture; investment startup costs (in 2002) were estimated at \$220 million. The Al Yamamah arms sale was concluded in 1985, its offset program was launched in 1989.

³⁵ 1 December 2005. “Saudi-French Economic Projects.” ArabNews.

Arabia, also the product of a previous French offset.³⁶ Abdul Rahman Al-Zamil is also a former Deputy Minister of Commerce³⁷ and a member of the Consultative Council (an appointed body of ‘notables’ which either transmits public opinion to the King or provides a scapegoat for disastrous royal decrees, depending on one’s viewpoint).³⁸ In February 2010, Abdul Rahman Al-Zamil was given a spot on the newly created Central Committee for Local Industrialization.³⁹ Comprised of business leaders and defense officials, the committee is part of a broader effort to encourage foreign defense firms with offset obligations to subcontract with Saudi manufacturers.

If offset investment (like all patronage) is designed to reward loyal elites and co-opt potential dissenters, it appears to have served its purpose. Both Abdul Rahman Al Zamil (chairman of Al Zamil Group) and the recently deceased Ghazi Al Gosaibi (former Labor Minister) were prominent leftist intellectuals on a collision course with the conservative rule of King Faisal before they were brought in and groomed for bureaucratic service by the younger and more liberal future ruler King Fahd.⁴⁰ Zamil, for his part, lauded the

³⁶ Helm Arabia is jointly owned by the German Company Helm AG and the French defense firm Thales. 5 June 2007. “Sipchem and HELM ARABIA sign joint venture agreements for acetyl projects.” <http://www.helmag.com/de/news/sipchem-helm-arabia-joint-venture.html>. Helm AG press release.

³⁷ Zamil held this post for 16 years.

³⁸ Champion. *The Paradoxical Kingdom*: p290-1.

³⁹ Reuters News Agency. 7 February 2010. “Saudi Arabia opens military supply to local firms.”

⁴⁰ Hertog. *Princes, Brokers and Bureaucrats*, p99. Gosaibi was an extremely popular literary figure, whose books remained banned in the Kingdom until shortly before his death in 2010. Among his most well-known works are a collection of poetry called “Battle without a Flag” and a novel titled “An Apartment Called Freedom.”

offset program as “not...only an investment instrument, but a program able to sell Saudi Arabia to the largest corporations in the world.”⁴¹

A recent feature of GCC offset programs is the practice of allowing firms with offset obligations to capitalize new state-owned investment funds (a sort of sovereign wealth fund financed by foreign defense firms) rather than establish joint venture companies with domestic partners. The UAE has vigorously pursued this avenue since the late 1990s/early 2000s, and, for a time, it was also a key feature of Kuwait’s offset program. However, Saudi Arabia has only one such fund thus far, and does not appear eager to duplicate the experience. The Saudi Offset Limited Partnership (SOLP) is a fund set up by DevCorp International, a private equity firm incorporated in Bahrain, whose sole investment activity appears to be the implementation of offset projects on behalf of Raytheon and Thales, which provide the money for SOLP.⁴² Along with the aforementioned General Mishari of the EOS, who holds a 45% stake in DevCorp, the other shareholders are an American investor and the wife of a German man who was kidnapped in Kuwait by Iraqi invasion forces during the First Gulf War.⁴³ Although previous references to DevCorp in financial publications listed SOLP’s assets at around \$25 million⁴⁴ (a paltry sum in any event given the billions that Saudi officials insisted would be forthcoming from their offset programs), industry trade publications revealed in

⁴¹ Carlyle Group. Presentation to Saudi Arabia Economic Offset Committee. 1996. P11.

⁴² 70% of the investment comes from Raytheon; the other 30% from Thales.

⁴³ DevCorp is owned by Ibrahim Mishari (45.45%); James Lewis Greenberg (36.36%); and Suzan Jahnke (18.18%). Suzan’s husband Uwe was the one kidnapped by Iraqi forces.

⁴⁴ Pearl, Daniel. April 20, 2000. “Arms Dealers Get Creative with ‘Offsets’.” *Wall Street Journal*, Eastern Edition.

2007 that SOLP's actual *investments* were in the range of only \$3-4 million.⁴⁵ Despite the small sum, both Raytheon and Thales have received substantial offset credits from the SOLP, principally due to offset multipliers. DevCorp's managing director boasts that the company aims for projects that garner credits equal to six to eight times the actual cash investment, and even ten times when possible.⁴⁶

The Al Yamamah Offset: Saudi Arabia, the UK, and British Aerospace (BAE)

The dramatic allegations of corruption surrounding the British Al-Yamamah arms deal has resulted in a large body of published material, including leaked government documents and official testimonies, that are not available for most other offset programs. These materials provide substantial insight into the offset process, meriting a more in-depth investigation here. Although the first phase of the Al-Yamamah offset was initiated in 1988 (three years after Saudi Arabia signed the original contract to purchase 72 Tornado fighter-bombers, 30 Hawk trainers, PC-9 aircraft, naval vessels, associated equipment/services and airfield construction at a cost of \$7.6 billion) the UK's joint management team of MoD and BAE representatives is still implementing projects.⁴⁷ The deal would eventually grow to more than £43 billion (almost \$60 billion), making it Britain's largest-ever defense export deal,⁴⁸ and the offsets have been correspondingly extensive. Although the British Offset Office – the UK MOD's official offset liaison –

⁴⁵ CTO Newsletter. 15 January 2007. 25(2).

⁴⁶ Then-managing director Bill Barilka told the publisher of the CTO Newsletter, "We strive to get somewhere between six and eight times the actual cash investment [in credits]. Some projects can even enjoy a multiplier of 10 but each offset program is different." CTO Newsletter. 15 January 2007. 25(2).

⁴⁷ The latest offset project was a \$280 million petrochemical project. CTO Newsletter. 23 March 2009. 27(6).

⁴⁸ "Saudis countdown to Typhoon service entry." 13 May 2010. *Arabian Aerospace*.

provided a figure of \$2.6 billion in offset investment as of 2007,⁴⁹ today these officials claim to have “a gentleman’s agreement” with the Kingdom that precludes any “talk about the value of offset credits” even as “the program will continue to run and run.”⁵⁰ It is worth noting briefly here that, unlike the UK and France, the US has no official offset agency. Indeed, as noted in Chapter 2, the US Government has explicitly prohibited the participation of any US Government employee in offset-related activities – whether through conducting negotiations, providing performance guarantees, or monitoring fulfillment of contracts, since offsets are considered private agreements between the firms and their overseas customers.

Under the Al Yamamah contract, in order to beat out a competitive French tender the UK agreed to take payment for its arms in oil⁵¹ – roughly half a million barrels of it – which Saudi Arabia agreed to sell to the British firms BP and Royal Dutch Shell at a low fixed price.⁵² The firms then sold the oil on the international market, and after keeping some of the proceeds as payment for their intermediary services, the oil companies deposited the remaining funds into an escrow account in London, to which BAE and the UK MoD were

⁴⁹ CTO Newsletter. 9 April 2007. 25(7).

⁵⁰ Tony Smith, UK Ministry of Defense British Offset Office on the status of the Al Yamamah offset program, April 2007. Reported in CTO Newsletter. 9 April 2007. 25(7).

⁵¹ Frederic S. Pearson. 1988. “The priorities of arms importing states reviewed.” *Contemporary Security Policy*. 9(2), p179. The French lost out to the British on the Saudi sale despite offering a loan at only 3% interest – compared to the 9-10% that is standard for OECD countries, p185. Because US equipment is generally considered to be the most technologically advanced, the European producers often concentrate on offering better terms – such as low interest rates or oil-barter schemes – in order to compete.

⁵² Chris Thompson. 1 September 1994. “Planned International Technology Transfer: The ‘Economic Offset’ Example in Saudi Arabia.” *Digest of Middle East Studies*. 3(1): p8.

signatories.⁵³ All told, an estimated £15 billion in bribe money was paid to members of the Royal Family,⁵⁴ which was facilitated by the fact that normal accounting and oversight procedures were not present, as the deal was concluded under treaty terms between the two governments rather than as an arms sale.⁵⁵ Because most of the Al Yamamah projects brought in third party investors (pharmaceutical firms, petrochemical companies, construction firms, etc.) and involved a range of offset brokers and local “consultants” as well as Saudi and foreign financial institutions, the number of transactions involved in each project was greatly multiplied, as were the opportunities for corruption. Tellingly, one of the participants in the offset program, Rolls Royce, was the subject of a Saudi high court writ because of its failure to pay commissions at the ‘contracted rate’ of 15-100%.⁵⁶

Like the earlier Peace Shield companies, the Al-Yamamah offsets met with a number of operational obstacles, including delay due to the 1991 Gulf War and a shortage of British investors willing to participate in joint ventures inside the kingdom. The first project, worth only £1.8 million (in 2005 dollars) was not initiated until 1993 – nearly 8 years after the initial MoU was signed.⁵⁷ This is despite a sizeable contingent of UK government employees working in the British Offset Office in Saudi Arabia, which

⁵³ Chris Thompson. 1 September 1994. “Planned International Technology Transfer: The ‘Economic Offset’ Example in Saudi Arabia.” *Digest of Middle East Studies*. 3(1): p8.

⁵⁴ CTO Newsletter. 14 August 2006. 24(15).

⁵⁵ CTO Newsletter. 27 April 2009. 27(8).

⁵⁶ Catherine Courtney. “Corruption in the Official Arms Trade.” April 2002. Policy Research Paper 001. Transparency International (UK).

⁵⁷ CTO 8 August 2005. 23(15).

sponsors investor conferences and boasts an extensive list of investment incentives available to those willing to invest – many of which are outlined in the section below on state subsidizes available to firms under the offset program. Briefly, some of these include ‘soft loans,’⁵⁸ \$10 million worth of matching funds, duty exemptions, low cost utilities and rents, tariff free access to other GCC markets, free business consultant services, and other types of professional support like market research.⁵⁹ Offset-generated joint ventures also qualify for tax holidays, unrestricted repatriation of profits, exemptions from import duties, and access to “reasonably-priced infrastructural amenities.”⁶⁰ In 1989, the deputy head of procurement in the U.K.’s Ministry of Defense ordered an investigation of the Ministry’s handling of the Al Yamamah arms sale. The country’s National Audit Office (Special Fraud Office) completed the report in 1992, but its findings were suppressed. The official reason was the large number of defense jobs involved – Al-Yamamah alone accounted for more than 20% of U.K. arms export employment for over a decade⁶¹ – and the possibility of “upsetting” the Saudi royal family.⁶² Currently 27% of employees working for the UK’s official defense sales

⁵⁸ A soft loan here is defined as money lent at Sibor + 0.375 percent. That is the rate at which Saudi banks lend to each other (the Saudi Interbank Offered Rate) + 0.375 percent. This is much lower than the rate a firm would get from pursuing a commercial loan through ordinary channels.

⁵⁹ CTO 8 August 2005. 23(15).

⁶⁰ Anuradha Mitra. January 2009. “A Survey of Successful Offset Experiences Worldwide.” *Journal of Defence Studies* (Institute for Defence Studies and Analysis, India). 3(1), p47.

⁶¹ Transparency International, “Corruption in the Legal Arms Trade,” p35.

⁶² Transparency International, “Corruption in the Legal Arms Trade,” p35. The head of the Public Accounts Committee in the U.K. Parliament, Robert Sheldon, refused even to reveal the content of the report to the other members of the PAC.

agency, the Defense Export Services Organization, work for the “Saudi Armed Forces Project.”⁶³

Although an original offset target of £1 billion in investment was agreed to early on, that figure was surpassed in the late 1990s, according to a paper submitted to the Saudis by the British Offset Office.⁶⁴ Although the paper never received an official response, unofficially the Saudi government insists the figure has not been met by British investment.⁶⁵ This difference of opinion is facilitated by the fact that no actual offset contract was written, and therefore there are no penalty clauses, no milestone targets, no reporting requirements, no quotas, no fulfillment periods, and no arbitration clauses⁶⁶ - just a “best endeavors” approach that, like the “good faith” commitment governing U.S. offsets in the Kingdom, provides little motivation for either side to pursue meaningful projects.⁶⁷ And because there is no physical contract, the Saudis have not ‘signed off’ on the completion of any Al Yamamah projects.⁶⁸ Yet, the investment trajectory continues. In 2007, an official in the UK Ministry of Defense stated that,

We have had a directive from the Saudi government that the Al Yamamah economic program is to continue in parallel to the new [Al Salaam/Eurofighter Typhoon] deal. The UK government has agreed to this [and] will continue to

⁶³ The employee count is 161 out of a total of 600.
<http://www.guardian.co.uk/uk/2005/mar/09/freedomofinformation.armstrade>.

⁶⁴ CTO Newsletter. 9 April 2007. 25(7).

⁶⁵ CTO Newsletter. 9 April 2007. 25(7).

⁶⁶ CTO 8 August 2005. 23(15).

⁶⁷ Ronald Matthews. “Saudi Arabia: Defense Offsets and Development.” P206

⁶⁸ CTO 8 August 2005. 23(15).

support the offset program, sees it as a cornerstone of the relationship between the two countries, and intends to run with it until the Saudis tell us to stop.⁶⁹

Distribution of Offset Investment in Saudi Arabia

Although diversification is the stated goal of Saudi Arabia's economic offset program, a large portion of offsets have went to the downstream petroleum sector, which already accounts for most of Saudi Arabia's economic activity. And if the kingdom did not have restrictions on foreign ownership on upstream activities (exploration and extraction), it is likely that more offsets would be directed toward exploiting the kingdom's raw materials. A 2005 study conducted by a Saudi economist (using government reports issued in 2003) concluded that downstream oil enterprises and related manufacturing processes have received 54% of offset investment.⁷⁰ The remaining 46% was distributed amongst: training and education programs for Saudi nationals (24%), import-substitution/export-driven industries (15%), and the service sector (7%).⁷¹ A later report published in an offset industry newsletter and based on the data released by the Saudi Economic Offset Secretariat in 2008 confirmed the dominance of petrochemical investment, but found that far fewer offset resources were being directed toward training/education programs. According to these new figures downstream oil enterprises accounted for 56% of offset investment; followed by electronics and defense/aviation manufacturing (13% each);

⁶⁹ CTO. 9 April 2007. 15(7).

⁷⁰ Petrochemicals account for about \$359 million out of a total of \$667 million in offset investment. The figure of \$667 million represents foreign share ownership. When domestic investors are included, the projects equal \$2.2 billion. Ramady (2005), p288.

⁷¹ Data includes offset projects implemented as of 2002. Ramady (2005), p288.

food/drug processing (12%); and assembly/recycling and education/other services (3% each).⁷²

Tawazun (Balance) and Alfia (Goals): Defense Offsets in The United Arab Emirates

Official figures from Abu Dhabi cite 40 offset projects as of 2010, valued at about \$2.2 billion.⁷³ The UAE's early offset strategy avoided the large-scale industrial projects pursued by Saudi Arabia in favor of a broader mix of ventures, including luxury real estate development, leasing programs for aircraft, oil tankers and other 'big-ticket' items, agriculture and fish farming initiatives, a shipbuilding facility, waste management services, a district-wide air conditioning project, and agreements to acquire services from Western legal and financial firms regarding activities like establishing asset management vehicles and designing business regulations.⁷⁴ The UAE's population, which is sparse even by Gulf standards, meant that grand industrial initiatives were never viable options.⁷⁵ Additionally, the dramatic shift in development narratives that transpired between the mid-1980s, when Saudi Arabia initiated its pursuit of offsets, and the early 1990s when the UAE followed suit, made state support for indigenous industry an even less popular development scheme.

⁷² CTO Newsletter 9 June 2008. 26(11).

⁷³ <http://www.zawya.com/story.cfm/sidZAWYA20100613121641/UAE%20launches%20new%20offset%20policy>

⁷⁴ The UAE is unarguably at the forefront of utilizing offset commitments to establish investment vehicles – it has several state-managed funds that invest offset dollars, including Mubadala, Tawazun, and the Alfia Fund, which will all be examined in greater detail below.

⁷⁵ The large-scale construction projects undertaken in the UAE do not contradict this general observation as those who work on these projects are poor migrants, not members of an indigenous workforce whose employment is a strategic objective of the government.

This sectoral diversity, however, has not been mirrored in the *composition* of the pool of domestic investors; shareholders and key executives are largely drawn from the wealthiest and most politically well-connected families, including the Al Ghosaibi, Al Suweidi, Al Nowais, Al Mazrouei, and Al Jaber families. A 2008 report released by the UAE-based investment bank *The National Investor* analyzed the board membership of 582 companies to produce a list of the ten most powerful families in each of the GCC member states.⁷⁶ Eight of the ten families listed for Abu Dhabi hold either significant shares and/or seats on the boards of an average of 3.8 companies that were either established under an offset commitment or received substantial investment via an offset agreement.⁷⁷ These include the Suweidi, Dhaheri, Hajeri, Qassimi (rulers of Sharjah and Ras Al-Khaimah), Nahyan (rulers of Abu Dhabi), Otaiba, Mazrouei, and Sayegh families. Two families with a significant presence in offset-related ventures that are not on the TNI list include the Nowais family (which has interests in six offset-related ventures) and Al Jaber family (which has interests in four offset-related ventures). Both patriarchs of these families are billionaires, and both earned their way onto a similar “power list” compiled in 2005 by the independent UAE-based newspaper *The National*.

Other names with a noticeable presence in offset-related activities in the UAE – the Khoury, Mansoori, Mubarak, and Muhairi families – are all prominent families according to other indicators of influence, such as their political connections to the Royal Family, or

⁷⁶ “Power matters: A Survey of GCC Boards.” 13 May 2008. *The National Investor*. The report covers 3,493 individual board members occupying 4,254 board seats across 582 listed companies; with the board seats weighted according to the market capitalization of the company.

⁷⁷ The two families that made TNI’s list but did not have direct shareholdings in any offset-generated companies or hold seats on the boards of any offset-generated companies in the UAE were the Omran and Rostomani families.

their personal wealth.⁷⁸ Several families with connections to the UAE Armed Forces have also benefited from offset-related investment, including the Al Ketbi, Al Kaabi, and Rumaithi families.⁷⁹

When the growing influence of emerging market economies put sovereign wealth funds squarely in the global economic spotlight Abu Dhabi seized the opportunity to use the resources generated by offset commitments to establish three new state-owned investment vehicles: *Mubadala* (“exchange”), which is now the Emirates’ third-largest state-owned fund after the *Abu Dhabi Investment Authority* and the *International Petroleum Investments Company*; *Tawazun* (“balance”); and the *Alfia* (“goals”) *Fund*, which were all originally capitalized with money from offset obligors. The two largest funds – Mubadala and Tawazun – are technically overseen by Emirati government officials, although in practice (like most SWFs) they are run by professional financial

⁷⁸ The Khoury and Muhairi families just missed the TNI top-10 list (they were numbers six and ten on the ‘unweighted’ list, respectively); Sultan bin Saeed Al Mansoori is the UAE’s Minister of the Economy; Khaldoon Khalifa Mubarak is the CEO of Mubadala, and ranks 23 on ArabianBusiness’ list of the 500 most influential Arabs.

⁷⁹ Obaid Al Ketbi, the Director of General Procurement for the UAE Armed Forces, also sits on the board of Abu Dhabi Ship Building, the result of an offset with Northrop Grumman; while Abdullah Darwish Al Ketbi is a principal shareholder in United Technical Services, which received investment from the French firm Dassault under an offset agreement. Armed Forces Deputy Chief of Staff Major General Mohammad Helal Al Kaabi is the Chairman of International Golden Group, which received substantial investment dollars from the Tawazun fund. The Rumaithi family holds several high level posts in the UAE Armed Forces, including Chief of Staff of the UAE Armed Forces (Hamad Mohammed Thani Al Rumaithi), Vice Chief of Staff (Saeed Al Rumaithi), and Chief of Logistics Staff (Dr. Khalifa Al Rumaithi); while Matar Al Rumaithi is a Director in the UAE’s Offset Program Bureau. Thani Al Rumaithi holds a senior level management position in Tabreed (an offset-generated company); Abdullah Khalfan Al Rumaithi is a former board member of the real estate giant Aldar Properties, which received funds for specific development projects under offset agreements; and Saeed (the Vice Chief of Staff noted above) is a principal shareholder in a venture capital firm along with General Khaled Abu Ainnain, who has leveraged offset obligations to start at least five separate ventures. Other individuals who have leveraged their military careers to gain assets through the offset program are the above-mentioned Abu Ainnain and Homaid Al Shemmari, a former Lieutenant Colonel in the UAE Armed Forces, who is now the Executive Director of Mubadala’s aerospace subsidiary and Chairman of Abu Dhabi Autonomous Systems Investments LLC, Abu Dhabi Aircraft Technologies, Advanced Military Maintenance Repair and Overhaul Centre, and a board member of Abu Dhabi Ship Building and Al Yah Satellite Communications Company.

managers, whereas Alfia is a \$10 million private equity fund managed by the First Gulf Bank and incorporated in Mauritius. Although such investment funds were first proposed by the U.S. Department of Commerce's International Trade Administration in 1997 as a "convenient vehicle" to administer the large offset commitments incurred by U.S. firms,⁸⁰ the UAE appears to be the only country that has enthusiastically adopted this model.⁸¹ The boards of directors and senior executives of the funds are drawn from the upper echelons of the Emirati elite – and include significant overlapping membership. Mubadala's board and senior executives include Abu Dhabi Crown Prince Sheikh Mohammed, Mohammad Ahmed Al Bowardi – the secretary general of the Abu Dhabi Executive Council – as well as members of the influential Suwaidi, Muhairi, and Mubarak families;⁸² Tawazun's four-member board also includes Sheikh Mohammed and Mohammad Ahmed Al Bowardi, as well as members of the Sayegh and Mazrouei families – all of whom also sit on the board of the Offset Program Bureau, the UAE's

⁸⁰ Since then, however, BIS, has criticized this method of offset fulfillment for the same reason that offset critics have in the U.S. Congress also rebuffed the idea – mainly that investment funds would facilitate a system of granting favors and delivering bribes to procurement officials because the financial regulatory and oversight apparatus present in many procuring countries is inadequate. See Daniel Pearl. April 20, 2000. "Arms Dealers Get Creative with 'Offsets.'" Wall Street Journal.

⁸¹ Kuwait and Saudi Arabia have also launched similar offset-financed investment funds, but to date these have not been used to establish ventures engaged in the production of defense material.

⁸² These members are: Mohammed Ahmed Al Bowardi, Hamad Al Hurr Al Suwaidi, Nasser Ahmed Khalifa Al Suwaidi, Abdulhamid Mohammed Saeed, Mahmoud Ibrahim Al Mahmoud, and Khaldoon Khalifa Al Mubarak. Other Mubadala executives include Homaid Al Shemmari – who is also the Chairman of Abu Dhabi Autonomous Systems Investments, a subsidiary of Tawazun; Suhail Mahmood Al Ansari, who is also chairman of the Imperial College London Diabetes Center, a wholly-owned subsidiary of Mubadala, and a director of Agility Abu Dhabi – the Abu Dhabi based operation of the Kuwaiti defense logistics company in which Mubadala recently purchased a large stake; Jassim Mohamed Al Zaabi, who is also the CEO of Yahsat, another Mubadala subsidiary; and Ali Eid Am Mehairi/Muhairi, who recently became Chairman of the UAE's largest real estate developer Aldar Properties, which received an enormous infusion of capital from Mubadala after suffering major losses during the recent financial crisis.

official offset bureaucracy. Abdulhamid Mohammed Saeed is on Mubadala's board and is also managing director of the First Gulf Bank – which oversees the Alfia Fund.⁸³

Mubadala has been the source of some very large public infrastructure projects, including the \$3.5 billion *Dolphin Gas* pipeline, which transports natural gas from Qatar to the UAE, as well as the Mubadala Oil & Gas Company, which has operations in the Middle East as well as Central and East Asia.⁸⁴ By contrast, the Alfia Fund – established in 2000, has been used to finance smaller projects.⁸⁵ One company in which Alfia is invested is Mahaleel, a manufacturer of intravenous solutions (known as the National Medical Solutions company in English). Mahaleel's primary domestic shareholder is the Bin Nawi Group, chaired by the powerful and well-connected Mohammed Mubarak Al Mazrouei. The Mazrouei family re-appears on the boards and as major shareholders in a number of offset-related entities, including Dolphin Energy; Mubadala Oil & Gas; the Abu Dhabi World Trade Centre; Tabreed (the National Central Cooling Company); Abu Dhabi Shipbuilding; German & Emirates Company Ltd.; the Bena/Bina Group (which is an investor in two projects financed by the Alfia Fund); on the Tawazun board; and in key executive positions in the UAE's offset bureaucracy.⁸⁶

⁸³ Saeed is also a former director (until 2006) of Al-Waha, one of the UAE's largest offset-generated companies, and one of the first companies to be floated on the Abu Dhabi Securities Exchange.

⁸⁴ Mubadala Oil & Gas operates as Pearl Energy in Indonesia, Philippines, Vietnam, Thailand, Singapore, Bahrain, Kazakhstan and Malaysia; as Liwa Energy Ltd. in Libya;

⁸⁵ CTO 12 March 2007. 25(5). Also see UAE Yearbook. www.uaeinteract.com/uaeint_misc/pdf_2005/English_2005/eyb7.pdf. Accessed May 4, 2009.

⁸⁶ Mohamed Saif Al Mazrouei is CEO of the UAE's Offset Program Bureau.

An interesting trend is the increasing emphasis on using the Tawazun fund to finance projects with direct military applications. Although there is not sufficient space to examine this shift here,⁸⁷ there are a handful of Emirati military officers whose private business enterprises have benefited from this new investment trajectory, suggesting that the practice of utilizing offset investment to subsidize critical elite constituencies remains a robust observation. Because this strategy has been employed for only a few years, it is difficult to characterize its causes or consequences with much certainty. However, in the author's view, an increasing number of military officers are benefiting from offset-generated investment not because the well-established elite merchant families see the military as an increasingly important avenue of influence, but because several extant factors have made military officers *more elite*. These factors include the large sums spent on procurement; the increasing prevalence of military exchanges that bring foreign officers to train at U.S. and European military colleges; and the increased number of interactions between representatives of private industry and foreign procurement officials – all of which have created important economic opportunities for families traditionally associated with the military in the UAE.

The funds are also used to offer financial guarantees to foreign firms in order to encourage them to enter into joint ventures with Emirati companies. For example, the same month Tawazun purchased a 26% share in The International Golden Group – a

⁸⁷ I would point readers to a paper I recently wrote (forthcoming from the Kuwait Program at Sciences Po, Paris) titled “Emergent Trends in Gulf Security Policy: Offset Investment and Indigenous Defense Production in the Arab Gulf,” which specifically examines this question.

retail and distribution company owned by Armed Forces Deputy Chief of Staff Major General Mohammed Helal Al Kaabi – it was also announced that IGG had signed an agreement with the South African defense firm Paramount to build a factory in the UAE where they would jointly produce armored vehicles for the domestic and export markets. Comments by Paramount executives emphasized the UAE’s aggressive industrial policy – primarily its emphasis on expanding manufacturing – as evidence of the feasibility of the venture, which executives suggested could be expanded through additional joint ventures with IGG in the future.⁸⁸ Likewise, three years after Tawazun entered into a three-way venture with the private sector conglomerate Al Jaber Group and the German defense firm *Rheinmetal Munitions* to build a munitions factory in the UAE,⁸⁹ Al Jaber Group was chosen to partner with the German defense firm Diehl to upgrade the UAE Armed Forces’ existing fleet of land vehicles,⁹⁰ and was also given responsibility to oversee the acquisition of HETs (heavy equipment transporters) from U.S.-based Oshkosh Defense on behalf of the UAE’s Armed Forces, although it is unclear what service Al Jaber Group was to have provided in the scope of this contract.

Foreign defense firms may also enter into joint ventures as a way of rewarding influential officials who may have aided the firm in landing previous contracts. For example, *Emirates Advanced Investments/EAI* is a private company owned by retired Special Forces Colonel Hussain Ibrahim Al Hammadi, described in a State Department cable as

⁸⁸ “UAE armoured vehicle venture with Paramount.” 22 February 2011. *Reuters*. Also see Ivan Gale. “Capital targets military vehicles.” 10 April 2011. *The National* (UAE)

⁸⁹ “UAE’s first munitions factory to be set up in Abu Dhabi.” 28 November 2007. Press release.

⁹⁰ “Al Jaber Group and Diehl Defense sign a Joint Venture during IDEX 2011.” 23 February 2011. *Zawya*.

having “close ties” to Abu Dhabi’s ruling family.⁹¹ In 2008 *Raytheon* agreed to partner with *EAI* to develop a laser-guidance kit for unguided helicopter rockets.⁹² The previous year *Raytheon* had landed a \$76 million missile supply contract with *Abu Dhabi Ship Building*, where Hammadi is on the board of directors.⁹³ Similarly, in 2009 two large European defense firms that had served as major suppliers to Abu Dhabi Ship Building established joint ventures with *C4 Advanced Solutions*, a wholly-owned subsidiary of Hammadi’s EAI.⁹⁴ Since being formed in 2006, EAI has added about 12 subsidiaries, including *Global Aerospace Logistics* and *Golden Advanced Land Systems*, both of which are joint ventures with the above-mentioned *International Golden Group*.⁹⁵

The UAE’s offset funds have also been used to increase the government’s stake in ventures established by previous offset obligations – often by acquiring the outstanding shares still held by the original defense obligor firms. This was the case with *Eships*

⁹¹ 9 January 2008. U.S. Embassy in Abu Dhabi. “Blue Lantern Level 3: Pre-License End-Use Check on Application.”

⁹² Staff Writers. 9 May 2008. “Raytheon Teams with Emirates Advanced Investments to Develop Laser Guided Rocket.” SpaceWar.com. The kit is to be attached to unguided Talon rockets for use on patrol helicopters.
http://www.spacewar.com/reports/Raytheon_Teams_With_Emirates_Advanced_Investments_To_Develop_Laser_Guided_Rocket_999.html

⁹³ The contract for missile launchers was signed with ADSB in January 2007. ADSB and Raytheon have subsequently launched a number of joint projects, including the construction of a regional missile maintenance depot at ADSB that would form the offset for a major missile procurement by the UAE government. Richard Scott. 26 February 2009. “ADSB, Raytheon pitching RAM missile support plan.” *Janes.com* (cached site)

⁹⁴ These are the French firm *Thales* (which formed *Thales Advanced Solutions/TAS*) and the European consortium *EADS Defence & Security* (which formed *Emiraje*). See Emirates Advanced Investments Press Release page: <http://www.eai.ae/eai/?page=pressrelease>

⁹⁵ 23 February 2009. “Golden Ventures” EADS press release.
<http://home.janes.com/events/exhibitions/sofex2010/sections/daily/golden-ventures.shtml> GAL was formed in July 2007 and GALS in 2009. Employee profiles suggest that some Raytheon personnel moved to GAL in 2007.

(formerly *Combined Cargo UAE*), one of the ventures set up by the state-owned French defense firm *Giat* in fulfillment of an offset obligation.⁹⁶ *Giat* held 1/3 of the company via “General Investments FZE⁹⁷,” its UAE-based holding company, but *Giat’s* share was acquired by *Mubadala* soon after the latter was established in 2002. *Eships* is now 100% Emirati-owned, with equal shares held by *Mubadala* and the *Abu Dhabi Investment Corporation (ADIC)*, a non-offset related sovereign wealth fund.⁹⁸

These funds – much like any sovereign wealth fund – have also been used to acquire the assets of foreign companies. Notable examples include the gun maker *Merkel*, as referenced above, but also the *Leaseplan Corporation*, a Dutch automobile company, in which *Mubadala* acquired 51% of shares.⁹⁹ In at least one case some assets of a privately-owned Emirati company, the Adcom Munitions Factory, was acquired by Tawazun. The factory was part of Adcom Systems, owned by Ali Al Dhaheri. The Dhaheri family is also involved in several offset ventures in the UAE, including the Raha Beach Complex and the World Trade Centre-Abu Dhabi (both via the Dhaheri’s holdings in the National Corporation for Tourism and Hotels).¹⁰⁰ The family was also the recipient

⁹⁶ *Giat* actually brought in the Norwegian company Torvald Klavness Group (a firm specializing in dry bulk shipment) to act as the foreign partner. In 2002 Torvald owned 25% of the shipping company, but must have sold its shares back to *Giat*, which by 2004 owned 1/3 of shares through its holding company.

⁹⁷ FZE designates a firm operating in the UAE’s “free-zone,” where regulations pertaining to customs, taxation, immigration are relaxed.

⁹⁸ ADIC was (in 2010) the largest sovereign wealth fund, with assets of over \$600 billion.

⁹⁹ Originally, *Mubadala* owned 25% of shares, along with the Saudi firm Olayan Investments, which owned another 25%. Recently, Volkswagon bought out both these entities.

¹⁰⁰ The Dhaheri family of the UAE has some 25 members occupying senior positions in the government and the Emirate’s most influential companies: the family patriarch Dr Hadeef bin Jua’an Al Dhaheri is the Minister of Justice, and sits – along with three of his relatives – on the board of the National Bank of Abu Dhabi, the Emriates’ largest bank and the one that conducts financial business for the government. See “UAE: Key Figures.” 7 October 2008. Country Background. *The Economist Intelligence Unit*.

of an offset granted by Boeing to a printing business owned by the Dhaheri's company *Emirates Computers*; has a direct stake of over 3 percent in *Tabreed*, an air-conditioning company initially financed by *Mubadala*, that currently has over \$2 billion in assets;¹⁰¹ and holds executive level management positions in *Dolphin Energy*, which owns the above-mentioned pipeline. *Mubadala* also acquired the assets of the nearly-defunct *Gulf Aircraft Maintenance Company* (GAMCO), which had previously received technology and some manufacturing equipment under an offset agreement with the defense firm *Aerospatiale*.¹⁰² GAMCO's legacy of previous owners ranged from the young British aviator who founded the company as *Gulf Aviation* in 1950, to a consortium of Gulf governments (Bahrain, Oman, Qatar and the UAE) that utilized the firm's aircraft and maintenance facilities to operate their national carriers, before it finally became the sole property of *Mubadala* and was renamed *Abu Dhabi Aircraft Technologies* (ADAT).

In addition to integrating defense offset obligations with sovereign wealth investment strategies, the extent to which the UAE has sought to make offset policy a high-profile component of its investment strategy is also unique. Abu Dhabi holds an annual conference focused exclusively on defense offsets (the Abu Dhabi International Offset Conference/ADIOC), but the Offset Program Bureau is also a headline sponsor of the

¹⁰¹ 3% may sound like a small figure, but in addition to the Al Bitar family of Saudi Arabia, which holds 3.8% of *Tabreed* shares, the other investors with holdings of over 3% are all institutional investors. These include *Mubadala*, *GOSI* (social security agency), *Giat's General Investments FZE*, *HSBC Bank*, and *ADIC*. The Dhaheri family's *Tabreed* shares are held by Sheikh Mohammed Bin Sultan Bin Suroor Al Dhaheri. Obeid Al Dhaheri is Senior Manager of Strategic & Corporate Planning at *Dolphin Energy*, and Salem bin Mohammed bin Salem Al Dhaheri sits on the board of the property developer *Aldar*, which has received financing for several projects through the Emriates' offset program.

¹⁰² The offset, dubbed GAM-AERO (a combination of the names GAMCO and *Aerospatiale*), provided technical maintenance services for equipment used in testing and repairing avionics material. WTO report on UAE Trade Policy.

International Defense Exhibition (IDEX), the region's largest annual military trade fair, and recently launched a new conference called the Military Industry Partnership Summit, which brings government officials, contractors, third party brokerage firms and economists together to Abu Dhabi. The UAE also dedicates more bureaucratic resources to managing offsets than its neighbors, and devotes significant PR resources to its offset program and existing offset ventures.¹⁰³ This enhanced focus on offsets has been accompanied by efforts to implement policies that diverge rather dramatically from standard offset practices. Notable among these is the requirement that credits only be granted to obligors based on the profits generated by offset ventures, rather than the capital used to initiate them. Given the Emirates high requirement threshold of 60% - nearly double the requirement of Kuwait and Saudi Arabia - this generated a great deal of skepticism from offset policy experts and handwringing from defense executives. This figure is somewhat tempered, however, by the well-known regional practice of granting large multipliers. In the UAE the largest multiplier (a figure of five) is granted for ventures that produce goods or services for export, which would significantly reduce the actual investment necessary to meet the 60% threshold.¹⁰⁴

Lastly, because the UAE is a federation - and the rulers of each emirate may have contradictory goals relating to the offset program - there is another layer of variation to examine. Since the oil-rich Emirate of Abu Dhabi financed military procurement for the entire federation, it also exerted control over the offset program, and had wide leverage in

¹⁰³ The website ameinfo.com issues press releases on new offset ventures and regularly reports on offset success stories. In addition to state-funded publications, the various offset agencies also frequently purchase space in reports published by companies like Oxford Business Group and Forbes.

¹⁰⁴ Newsletter from *Epicos* (a private sector offset service provider). 10 February 2011. 3(6): p17.

assigning benefits to whichever domestic elites and institutions it chose.¹⁰⁵ By some accounts, the UAE offset program was initially envisioned as an Abu Dhabi-sponsored subsidy program meant to catalyze industrial investment and energy distribution in Dubai and the other relatively resource-poor Emirates – a sort of inter-Emirate development fund.¹⁰⁶ Some of the early projects support this interpretation – the Dolphin project supplies cheap gas to Dubai, and Dubai’s share of Gulf Energy Maritime (GEM) exceeds the share owned by Abu Dhabi.¹⁰⁷ Yet royal rivalry and the tendency of such programs to create personal fiefdoms for their overseers seem to have derailed this early approach. The spectacular implosion of an over-leveraged Dubai during the recent financial crisis – and the royal chastening signified by the renaming of the *Burj Dubai*¹⁰⁸ – is reflected in the current trajectory of offset projects, as official entities (such as Abu Dhabi’s sovereign wealth funds) and private investors from Abu Dhabi overwhelmingly dominate new offset projects; investors from Dubai or the other Emirates are few and far between. Indeed, none of the families that made it onto the above-mentioned TNI list for Dubai are major shareholders or board members in UAE offset projects.¹⁰⁹

¹⁰⁵ Dubai’s army was the last to be integrated in 1997.

¹⁰⁶ APS Review, Oil Market Trends. 2 June 2008.

¹⁰⁷ Abu Dhabi’s SWF International Petroleum Investment Corporation owns 30% (as does Oman’s state-owned oil company), whereas Dubai’s state-owned oil company owns 25% of GEM shares. The French defense firm Thales owns the remaining 5%. *Zawya*.

¹⁰⁸ The *Burj Dubai* (Dubai Tower) was renamed the *Burj Khalifa* (Gulf Tower) after Abu Dhabi was forced to bail out Dubai during the recent financial crisis. The *Burj Khalifa* – the tallest building in the world – seemed to symbolize all the reckless behavior and risky investments that had brought Dubai to near-ruin, making it the perfect project for a statement about royal responsibility.

¹⁰⁹ The one exception is the Mazrouei family – which is so powerful it made it onto the list for Abu Dhabi *and* the unweighted list for Dubai (the Mazrouei did *not* make it onto the unweighted list for Dubai). The other families on the Dubai list (weighted for market value) are Ghurair, Shamsi, Lootah, Shaibani, Ba’alawy, Alabbar, Matrooshi, Belhoul, Jawa, and Mohannadi.

The Bureaucratic Back-and-Forth: Defense Offsets in Kuwait

According to Kuwait's official offset agency, the National Offset Committee, the state has launched offset projects worth approximately \$3.46 billion between 1992-2008,¹¹⁰ with 31% of this total coming from U.S. companies, 29% from British firms, and 23% from French firms.¹¹¹ The majority of this investment has been generated quite recently; NOC estimates for the period between 2006 and 2009 indicate about \$2.75 billion in offset obligations, with about \$1.23 billion of that total already satisfied.¹¹²

Like the UAE, Kuwait has a similarly diverse portfolio of offset-generated ventures, although their projects have tended to be more conservative – lacking the enormous scale of construction and complex financial vehicles that have become a hallmark of offset projects in the Emirates and the focus on petrochemicals that dominates the Saudi offset program. Despite its lower profile, Kuwait's offset program has encountered more turbulence than those of its Gulf neighbors: in 1998 MoF officials threatened to blacklist a number of defense firms for failing to meet their obligations, and bureaucratic struggles over the program have been persistent and substantial.¹¹³ For most of its existence, Kuwait's offset bureaucracy – the Offset Program Department (OPD) – operated within the Ministry of Finance (MoF), before the formation of the quasi-independent NOC. In

¹¹⁰ NOC Newsletter. Oct/Dec 2009. 2(4). According to a NOC presentation at the 2008 Defense Industry Partnerships Summit held in Abu Dhabi, this figure stood at \$3 billion in 2007.

¹¹¹ Kuwait NOC Newsletter. December 2008. 1(3/4), p9.

¹¹² CTO Newsletter. 24 May 2010. 28(10). Despite this relatively substantial figure, the magnitude of 'multipliers' – the mechanisms that allow firms to meet their offset obligations by investing in strategic areas that garner credit in excess of the actual investment – has apparently been quite large. The same NOC report that produced the figure of \$1.23 billion also showed that only \$201 million in actual investment had been made, indicating an average multiplier of 6. NOC newsletter. 2010. 3(1).

¹¹³ In addition to threatening fines and blacklisting, Kuwait reportedly held up payments to some of these companies. Lieutenant Colonel Frank S. Petty. Summer 1999. "Defense Offsets: A Strategic Military Perspective." *DISAM Journal*, p74.

2002 and again in 2005, the MoF invited a delegation from the World Bank and UNDP to study Kuwait's offset program and provide recommendations, as the program was beset by major delinquencies on the part of offset obligors.¹¹⁴ The first report stated that "like the rest of the civil service of Kuwait, the Offset Programme Department (OPD) experiences difficulties in performing its delegated functions," and recommended that an independent agency be put in charge of administering the offset program,¹¹⁵ but advised against transferring any offset responsibilities to the MoD,¹¹⁶ which in many other states share some of the administrative responsibility for the program. Thereafter ensued a struggle between the MoF and the Ministry of Defense (MoD) for control over the offset program, culminating in a yearlong suspension of all offset activity between 2004 and 2005.

During the suspension the MoF issued requests for recommendations from private sector offset experts, keeping MoD officials in the dark - presumably so their ministry could come forward with a comprehensive revised policy that the MoD would have no way of matching, giving MoF the advantage by default.¹¹⁷ Indeed, the MoF ultimately announced that it would create a privately-run, government-owned company to administer the offset program – something supported by both the 2002 and 2005 World Bank/UNDP studies. The MoD resisted, with ministry officials claiming there was no

¹¹⁴ CTO Newsletter. 28 March 2005. 23(6).

¹¹⁵ CTO Newsletter. 28 March 2005. 23(6).

¹¹⁶ CTO Newsletter. 27 June 2005. 23(12).

¹¹⁷ This outside counsel was David Hew, a lawyer from Singapore and Director of the Asia Pacific Countertrade Association Pte Ltd. CTO Newsletter 28 March 2005. 23(6). The publisher of CTO spoke with officials from both the MoD and the MoF; defense officials had no knowledge of the WB delegation or the advice solicited from Hew, while MoF officials confirmed that they had requested the advice of both.

precedent for such an entity, that it would be of little use, and that instead responsibility for offsets should be transferred to the MoD.¹¹⁸ The ministerial wrangling over offsets was sufficiently intense that it reportedly led to delays in the delivery of military equipment from foreign firms, as some scheduled payments were held up and contractors insisted on clarification of official offset requirements.¹¹⁹

One possible interpretation of these events is that the offset delinquencies triggered a degree of public and official scrutiny unforeseen by the MoF, whose members enjoyed the privileges associated with control over the program. The recommendation to create an independent (yet still state-owned) company to implement and monitor the offset program meant employing technocrats instead of bureaucrats. Such a move would negatively impact both bureaucrats within the MoF – whose control over these patronage resources would be diminished – as well as the domestic investors and offset consultants who relied on their contacts with MoF officials to secure partnerships and contracts to provide their services to offset obligors.¹²⁰ The recommendations also contained specific policy changes that would have undercut the need for intermediary activity. These included policies designed to encourage firms to engage in less complex offset schemes such as buybacks, by subtracting the cost of equipment purchased from Kuwaiti companies directly from the offset obligation, a move that would grant more control over partnership to the defense firm and away from Kuwaiti bureaucrats. Another change

¹¹⁸ CTO Newsletter. 28 March 2005. 23(6).

¹¹⁹ CTO Newsletter. 28 March 2005. 23(6).

¹²⁰ Interview with M.S. 27 January 2010. M.S. was part of the UNDP/WB delegation reviewing Kuwait's offset policies in 2002 and 2005. His estimation of the process included the observation that he and his team had "seriously underestimated the political clout of these people" [offset intermediaries].

would encourage offset obligor companies to work directly with the government ministry that had signed the original procurement contract (rather than go through the Kuwaiti offset bureaucracy within the MoF). This would have transferred considerable power not only to the MoD but also to other state ministries – such as the Ministry of the Interior – which are also eligible for reciprocal investment because Kuwait imposes offset requirements on large civil procurement contracts as well.¹²¹ The MoD saw the revelations of mismanagement as an opportunity to appropriate control over the program to its own members, sparking the MoF’s efforts to lead the overhaul (and hence maintain authority over) the distribution of offset programs. Although the MOD has increased its input and influence over the program in recent years,¹²² the MoF ultimately prevailed, and today the National Offset Committee (NOC) remains housed within the MoF. In 2003, Kuwait and the UAE formed an impromptu “offset cooperation committee” composed of two representatives from each state.¹²³ This meeting preceded a number of significant changes, including Kuwait’s experimentation with investment vehicles financed by offset obligations – much like the UAE’s Mubadala, Tawazun and Alfia funds. As of 2010 there were four such funds: the Kuwait Investment Opportunities Fund (KIOF), KAMKO, AL MARKAZ and Universal.¹²⁴ In contrast to the UAE – where these funds are managed by government entities – in Kuwait the funds are fully managed by

¹²¹ This is a very unique aspect of Kuwait’s offset program. The only similar case in the Gulf was a \$4 billion Saudi contract with AT&T/Lucent Technologies in the mid-1990s. The WTO prohibits offsets on civil (non-defense) procurement, but makes an exemption for developing countries. Apparently Kuwait has been able to exploit this loophole, despite being the 11th richest country measured by GDP-per capita.

¹²² CTO Newsletter. 24 January 2005. 23(2).

¹²³ This eventually grew to include representatives from all the GCC states, but other than vague statements promising closer collaboration, little has come of these region-wide offset plans.

¹²⁴ CTO Newsletter. 24 May 2010. 28(10).

the investment arms of private banks, although the new appointment of officials from Kuwait's sovereign wealth fund (the Kuwait Investment Authority) may signal efforts to subject the funds to tighter government monitoring.¹²⁵ At a general assembly meeting of the NOC, the institution's chairman reported that about 1/3 of offset investment between 2006 and 2007 went into these offset investment funds, making fund management a very lucrative enterprise.¹²⁶ The \$148 million KIOF fund is currently managed by NBK Capital, an arm of the National Bank of Kuwait that focuses on private equity investments. As with the military aircraft financing deals secured by Al-Waha, NBK increases its own shareholder profits by managing the fund, and the bank's shareholders include some of the state's wealthiest (and oldest) merchant families, including the Khorafi/Kharafi, the Al Sager, and the Al Bahar.¹²⁷ It is worth noting that Saudi Arabia's SOLP – mentioned above – is also an offset-related fund, but it is neither state-owned,¹²⁸ (as in Kuwait) nor is the fund even nominally managed by official state entities (as in the UAE).¹²⁹ Instead, the Saudi Offset Limited Partnership (SOLP) is owned by the defense

¹²⁵ This includes the appointment of a new Board of Directors to oversee the NOC, all of whom are drawn from the KIA. These include Chairman Anwar Abdul Rahman Al-Jawdar; Vice Chairman Mishal S. Otaibi; and Khalid H. Al-Omar. CTO Newsletter. 9 August 2010. 28(15).

¹²⁶ The investment funds amounted to \$108 million (out of a total offset obligation of \$339 million). These figures represented 21 agreements executed with 16 different foreign contractors during the period of September 2006 through December 2007. "First general assembly of the National Offset Company takes place." 16 April 2008. NOC Press Release. <http://www.ameinfo.com/137815.html>.

¹²⁷ The Alsagar (Al Sager) and Khorafi/Kharafi, are represented on the bank's board of directors. The patriarch of the Khorafi family (Nasser Al Khorafi) died in 2011, but was the richest Kuwaiti in the world according to ArabianBusiness, and the seventh richest Arab overall. NBK's two largest shareholders are Al Ahleia Insurance Company and the Kuwait Invest Holding Company (now International Finance Company or IFC). The largest individual shareholder in Al Ahleia is the Bahar family (also on NBK's board); the largest institutional shareholder is National Industries Group Holding, whose largest shareholder is the Kharafi family.

¹²⁸ SOLP is operated as a venture capital fund, owned by Raytheon and Thales, which put up 70% and 30%, respectively, of the fund's \$35 million in capital.

¹²⁹ This is in line with Saudi Arabia's historic reluctance to adopt the sovereign wealth fund investment strategy. In fact, Saudi Arabia does not even have a sovereign wealth fund in the traditional sense, and

firms that put up its capital (Raytheon and Thales) and projects are managed by a private venture capital firm.

Another recent shakeup in Kuwait hints at the continued impact of inter-bureaucratic struggles over the offset program. In 2010, after years of repeated guideline revisions the NOC was placed under the management of a new Board of Directors appointed by the Council of Ministers. These new directors all came from the Kuwait Investment Authority (KIA), the country's largest (and the world's oldest) sovereign wealth fund. The new directors made several statements critical of the NOC's performance, including negative comments about transparency and openness, the weakness of Kuwait's offset program relative to its Gulf neighbors,¹³⁰ and the basic competence of the NOC's previous administrators.¹³¹ Just a few weeks later, the NOC's General Manager, Mazen Madooh, who had held the position since the NOC was created in 2006, resigned his post and left the NOC.¹³² The subsequent naming of an interim General Manager (Reem Al-Khudur/Khader) suggests his exit was unexpected.¹³³ The NOC's stated focus shifted as well, with announcements made by Ms. Khudur that the organization would concentrate

instead makes its foreign investments (mostly in treasuries) through its central bank, the Saudi Arabian Monetary Authority. In 2008/9 the Saudi government announced the formation of a SWF that would invest on behalf of the Public Investment Fund/General Organization for Social Insurance, but it is not yet operational.

¹³⁰ Review of NOC press conference. NOC Newsletter. September 2010. 3(3).

¹³¹ In an interview with IFC Reports (a British PR firm that places supplementals in publications like the Economist and the Guardian newspaper), the new NOC chairman Anwar Abdul Rahman Al-Jawdar stated, "With all due respect for my colleagues – who worked in the company before me – it is important to know what the NOC is doing." 26 January 2011. IFC Reports: Special Report on Kuwait.

¹³² Madouh had previously sat on the board of directors of the Kuwait Investment Company, which is majority owned by the KIA (Kuwait's sovereign wealth fund), but has interests in a large number of private sector companies throughout the Middle East.

¹³³ CTO Newsletter 25 October 2010. 28(20).

on importing the management skills available via partnerships with international firms, because, in her words, “We don’t need the money, we need the management.”¹³⁴ The new NOC chairman was likewise brusque in his characterization of Kuwaiti businessmen who had participated in the program, who [in his terms]

want the investment the easy way – they want the obligor to invest for 3-4 years and that’s it...I ask the private sector why they are accepting obligors and their money, if then after 5 years they end the relationship and start with a new obligor.¹³⁵

This commentary makes explicit the patronage relationship that is otherwise hidden in the corporate profiles and shareholder listings of offset projects – mainly that domestic elites are able to extract significant financial benefits from offsets that ultimately contribute little or nothing to the overall economy.

The most recent offset contracts concluded in Kuwait reflect the new trajectory adopted by the NOC, for example Raytheon’s latest program brought in Epicos (an offset services firm based in Greece) to provide marketing and other advisory services to high-tech companies operating in Kuwait’s private sector.¹³⁶ Ms. Khudur also indicated that the use of offset funds – which had become increasingly popular among obligors as they necessitated little long-term participation or commitment – would be discouraged because the revenue streams they generated in the past were disappointing.¹³⁷ This shift is indeed supported by the general absence of new information on the activities and performance of

¹³⁴ CTO Newsletter 25 October 2010. 28(20).

¹³⁵ IFC Reports. Interview with Jawdar. 26 January 2011. IFC Reports: Special Report on Kuwait.

¹³⁶ CTO Newsletter 25 October 2010. 28(20).

¹³⁷ CTO Newsletter 25 October 2010. 28(20).

these funds. This shift may have come at the behest of the new directors, who likely saw the offset funds as competing with the institutional responsibilities and bureaucratic jurisdiction of the KIA. Interestingly, Ms. Khudur also emphasized that “donations” to the Ministry of Defense would no longer qualify for offset credits.¹³⁸ Much like the structured financing initiatives offered by offset service firms that leverage offset obligations as collateral to boost the defense budgets of procuring countries, such ‘donations’ are a win-win for defense firms, which are essentially locking-in future contracts using their customers’ own funds!¹³⁹

Kuwait’s offset program diverges from those of its Gulf neighbors in a few important respects. In addition to the presence of civil offsets, investment in the oil and gas sector (even downstream petrochemical processing) has been very limited.¹⁴⁰ Also, before the latest installation of a new board of directors, officials involved in the program publicly eschewed “profitability” as a benchmark for project approval – in stark contrast to the UAE’s stated policy, which not only insists on profitability but gauges fulfillment according to the income generated by each project.¹⁴¹ This is despite the fact that credits were awarded to firms that invested in the country’s offset funds according to the profits

¹³⁸ CTO Newsletter 25 October 2010. 28(20). This is indeed an interesting statement, and echoes the experience of defense contractors in Egypt, who report that “discounts” to the military and similar incentives are a large part of Egypt’s informal offset program. The “donations” made in Kuwait may have been part of a compromise between the MOF and the MOD that allowed the MOF to maintain indirect responsibility for the offset program, while still allowing the MOD to enjoy its own range of institutional benefits.

¹³⁹ Blenheim is the first firm to offer this service, which founder Grant Rogan terms “off-balance sheet financing.” CTO Newsletter. 13 July 2009. 27(13).

¹⁴⁰ CTO Newsletter. 8 August 2005. 23(15).

¹⁴¹ CTO Newsletter. 14 November 2005. 23(21).

generated by the investment – including investments made *outside* Kuwait – which seems in direct contradiction to goals related to employment and inward technology transfer.¹⁴² Another unique aspect of Kuwaiti offset policy is the NOC’s decision to collect, evaluate, and publicize on their website “concept papers” – essentially business plans – submitted by local entrepreneurs hoping to partner with foreign firms. If approved, these projects are presented to defense firms as potential ventures to discharge their obligations, and they run the gamut from industrial entities providing waste removal services to establishing schools to train Kuwaitis in technological skills acquisition and business management.¹⁴³ This feature also seems likely to change, however, under the NOC’s new leadership, and Ms. Khudur has advised that the impetus for projects will no longer come from the Kuwaiti private sector, but will instead come from the obligors themselves, who should consult a list of large infrastructure and residential housing projects and seek out their own domestic business partner.¹⁴⁴

Despite periodic upsets caused by bureaucratic wrangling, the pipeline of privilege continues to benefit a select group of Kuwaiti elites. The individual composition of the offset bureaucracy may shift, but because such a small number of families control so much of the economy, they are able to continue to exploit the offset program regardless.

In 2003, Ziad Al-Sharhan of Kuwait’s Ministry of Finance traveled as part of a two member offset delegation to a meeting with UAE offset representatives to discuss the

¹⁴² According to official offset guidelines, offset fund managers may place up to 40% of the funds capital in projects outside Kuwait, and this 40% threshold can be exceeded if the NOC issues a written approval. CTO Newsletter. 24 September 2007. 25(18).

¹⁴³ NOC Newsletter. June 2008. 1(2): p11.

¹⁴⁴ CTO Newsletter 25 October 2010. 28(20).

possible formation of a joint offset committee.¹⁴⁵ Two years later the Australian College of Kuwait (ACK), a private, for-profit university chaired by a relative of Ziad's (Abdullah Al Sharhan) received two offset-generated investments associated with Kuwait's purchase of 16 Apache attack helicopters: an aviation maintenance and training platform from Boeing, and a marine simulator from Lockheed Martin, delivered in 2009.¹⁴⁶ Defense industry observers consider this offset potentially one of the largest offsets in Kuwait's history in terms of dollar value.¹⁴⁷ Abdullah also chairs Al-Safat Tec Holding Company – whose primary business includes the ownership and operation of educational institutions – where Ziad sits on the board of directors.¹⁴⁸ Removing the Ministry of Finance from decision-making with regard to offsets *could* have presented a direct threat to such personalistic distributions of patronage, but judging by the offsets awarded to ACK both before *and* after the official creation of the NOC, bureaucratic influence survived official efforts at reorganization.

The other families that benefited from offset investment are – as in the cases of Saudi Arabia and the UAE – the politically well-connected economic elite. For example, in the same report published by the UAE-based bank *The National Investor* (cited above), the

¹⁴⁵ CTO Newsletter. 28 July 2003. 21(14).

¹⁴⁶ Press Release. 11 July 2005. “The Boeing Company and AMAS Group of Companies, owners of the Australian College of Kuwait sign an agreement.” Also see press release. 3 June 2009. “Lockheed Martin and Australian College of Kuwait Unveil New Simulation and Training Center.”

¹⁴⁷ The deal proved extremely expensive – and controversial. Although the average per-unit cost of the AH-64D is about \$18 million, Kuwait paid \$2.1 billion for the 16 helicopters, yielding an average per-unit cost of more than \$130 million. Observers noted that the associated offsets were likely to run in the hundreds of millions of dollars. Opposition MPs and individuals from the Public Accounts Committee (Audit Bureau) criticized the high cost of the deal and the resulting potential for kickbacks. See Michael Knights. 18 December 2003. “Future Development of GCC Air Forces; Part 2.” Air Combat Information Group (ACIG).

¹⁴⁸ Zawya profile. Also see profile on BusinessWeek.

Ghanim (Alghanim) family ranks as the seventh most powerful in Kuwait,¹⁴⁹ and the patriarch of the family ranked among the top 50 wealthiest Arabs in 2009.¹⁵⁰ The Alghanim family has been the partner for a number of offsets, including the very first project established under the offset program in 1996: the Gulf Industrial Technology Company, which was a 51%/49% split in share ownership between the Fouad Alghanim & Sons Group and Hughes Aircraft (now Raytheon), respectively. They were also the recipients of additional offset investment two years later, when Gulf Stream Aerospace (now part of General Dynamics) set up Kuwait International Aircraft Leasing, which is today 100% owned by the Fouad Alghanim & Sons Group. According to the company's website, the leasing company is involved in a number of aviation-related projects inside and outside Kuwait.¹⁵¹ The Alghanim family continues to be the recipient of offset-generated investment today. Most recently, they were among the beneficiaries of the recent *Al Tair* project, which financed a marketing/management program for Wataniya Airways, in which Alghanim holds about 5% of shares.

In fulfillment of its offset obligations, the Russian state arms exporting body Rosonboronexport facilitated a joint venture between Moscow's state-owned oil company Gazprom, and the Kuwaiti investment bank Noor Financial, focused on oil and gas exploration.¹⁵² 51% of Noor Financial is owned by National Industries Group

¹⁴⁹ This list is based on the families' presence on the boards of 582 publicly-listed GCC companies, weighted by market value.

¹⁵⁰ The Alghanim family just missed the top 50 cut-off in 2010.

¹⁵¹ <http://www.fmtas-group.com/en/aviation-kial.html>

¹⁵² "Gazprom creates joint venture with Kuwait's Noor." 24 January 2011. Reuters.

Holding, in which Alghanim is a major shareholder. Noor was also the primary domestic partner for another recent offset – a venture capital fund launched in cooperation with Consensus Business Group using offset financing from the European defense consortium EADS.¹⁵³ Other major Noor shareholders include the Kharafi and Behbahani families, who rank #1 and #5, respectively, in the TNI rankings.

Another influential family to have benefited from the offset program is the Al Wazzan (ranked #4 on TNI's *unweighted* list of most powerful families), whose conglomerate Al Wazzan Holdings Group owns the Institute for Private Education & Training, which was established with financing from the British defense firm Tec.Quipment; the Al Wazzan also own shares in the Kuwaiti Catalyst Company, set up by a Japanese firm under the offset program;¹⁵⁴ and is the major shareholder in EYAS for Higher and Technical Education company, which owns the Gulf University of Science & Technology (GUST), which partnered with Raytheon to host a business training program for Kuwait's civil aviation sector. The ruling Al Sabah family also has offset-related interests – the Sabah-owned firm Kuwait Dynamics Limited (owned via Action Group Holdings) was the recipient of offset-generated investment from Oerlikon Contraves, now part of the German defense firm Rheinmetall.¹⁵⁵

¹⁵³ James Rossiter. "Vincent Tchenguiz links up with EADS for launch of €150 technology fund." 14 April 2007. *Times Online (UK)*. See also Daniel Thomas. "The first 'green billionaire'." 13 April 2007. *Building (UK)*. (a trade publication for the construction industry).

¹⁵⁴ Like many families, the Al Wazzan also own interests in offset-generated companies indirectly. For example, the Al Wazzan Sons General Trading Company is a major shareholder in Global Investment House, which is in turn a major shareholder in National Industries Group Holding, which owns 51% of Noor Financial, which has been the recipient of several offset-generated investments.

¹⁵⁵ The Oerlikon investment went to form a joint venture with Kuwait Dynamics Limited, called the International Company for Logistics Project Firing Ranges.

By measures of value and scope, the offset program in Kuwait has been less successful than the programs in Saudi Arabia and the UAE. No doubt this is partially due to Kuwait's relatively smaller defense budget, and (relatedly) its more circumscribed political influence vis a vis foreign arms exporters. However, according to indicators like the Corruption Perception Index published by Transparency International, Kuwait is also the most corrupt state in the GCC, and recently the offset program has been the target of official inquiries and audits relating to corruption in military procurement,¹⁵⁶ suggesting that the siphoning off of offset benefits may also be partly to blame. One particularly interesting example is that of the U.S. defense firm ITT, which incurred substantial offset obligations relating to its sale of Sincgars (Single Channel Ground and Airborne Radio System) to the Kuwaiti military. According to court documents relating to a whistleblower complaint filed in Washington DC and the Northern District Court of Indiana (where ITT is headquartered), the legal obligations ITT faced under Kuwait law relating to the SINCGARS contract required that ITT set aside 30 percent of the contract value to pay a Kuwaiti offset company. In accordance with the Foreign Corrupt Practices Act, the offset company could not have any "connection with members of the Kuwait government and military who have any authority to approve or implement the contract."¹⁵⁷ According to an affidavit submitted by Nicolas Haddad, a former employee of ITT Corporation and the individual who filed the complaint, Colonel Ali Al-Sarraf (a 2005 graduate of the DOD-funded National Defense University, whose family owns the Sarraf International

¹⁵⁶ Abubaker A. Ibrahim. 6 July 2011. "Panel probes 'offset irregularities.'" *Arab Times*. See also "National Audits Committee investigating bribes allegations." 7 July 2011. *Kuwait Times*.

¹⁵⁷ Haddad vs. ITT Industries. 25 August 2005. Heard by District Judge Henry Kennedy. United States District Court, District of Columbia. Also see Nicolas M. Haddad vs. ITT Industries Inc. US District Court, Northern District of Indiana, Fort Wayne Division. Case No. 1:05-CV-370-TLS.

Group) informed one of Haddad's co-workers that because he was being promoted within the Kuwaiti military, he [Sarraf] "was going to give ITT a lot of business, since the Colonel's family owns part of the offset company with whom ITT has agreed to work."¹⁵⁸ After the meeting where this discussion took place, Haddad confronted Noble about the offset plan, which he believed to be illegal.¹⁵⁹ Haddad was ordered not to discuss any of the details of the deal outside company meetings, and was ultimately fired by ITT. Interestingly, after Haddad was fired, but before he filed a formal complaint in U.S. courts, Haddad was given a job at the National Company for Mechanical and Electrical Works, part of the Al Kharafi conglomerate. The Al Kharafi family has also received substantial benefits from previous offset projects in Kuwait, and would certainly have an interest in convincing Haddad not to file a formal complaint – thus maintaining the sanctity of the offset program.

The Provision of Privilege in the Gulf: Divergent Policies, Common Outcomes

Despite differences in offset policy among Kuwait, Saudi Arabia and the UAE, the identity of the domestic recipients of these offset investments remains the same – mainly the large family-owned conglomerates that owe their competitive advantage to extended personal networks with royal decision-makers and privileged access to both information and capital. The fact that these conglomerates have subsidiaries operating across the full spectrum of economic sectors – from industrial projects to real estate ventures to investment houses – means that changes in the nature of the offset projects themselves

¹⁵⁸ Haddad vs. ITT Industries. http://www.islerdare.com/documents/Haddad_v_ITT_Industries_Inc.pdf

¹⁵⁹ Haddad vs. ITT Industries. http://www.islerdare.com/documents/Haddad_v_ITT_Industries_Inc.pdf

does not prevent the procuring regimes from continuing to deliver economic privileges to the elites that form the bases of their political support networks.

The provision of economic privileges through offset programs reflects the nature of economic patronage that existed during the state-building period and continues to dominate the region today. Take, for example, the AlGosaibi family of Saudi Arabia. Unlike many of the large merchant families, who used their wealth and social standing to support the consolidation of Ibn Saud's rule, the Gosaibi family did not have any tribal pedigree or personal fortune to offer. Instead, the early Gosaibi patriarchs provided intelligence on Turkish troop movements and clandestine courier services to Ibn Saud in his struggle to lay claim to ever-larger swaths of the Peninsula.¹⁶⁰ However, the Gosaibi were never paid *directly* by Ibn Saud, instead they were encouraged to "reimburse" themselves by retaining portions of the subsidies (in cash or in goods) they delivered to Ibn Saud on behalf of the British Government, or else to keep larger portions of the profit margins from the payments they ferried between Ibn Saud and a network of regional traders.¹⁶¹ Defense offsets resemble the methods of reimbursement described above because they allow the state to provide privileges to loyal elites *indirectly*, that is, without disclosing the origins of the benefit – mainly the public purse. Not only do close political linkages make the established families appealing to defense manufacturers who must court royal favor to increase their chances of securing contracts in the future, but defense

¹⁶⁰ Michael Field, *The Merchants*.

¹⁶¹ As their wealth and business dealings expanded, they acquired additional privileges suited to those activities, like preferential tariff rates (they paid 2.5% on trade between Bahrain and the Kingdom, whereas other traders paid the full 5%). Michael Field. 1984. *The Merchants: The Big Business Families of Saudi Arabia and the Gulf*. New York: Overlook Press, p223-6.

offsets also adhere to the established practice of rewarding loyal elites – making them an ideal vehicle for all parties concerned.

This remainder of this chapter will explore some of the broader themes and patterns that characterize defense offsets in the Gulf. First, I will examine the features of Gulf economies that make the provision of defense offsets attractive to both foreign defense firms and the region's monarchies. These features include regional security dynamics and the nature of military institutions in the Gulf, the legacy of the agency system and high levels of wealth concentration, and the large capital reserves that allow Gulf monarchs to subsidize domestic investors participating under the offset umbrella.

Second, I will highlight some of the particular institutions and economic dynamics – such as industry intermediaries and speculative investment – that have grown up around the provision of defense offsets.

The Best Kind of Customer: The Gulf Arms Market and Defense Offsets

Because their defense markets are highly coveted by weapons manufacturers, the Gulf States are in a uniquely powerful bargaining position vis a vis the provision of defense offsets. In addition to controlling a large portion of the global defense market (the GCC states are expected to import more than \$120 billion in weapons between 2010 and 2015, with projected offsets of \$54 billion),¹⁶² wealthy Gulf countries have historically been eager to acquire the most advanced equipment, presumably due to the perpetual arms race with Israel as well as periodic threats – real or perceived – from Iraq and Iran. The

¹⁶² CTO Newsletter. 24 May 2010. 28(10).

export of advanced equipment (even to allies) provides an additional incentive to design – and therefore provide government funding for – the next generation of weapons systems. These research and development dollars represent an enormous subsidy granted to arms manufacturers, who subsequently export the newly redesigned system, starting the cycle anew. In some rare cases the Gulf States have even financed the upfront R&D costs for new weapons systems, which promises significant financial benefits for the firm(s) involved.¹⁶³

Gulf countries are also favorite customers for defense companies because they lack the armament manufacturing facilities and skilled manpower of other major purchasers; typically these customers possess their own indigenous defense producers that must be placated with support or supply contracts from foreign firms. Gulf countries rarely request modifications of the equipment they purchase in order to install locally produced components or perform in-country maintenance – instead opting for indirect offsets that channel subsidies to non-defense businesses. Evidence suggests that arms deals containing indirect offsets are more financially beneficial for the exporting firm, hence adding to the allure of Gulf arms deals.¹⁶⁴ However, this evidence may stem from the fact

¹⁶³ Hasbani (March 2006). “The Geopolitics of Weapons Procurement in the Gulf States.” *Defense & Security Analysis*. 22(1): p76-78. In at least one case (the UAE’s purchase of the F-16 E/F) the customer actually financed innovations and research for the equipment up front, and the resulting model was then exported to additional customers with no added cost born by the firm.

¹⁶⁴ Hasbani (March 2006). “The Geopolitics of Weapons Procurement in the Gulf States.” *Defense & Security Analysis*. 22(1): p76-78. Hasbani claims that it is the cost of equipment modifications that drive down the seller’s profit margin, although he does not appear to take into account the presence of offset contracts. Taylor (2003), whose explicit focus is the economic efficiency of defense offsets, comes to the same conclusion, although his analysis is conducted from the point of view of the procuring country. He finds that offsets typically classified as indirect are less likely to provide any financial benefit to the purchaser, whereas offset typically classified as direct have the potential to mitigate the costs of arms acquisition. I disagree with Taylor’s conclusion, which does not take into account the probability that the exporting firm prevents the procuring country from realizing any economic benefit precisely because the

that developing countries – which are less well-equipped to demand and monitor the offset commitments made by arms manufacturers – are responsible for the majority of indirect offsets, with most developed states opting for direct offsets. The Gulf States also offer “multipliers” in their offset contracts – which reduce the actual dollar investment required to satisfy the obligation – more frequently than other states: the BIS ranked the UAE and Kuwait in second and third place, respectively, in the frequency in which they granted multipliers among all countries where U.S. contractors have offset obligations.¹⁶⁵ Whatever the underlying relationship between offsets and firm profits, because defense firms are able to recover the costs they incur for implementing offset projects – and often an additional premium that makes offsets a potential source of revenue rather than an outlay¹⁶⁶ – the large dollar values associated with the region’s arms deals, and the fact that they are overwhelmingly in the indirect category – make Gulf offsets an enticing add-on to weapons suppliers.

The Arms Trade and Political Leverage

More so than other states, the GCC countries also employ arms purchases for political purposes – often buying redundant systems from both U.S. and European firms, as

cost of the offset is included *up-front* in the contract cost. I do, however, agree with Taylor’s conclusion that direct offsets are the less of two evils, when judged purely on the basis of economic efficiency for the procuring country.

¹⁶⁵ Poland ranked first, offering multipliers 76.8% of the time, the UAE and Kuwait offered this incentive on 58% and 50% of contracts, respectively. BIS 12th annual report on offsets in the defense trade.

¹⁶⁶ In addition to evidence gleaned from USG directives (the DSCA memo cited in Chapter 2) and comments by aerospace industry analysts, there are other indicators that suggest offsets are not only revenue neutral, but in fact present a source of potential earnings for defense firms. For example, the French defense giant Thales has a subsidiary company that deals only with the firms offset contracts. According to its Hoover Business profile, Thales International Offsets has an average net revenue of several million dollars per year.

recently illustrated by Saudi Arabia's acquisition of Lockheed Martin's F-16 and enormous follow-on purchase of Eurofighter Typhoons, the latter is widely considered a less-capable version of the F-16. Because the defense industry is one of the last remaining sources of high-paying manufacturing jobs in the U.S. and Europe, large export contracts such as these are important sources of political leverage for Gulf leaders.¹⁶⁷ The leverage afforded by these contracts can translate into increased offset demands, a condition that has certainly characterized the regional arms trade in recent years.

Defense procurement in the Gulf has traditionally been a means of consolidating and solidifying relations with Western military bureaucracies, which served as their patrons and security guarantors. However, the control these patron states are able to exert over their armament industries is dwindling. First, many functions previously performed within the official bureaucracy have been outsourced to private contractors, whose allegiance to official state policy is certainly weaker than that of public agencies. Second, the global expansion of the defense industry's supply chain – precipitated by the overseas relocation of production facilities, the formation of joint ventures with foreign firms, the increase in the number of Foreign Sales Corporations that allow firms to move portions of their business activities overseas, and the establishment of foreign subsidiaries – means that to leaders in the Gulf and elsewhere, relationships with the firms themselves have become just as important (if not more so) than relationships with their original host

¹⁶⁷ The sale of Eurofighter Typhoons to Saudi Arabia (the Al-Salaam deal) allegedly hinged on the UK government's agreement to suspend an ongoing bribery investigation that targeted high-ranking members of the Saudi Royal Family. The investigation was eventually suspended, and the Typhoon deal went through shortly after.

governments. These shifts in the nature of the arms market make offset programs an increasingly important avenue for regimes seeking to secure political linkages with their suppliers, which are no longer the states – but the firms themselves. The combined political force of procuring governments, exporting firms, industry trade advocates and the myriad other individuals and organizations that benefit from exports, may easily overwhelm those agitating against particular sales – even if those individuals hold political office within the exporting country’s government. Establishing additional linkages and creating new vested interests through the provision of offset projects – such as offset brokerage firms and the domestic recipients of offset transactions in the procuring country – yields even more influence to those operating outside formal state institutions.

The Arms Trade and Accountability & Authority

The absence of effective oversight mechanisms – not to mention legitimate avenues of political contestation – within GCC States also means that expensive weapons purchases are unlikely to be derailed by opposition from official government bodies or non-state actors. Opponents of the arms trade in the Gulf lack effective means to block weapons purchases, as appropriations are not subject to approval or veto by any elected body. Some of the most vocal opposition has come from right-wing religious extremists, who point to the inability of regional governments to defend their states without extensive assistance from the U.S. and Europe despite decades of enormous weapons

expenditures.¹⁶⁸ Similarly, analysts characterize the pursuit of offsets as an empty PR scheme designed to counter the view that too much of the GCC states' resources end up flowing into foreign coffers.¹⁶⁹ Gulf governments have effective tools to silence both forms of criticism: a nearly open-ended mandate to prosecute religious extremism, and considerable resources dedicated to convincing a skeptical public that offsets are economically beneficial. This permissive domestic environment, along with the Gulf's status as a group of "moderate allies" in an otherwise hostile and volatile region, makes the Gulf an attractive market for defense firms wishing to avoid the scrutiny and opposition that accompanies weapons sales to "rogue" states and other unpalatable actors. Offsets are likewise a convenient mechanism for Gulf States to divert criticism about excessive spending on foreign armaments.

Defense offsets are also a preferred form of patronage precisely because they are difficult to track. Even when working with just a single case, compiling a comprehensive list of offset projects, including defense firm sponsors, domestic partners, deal values, and other features is daunting. Over time, defense firms may merge and form new conglomerates, break up and be absorbed piecemeal by other firms, or cease to exist entirely, so corporate profiles, financial records or public relations materials that might have contained information on specific offsets may have been transferred or destroyed. Once the projects are identified, determining the identities of the domestic owners and

¹⁶⁸ This was a primary criticism lodged against the Saudi Royal Family by Osama Bin Laden, who pointed to the Saudi government's inability to deter Saddam Hussein without stationing U.S. troops on the peninsula as a major failing.

¹⁶⁹ The 2008 Oxford Business Group Report on Kuwait states, "Some have claimed that the scheme was designed as a public relations exercise to help diffuse criticism that too much government money goes abroad," p49. "Investment, reprogrammed." The Report: Kuwait 2008. Oxford Business Group.

shareholders is also an arduous process, as offset companies are often private, and even if they are public, the region's disclosure rules are weak and easy to evade. To further complicate matters, the association of each project with a specific weapons procurement deal adds another layer of secrecy. There are no laws – either on the U.S. side or the GCC side – requiring the public release of information pertaining to specific projects, which gives both governments ample space to conceal unpalatable information.

Breaking into the Offset Business: Influential Actors and Institutions in Gulf Offset Policies

The absence of domestic mechanisms of accountability and transparency combined with the large capital bases of the region's sovereign wealth funds and the dramatic expansion of new, unregulated financial products have lured foreign consultants with backgrounds in structured finance into the offset business as well. Many of these individuals have wielded significant influence over the defense offsets policies of the GCC states – making millions for themselves in the process. A brief examination of this handful of actors can provide interesting insight into both the political objectives of states pursuing defense offsets, as well as the economic incentives that have made defense offsets a particularly lucrative industry.

The UAE's offset policy has been heavily influenced by external actors, including some individual offset policy advisors. Dr. Amin Badr Al Din, a Jordanian citizen with an engineering PhD from Stanford, was the first Chairman of the UAE's offset agency – then called the UAE Offsets Group (UOG) – and is credited with writing the agency's

first guidelines.¹⁷⁰ Al Din described the UOG as “a government think tank, an investment bank and an internal government consultancy.”¹⁷¹ His public business profile cites an offset strategy that emphasized venture capital, privatization and public-private partnerships.¹⁷² El Din held the top position in the UOG until 2000, when he was replaced by a three-member board including Mohamed Saif Al Mazrouei (as CEO), Mohamed Ahmed Al Bowardi and Ahmed Ali Al Sayegh.¹⁷³ El Din now operates his own investment bank, *Chescor Capital*, a boutique outfit incorporated in Mauritius that specializes in offset financing.¹⁷⁴ Chescor also operates a \$20 million venture capital fund on behalf of the OPB called the Chescor Capital Offset Fund.¹⁷⁵ Although offsets were formally a part of UAE arms procurement as early as 1992, El Din elevated the profile of defense offsets within the Emirate’s economic development plans.

Another central figure in the creation of the UAE’s offset apparatus is R. Grant Rogan, the son of a former Middle East sales executive for Northrop Grumman.¹⁷⁶ Like Al-Din,

¹⁷⁰ El Din is also widely credited with creating the agency itself – although the relevant dates differ among competing sources. The consensus seems to be that the UOG existed (at the latest) by 1992.

¹⁷¹ “Qatar gets UOG Deals for Up to 85 MCM/D to Abu Dhabi, Dubai, Oman & Pakistan.” 26 June 2000. APS Review Gas Market Trends.

¹⁷² Businessweek profile.

¹⁷³ In 2007, the UOG was re-named the Offset Program Bureau (OPB), with some re-shuffling among the management staff but no changes in the board of directors. 23 April 2007. “New identity reflects Offset’s core focus.” AMEinfo (government press release).

¹⁷⁴ Information on Chescor Capital ownership/incorporation from Zawya Business profile.

¹⁷⁵ Leslie Wayne. “A Well-Kept Military Secret.” February 16, 2003. *New York Times*.

¹⁷⁶ Rogan is the son of Northrop Grumman’s former Beirut chief Richard Grant Rogan, himself tasked with “handling” the famed Arab intermediary Adnan Khashoggi, who made billions skimming commissions from arms sales made to the Saudi monarchy. Rogan Sr. spent several years defending himself in U.S. courts against violations of the FCPA. Rogan Sr.’s contact with Khashoggi is laid out in Ronald Kessler’s 1986 book, *The Richest Man in the World: The Story of Adnan Khashoggi*. New York: Warner Books, p76. According to a profile of Blenheim published in the industry outlet DefenseNews, the company also

Rogan was involved in an advisory capacity in the UAE as early as 1990,¹⁷⁷ and according to a *Wall Street Journal* article by the late Daniel Pearl, Rogan's firm Summit Corporate Services (renamed Blenheim Capital after briefly joining forces with Barclays Capital) was started with a portion of the \$160 million offset investment made by Lockheed Martin in *Mubadala*, the UAE's largest offset investment fund.¹⁷⁸ One of Summit's earliest deals was to help Mubadala buy into a chain of UK gas stations (Rogan is a British citizen and the company is registered offshore in the Channel Islands) as part of a strategy to diversify the UAE's energy supply operations.¹⁷⁹ Blenheim Capital is now one of the largest brokerage firms in the offset business, and certainly the most high-profile one in the Middle East, where Rogan has been dubbed "Mr Fix-It" in the local press.¹⁸⁰

In addition to capturing a large chunk of the regional offset services market, Blenheim Capital has also pioneered the introduction of equipment leasing companies (or "asset management vehicles" in official jargon) into the offset portfolios of regional governments. In the UAE, these leasing companies were designed to target regional customers (mostly state-owned airlines) whose budgets had contracted in the wake of the

employs "an historian, who was asked to map out for the firm the family trees and backgrounds of 10 prominent families in the Middle East and their investments." Antonie Boessenkool. "Small Firm, Big Player." 14 June 2010. DefenseNews. <http://www.defensenews.com/story.php?i=4668082>. Although the article does not hint at the identity of the historian, Grant's brother Eugene Rogan is the head of the Middle East studies department at Oxford University and author of the seminal text, *The Arabs: A History*.

¹⁷⁷ <http://www.summitcs.com/background.html>

¹⁷⁸ Daniel Pearl. April 20, 2000. "Arms Dealers Get Creative with 'Offsets.'" *Wall Street Journal*.

¹⁷⁹ Daniel Pearl. April 20, 2000. "Arms Dealers Get Creative with 'Offsets.'" *Wall Street Journal*.

¹⁸⁰ Ivan Gale. "Mr. Fix-it." *The National* (UAE).

Gulf War and the drop in oil prices, since leasing equipment like oil tankers and aircraft is much cheaper (in the short term) than buying it outright. These projects included a \$1.3 billion deal developed by Blenheim¹⁸¹ in 2006 for the lease of 25 Airbus aircraft to Oasis International Leasing Company (OILC); the aircraft were in turn leased to regional airlines. The profits from the leases went toward satisfying offset obligations for a number of U.S. and European defense firms.¹⁸² The company itself (OILC) was initially set up by BAE almost a decade earlier in order to fulfill its own offset obligation – a \$20 million capital infusion got the UK arms manufacturer a 15% stake in the leasing company.¹⁸³

After executing the \$1.3 billion deal, Blenheim entered into its *own* joint venture with Oasis Leasing, the latter's aircraft leasing operation was integrated into the new venture dubbed Al Waha Financial Services, which included the existing aircraft leasing operation and added a real estate investment arm, a leasing company for maritime equipment, and a structured finance arm – Blenheim's area of expertise.¹⁸⁴ Since then the UAE has added more leasing companies to its books through offset agreements: including Leaseplan Emirates, a joint venture with one of the largest vehicle and fleet management companies in the world, and the Emirates Ship Investment Company

¹⁸¹ At this time – in 2006 – Blenheim Capital was called Summit Corporate Services. The name Blenheim was adopted after Summit formed a joint venture with Barclays, but Summit's founder Grant Rogan eventually bought out Barclays, although he kept the name Blenheim Capital.

¹⁸² The deal was concluded in 2006, and involved EADS, Harris Corp., Textron, Eurocopter, and Rhode & Schwartz. CTO Newsletter. 13 February 2006. 24(3).

¹⁸³ Welt & Wilson. "Offsets in the Middle East."

¹⁸⁴ Blenheim took a 40% share of the new company; Oasis retained the remaining 60% of shares.

(Eships – formerly Combined Cargo UAE) which leases marine tankers.¹⁸⁵ Equipment leasing ventures are also a feature of Kuwait’s offset program, which used aircraft assets transferred from Gulf Stream Aerospace (now part of General Dynamics) to establish the Kuwait International Aircraft Leasing Company in 1998, and again in 2010, when Raytheon transferred four turboprop jets to establish a privately-owned aircraft leasing company called Essence Group – a deal that was also developed by Blenheim Capital.¹⁸⁶

Predictably, the familiar pattern of elite ownership remains. Although the identity of Essence Group’s shareholders is unclear, as mentioned above, the Kuwait International Aircraft Leasing Company set up by Gulf Stream Aerospace is part of the Fouad Alghanim & Sons group of companies. In the UAE, Hussein Nowais – a shareholder in several offset-generated projects – is the largest individual shareholder in the Al-Waha leasing conglomerate, second only to the Mubadala fund itself.¹⁸⁷ Nowais’ other investments include a 5.72% share in Abu Dhabi Shipbuilding (ADSB), a Northrop Grumman offset; 100% ownership of Danway Fusion Glass, a project also developed by Blenheim for a consortium of German companies with offset obligations; and 100% ownership of the Gulf Solar Power Company, an offset from GEC-Marconi. Nowais’s offset-generated ventures have also benefited from subsequent government business, such as when Al-Waha was “mandated” to arrange and manage the financing to purchase \$3

¹⁸⁵ Ivan Gale. 28 April 2010. “New Rules Expected for Offsets.” *The National* (UAE). See also an image taken from the brochure of Blenheim Capital – an offset service firm – which suggests procuring countries can enjoy higher financial returns from offsets involving structured finance than from traditional forms like co-production and technology transfer (Appendix A).

¹⁸⁶ CTO Newsletter. 8 March 2010. 28(5)

¹⁸⁷ Mubadala holds 15% of shares, Nowais holds 8%. Zawya Business Profile.

billion in military aircraft for the UAE armed forces, which Nowais observed would “positively affect the company’s financial performance by raising shareholders’ equity, strengthening assets and raising profitability.”¹⁸⁸

Like Blenheim in the UAE and Kuwait, there have been prominent Western financial institutions involved in Saudi Arabia’s offset program as well. The private equity firm Carlyle Group, made famous by its success in corporate buy-outs in the defense sector and the revolving door between its directors and high level posts in the U.S. Government, was the official advisor to the Saudi Offset Committee during its formative years: from 1994 until just after 9/11.¹⁸⁹ Carlyle’s former chairman explained the group’s role as a facilitator, singular in its ability to reach out:

to some of the Carlyle companies, some of the former Carlyle companies, and other companies where we are well known, to convince them of the merits of investment in Saudi Arabia and to bring them together with Saudi partners.¹⁹⁰

Although U.S. officials conceded that the program has never been successful, at least one Saudi official characterized Carlyle’s efforts as “disastrous.”¹⁹¹ Despite this apparent

¹⁸⁸ Al-Waha press release. <http://www.wahacapital.ae/news/106/106/index.html/?nval=6&mode=1>

¹⁸⁹ The revelation that Carlyle managed assets for Osama bin Laden’s estranged brother Shafiq probably encouraged both the Saudi government and Carlyle’s executives to sever all unnecessary ties in the wake of 9/11

¹⁹⁰ Frank Carlucci. Carlyle Group presentation to Saudi Economic Offset Committee. 1996. This would probably be a very large number of companies, since Carlyle Group is one of the largest private equity firms in the world. It had some \$90 billion under its management as of 2010.

¹⁹¹ Robert Kaiser. 11 February 2002. “Enormous Wealth Spilled into American Coffers.” *The Washington Post*. The Saudi monarchy did, however, secure representation from the powerful law firm Baker & Botts when the U.S. Department of Justice launched inquiries into the financial dealings of some of its members. Baker & Botts is the law firm of James Baker, Secretary of State under the elder President Bush, who used the contacts he made in office to guide Carlyle’s lucrative series of corporate defense buyouts. Former defense secretary Frank Carlucci was also a senior advisor to Carlyle during this period, and instrumental in facilitating the company’s defense buyouts. As of 2007, Carlyle operated in 21 countries worldwide, managing assets of \$76 billion.

failure, Carlyle is still heavily involved in the business of offsets: Carlyle has large investments in Turkish military conglomerates, many of which originated through technology and equipment transfers from previous offsets with the U.S., and in 2007 Carlyle secured a \$1.35 billion investment from Mubadala – the UAE’s offset investment fund, which now owns nearly 10% of the firm.¹⁹² Carlyle also owned United Defense, subsequently acquired by BAE Systems, when the former signed a major coproduction deal (a *direct* offset) for armored vehicles and machine guns with the Egyptian government.¹⁹³ Although this agreement consumed more U.S. aid dollars than a comparable ‘off-the-shelf’ purchase, given the industry practice of inflating the cost of such coordination up-front, United Defense (and therefore also Carlyle Group) gets paid regardless of such inefficiencies or cost overruns.

Carlyle and other privately-held funds have also benefited immensely from high liquidity in Gulf markets, as Gulf investors were spurned from buying up the assets of publicly traded companies after 9/11, as illustrated by the Dubai Ports fiasco.¹⁹⁴ 2002-era estimates put the value of private Saudi investments abroad at about \$1 trillion – with about $\frac{3}{4}$ of that invested with U.S. financial institutions – begging the question: why does the Saudi government need private equity firms to advise them on attracting foreign

¹⁹² Camilla Hall and Zahraa Alkhalisi. 10 April 2011. “Mubadala Holds 9.35% of Carlyle, Agreed to Invest \$600 million.” *Bloomberg*.

¹⁹³ “DOD Memorandum for Correspondents. 10 November 1997. No 206-M. U.S. Department of Defense. http://www.defenselink.mil/news/Nov1997_m11101997_m206-97.html. (accessed on 17 July 2009).

¹⁹⁴ Although the UAE state-investment vehicle owns significant assets in energy, heavy industry, telecommunications, infrastructure and aerospace in the Middle East, its efforts to increase ownership of similar assets overseas has met with significant public opposition. Investments in private-equity funds facilitates its entry into these markets by maintaining low visibility.

investment (which is how they characterize offsets) when all the investment dollars they need are languishing abroad in foreign banks?¹⁹⁵

Defense Offsets and the Structure of Domestic Economies in the Gulf The Agency System

The legacy of the agency system means that prevailing methods of doing business also conform well to standard models of offset provision. The agency system requires international firms to sell their products through local agents.¹⁹⁶ As a result, many regional conglomerates are merely local purveyors of international brands rather than domestic producers of distinct products.¹⁹⁷ Linking up with an individual businessman or family-owned firm in the Gulf is not only a *de rigueur* component of Gulf business culture, it also provides the firm with added security. Harry Stonecipher, then-President of McDonnell Douglas (and Boeing, once the two companies merged) explained the benefit to a gathering of Saudi officials and defense executives:

Why should you think about offset if no one forces you to? Because it is the best way in the world to form a partnership. Once you get the partnership formed, then it is very difficult to be dislodged from that country.¹⁹⁸

¹⁹⁵ One possible answer is that (much like a good deal of Gulf defense procurement) the purchase of such services is largely done as a political favor to Western allies. A 2002 Washington Post article reported that a “well-placed Saudi source said that wealthy Saudis close to Prince Sultan, the Saudi defense minister, had been encouraged to put money into Carlyle as a favor to the elder Bush.” The fees Carlyle generated from more than five years advising Saudi officials on their offset program were perhaps a similar favor. After 9/11 Carlyle Group had to abandon the gains from a number of such favors: in addition to dropping its contract with the Saudi offset program the group also had to return a \$2 million investment made by the Bin Laden family. Robert G. Kaiser. 11 February 2002. “Enormous Wealth Spilled into American Coffers.” *Washington Post*.

¹⁹⁶ Investment laws usually require that the local partner be the majority shareholder, in practice his share is often 51%, except in the economic free zones, where ownership and investment laws are relaxed and the foreign partner may be a majority shareholder.

¹⁹⁷ “The Impact of Private Equity on the GCC.” June 2007. Ithmar Capital, p11.

¹⁹⁸ “Workshop on the Offset Program: A Launchpad for Joint Ventures.” <http://www.us-saudi-business.org/p96ws2.htm>. The Carlyle Group, p9.

In short, offsets can solidify a firm's presence in the procuring country, although it need not be the defense firm itself that gains a foothold. The defense firm can also meet its offset obligation by eliciting investment from a third-party company, which simply licenses the domestic sale of an existing product, a process closely resembling the way that Gulf merchants secure licenses to sell foreign goods outside the auspices of the defense offset system. This formula was well-illustrated by the Congressional testimony of an industry lobbyist, which outlined the process whereby the licensed sale of foreign good can serve to fulfill offset obligations.¹⁹⁹ Again, because the Gulf countries do not possess extensive indigenous defense sectors, the agreements that bring in third-party companies are typical of the offset process, which harmonizes well with the pre-existing agency system.

In the UAE, the establishment of the Berlitz Language School in Abu Dhabi and the wholesale purchase of the German gun-manufacturer Merkel, which makes hunting rifles, are examples of offset transactions that follow the agency model, as is Saudi Arabia's licensing of a Glaxo Wellcome pharmaceutical plant under the Al Yamamah arms deal.²⁰⁰ None of these firms provided goods or services that were part of the original weapons deals – they were brought in as investors by defense firms that had incurred offset obligations. Yet these agreements are distinct from the ordinary process of expansion in which multi-national corporations (MNCs) secure licenses to produce,

¹⁹⁹ See testimony of Joel Johnson, Chapter 2.

²⁰⁰ Despite significant effort, I have not been able to determine the identity of the domestic partner for the Berlitz language school in Abu Dhabi. The assets of Merkel – along with the other subsidiaries under the parent company Caracal International – were acquired by Tawazun, the investment fund of the UAE's Offset Program Bureau.

distribute and market their wares abroad. Not only do procuring countries “pay” up-front for the business generated by the MNC through inflated contract costs, they often provide extensive public financing for the new initiative and designate “suitable” domestic partners from within the private sector. Such methods of support and control are more difficult to impart into non-defense transactions, especially if the relevant states are members of the WTO.

Unsurprisingly, the domestic partners are typically drawn from among the procuring country’s economic elite. According to Saudi government documents, the partner for the Glaxo Wellcome venture was the Saudi Imports Company (SIC), a subsidiary of the family-owned Banaja(h) Holdings (Ramady).²⁰¹ The Banaja(h) family, whose patriarch ranked #31 on ArabianBusiness’s 2010 list of the world’s richest Arabs, is also a domestic partner for two other UK offsets in Saudi Arabia: DEEF pharmaceuticals, in which it is the majority shareholder, and the United Sugar Company, in which it holds a 15% interest. The identity of the owner of the Berlitz school in the UAE is not reported in any public documents, but various references to the “patronage of his Royal Highness” suggests that Crown Prince Mohammed may be the owner. Tawazun – the investment arm of the UAE’s Offset Program Bureau – owns Merkel and its parent company Caracal International.

The agency system is rooted in the peculiar development trajectory of the Gulf kingdoms;

²⁰¹ Ramady records a 70% share ownership for SIC, but Zawya lists SIC with 51% and Glaxo the remaining 49%. It may be that SIC subsequently sold some of its shares back to Glaxo, or that the government documents used by Ramady provided inaccurate figures.

it not only dominated early interstate relations, as European colonial administrators used economic ties to strengthen their preferred interlocutors, it also characterized relations between the nascent monarchies and their subjects. As oil exports intensified, the wealth of the central governments in relation to the rest of their subjects also grew, and providing services to the state and/or the royal family became a quick and easy route to wealth. The durability of the resulting ties, the scarcity of skilled labor and raw materials (other than oil and gas), and a lack of enthusiasm for industrialization among the region's foreign patrons, hindered the establishment of industrial projects and the kind of economic diversification that might have allowed for the expansion of genuine domestic production, leaving demand to be met with foreign imports, which the U.S. and Europe were only too happy to supply.²⁰²

The irony of the joint venture model within the context of defense offsets is that the challenges posed by patronage in general and the agency system in particular are exacerbated; while the potential benefits that policy-makers claim can be drawn from such ventures is minimized. Because the role of the domestic partner seldom extends beyond the realm of investment or distribution to more collaborative activities like licensed production or technological spillover, such ventures result in little (if any) meaningful cooperation between the domestic importer and the offset partner. Likewise, because the offset partner is neither incorporating nor restructuring a pre-existing local venture, it is unlikely that such partnerships will have the purported effect of increasing

²⁰² A census in Saudi Arabia found that as late as 1967 nearly 50% of 'manufacturing ventures' employed no more than one person (the owner), and nearly 90% employed no more than four. Because there was no state regulation concerning the import of foreign commercial goods for many decades, a few families monopolized much of the import business. Niblock, Tim. 2007. The Political Economy of Saudi Arabia. New York: Routledge, p48-9.

efficiency or streamlining domestic business practices. Yet, technology transfer and administrative and managerial knowhow are precisely the benefits that Gulf governments claim will be engendered through the sustained participation of international firms in regional offset projects. Even the process of WTO accession has done little to dislodge long-standing patronage networks and the ubiquity of the agency system; yet regional regimes continue to pay dearly for a system of foreign investment that is much less disruptive to traditional modes of doing business.²⁰³

State Support for Indigenous Investors and Foreign Firms in Offset Ventures

In addition to financing the defense firm's participation in a domestic venture through payment of inflated contract costs, the Gulf States also provide significant financial incentives to domestic firms and third party foreign investors in order to encourage their participation – including interest free loans for up to 50% of the project cost; “non-recourse” loans – which minimize risk for the foreign investor; below-market prices for raw materials; exemption from import duties; tariff-free access to neighboring markets (even before the introduction of the Arab Free Trade Area); unfettered repatriation of funds; fast-track licensing approval; “match-making” services to link up potential investors with domestic entrepreneurs; preferential treatment in subsequent government procurement decisions; bank guarantees; subsidized land, and a host of other incentives.²⁰⁴ In Kuwait, offset generated ventures are granted a 10-year tax holiday, and

²⁰³ The UAE has done the most to relax some of the relevant laws, such as those governing foreign ownership of companies. Jack Kalpakian. “Economic Structures.” In Saudi Arabia and the Gulf Arab States Today: An Encyclopedia of Life in the Arab States. John A. Shoup and Sebastian Maisel (eds.) Connecticut: Greenwood Press, p132.

²⁰⁴ John Presley, Economic Advisor to the Saudi British Bank (SABB). Date unknown. “The Al Yamamah Economic Offset Programme: A Guide to Business Procedures in Saudi Arabia: Helping Business in Saudi

since many defense firms end up divesting from these projects after their obligation is fulfilled, this essentially exempts them from taxes altogether.²⁰⁵ Instances of granting preferential credit facilities are also visible in the UAE; for example, the Burkan Munitions factory – a joint venture between Al Jaber Group, Tawazun and Rheinmetall of Germany – got a nearly \$300 million loan from First Gulf Bank, which also manages the Alfia Fund, “to continue its development to launch new products.”²⁰⁶ The loan was made at a very low rate, despite Al Jaber Group’s persistent debt troubles; one month *before* the loan was made the company asked 330 creditor banks to grant it a delay on payments of its \$1.1 billion debt.²⁰⁷

Typically, 50% of the capital used to launch an offset-generated venture is provided by the procuring state.²⁰⁸ In Saudi Arabia this generally comes from the Saudi Industrial Development Fund or SIDF, which loans the capital at “nominal preferential rates”²⁰⁹ – which often means 0% for 15 years or more. Another 25% typically comes from commercial loans made by domestic banks, leaving 25% to be split between the domestic

Arabia Series.” *The Saudi British Bank*, p5. Although this document characterizes these incentives as being provided by the prime contractor for the Al Yamamah offset program (BAE) because BAE inflated the cost of the original arms contract by some 32%, it is really the Saudi government budget that is bearing the costs of these subsidies. 32% figure comes from D. Leigh and R. Evans. 28 October 2006. “The Secret Whitehall Telegram that Reveals Truth Behind Controversial Saudi Arms Deal.” *The Guardian* (UK).

²⁰⁵ CTO Newsletter. 28 July 2003. 21(14).

²⁰⁶ “Arms Industry to Help Boost Exports.” 11 January 2011. Offset Program Bureau press release.

²⁰⁷ Camilla Hall and Zainab Fattah. 19 December 2010. “Al Jaber Group of Abu Dhabi Talks with Lenders About Altering Debt Terms.” *Bloomberg*.

²⁰⁸ Stephen Martin. *The Economics of Offsets*, p234.

²⁰⁹ 25 November 1996. “Unichem/Herdilia for Saudi Cumene.” ICIS.com (chemical and energy industry publication).

partner and the defense firm.²¹⁰ So for 12.5% of the initial investment, both the domestic merchant and the defense firm are entitled to split the profits – quite a good deal if the defense firm is inflating their costs up front (which they are). Likewise a good deal for the domestic partner, since he frequently sits on the board of the domestic bank issuing the loan, he wins on both ends: easy-financing and profits from fees charged by the bank.²¹¹ The deal is even better for a foreign technology partner (such as a pharmaceutical firm or a petrochemical company – which was the model for BAE’s Al Yamamah program). In the language of BAE’s *Project Finance Initiative*, “this means the foreign partner has all the benefits of a 50% shareholding in the joint venture company for just 6.25% investment,” since BAE and the Saudi state provide the bulk of funding, with the domestic investor claiming the remaining 50% of shares.²¹² If this is not sufficient incentive, the BAE brochure continues: “combined with competitively priced utilities and the SIDF interest-free loan, this powerful incentive package represents a unique low-cost opportunity to enter the developing Saudi market.”²¹³

Because of these allowances, a very small percentage of the overall dollar value of offset investment actually originates outside the procuring state. A 2005 study conducted by a Saudi economist demonstrates why. As of 2003, the Saudi Economic Offset Secretariat cited \$1.4 billion in active offset projects undertaken by the UK corresponding to \$7.6

²¹⁰ Stephen Martin. The Economics of Offsets, p234.

²¹¹ In the annual reports of many GCC banks, the section on “related-party transactions” (ie, loans and other business conducted with the banks’ boards of directors and executives) is lengthy. Although regional banks are notorious for making “sweetheart” loans to well-connected businessmen these sections carry the standard disclaimer that all these transactions were conducted at normal rates.

²¹² “BAE Systems Project Finance Initiative 2.” See also Stephen Martin. The Economics of Offsets, p234.

²¹³ “BAE Systems Project Finance Initiative 2.”

billion in Saudi defense purchases.²¹⁴ But, after accounting for the myriad incentives provided by the Saudi government, and the investment from domestic partners (which of course is also eligible for the same subsidies) the actual figure of UK investment in offset projects is only \$361 million (or, 4.8%) of the total \$7.6 billion price tag, meaning that nearly 95% of the financing for offsets comes either directly from the Saudi government, indirectly from the Saudi government via the inflated costs it pays to BAE which are then dispensed through the British Offset Office, or from individual Saudi investors.²¹⁵

Rates for US and French offset investment are even lower, at 2.9% and 0.9% of the overall sums spent on military procurement, respectively.²¹⁶ Comparable breakdowns are not available for the UAE and Kuwaiti programs, although there is little reason to expect their offset programs to demonstrate substantially better returns. Comments made by Emirati officials indicate that they are well aware of the limited dollar amount of investment that originates with the obligor firm, and by extension the high cost borne by their governments to subsidize offset investment.²¹⁷ The resistance Kuwait's NOC has encountered in implementing a penalty for non-fulfillment of offset obligations equal to 6% of the original procurement cost must also be sending red flags. If defense firms

²¹⁴ Ramady. The Saudi Arabian Economy, p289.

²¹⁵ Ramady. The Saudi Arabian Economy, p289.

²¹⁶ Ramady. The Saudi Arabian Economy, p289.

²¹⁷ At a 2007 conference on offsets held in Abu Dhabi, an executive for the UAE Offset Program Bureau admitted to a room full of defense executives that his agency was aware of the practice of incorporating projected offset costs into the original equipment contracts (in effect ensuring that procuring countries would finance their own offset investments). His full statement was, "If we look at the procurement and try to find the offset cost you will not find it. There are a lot of ingenious ways to hide that cost. They are charging also for offset fees from countries that don't have offsets for their procurements, just to take that extra money and try to invest it in a country that *does* have an offset program [my italics]. And we know that this is true." Comments of Saif Al Hajeri, Director of the UAE's Offset Venture Group at the 2007 Middle East Regional Offset Conference held in Abu Dhabi. CTO Newsletter. 12 March 2007. 25(5).

object to possibly paying 6% of the overall contract cost, it must be because they are currently satisfying their offset obligations for substantially less than 6%. One industry insider that contacted me estimated that, at most, firms end up parting with sums equal to 3-4% of the contract cost.

In addition to formal financing incentives, there are many “soft” incentives offered to third-party investors through the region’s offset programs, including preferential access to high-level decision-makers; the “status” derived from having one’s proposal administered on a government-to-government basis; banking advice; market research; contacts within various government bureaucracies – such as the Saudi Arabian General Investment Authority, SAGIA; and, of course, “match-making services.”²¹⁸

The British handbook *Doing Business in Saudi Arabia* states that,

Investing under the economic offset programmes offers the independent foreign investor a number of advantages. The intergovernmental agreements provide for foreign shareholdings in ventures formed under the offset programmes to equal or exceed those of the Saudi partners and still to attract the full range of investment incentives. Moreover, the Saudi Economic Offset Office, The British and French governments and BAe Systems retain advisers that are most willing to give advice and help to prospective investors, particularly over the choice of suitable partners for their enterprises.²¹⁹

The case of CAD Middle East Pharmaceuticals, a recent Saudi offset, is instructive.

CAD is a joint venture, whose partners include Takamul Holding Company, the Arab

²¹⁸ These stated incentives are taken from numerous sources, including: (1) Spring 2000. “The Al Yamamah Economic Offset Programme.” RGGG News. (2) The website of the UK’s Middle East Association, which offers “informal advice on the selection and appointment of suitable Arab nationals and organisations necessary to represent your interests throughout the Middle East.” The Middle East Association (like the British Offset Office) is part of the UK Trade & Investment Authority.

²¹⁹ Anthony Shoult. 2006. *Doing Business with Saudi Arabia*. London: Global Market Briefings, p166. The selection continues: “BAe Systems operates a scheme that provides non-recourse loans to assist in offsetting risk associated with equity investment by the overseas technology partner. There is always the possibility too, that one of the beneficiary companies of the defence supply projects might itself be willing to invest in a venture that is related to its business objectives and is seen to have good prospects.”

Company for Drug Industries and Medical Appliances (ACDIMA), Dishman Pharmaceuticals (an Indian company), and the Saudi Pharmaceutical Industries and Appliances Corporation (SPIMACO). In addition to securing a \$55 million soft loan from SIDF (which also happens to be the previous workplace of Takamul's CEO Nizar Hariri) and funding from the British Offset Office, CAD also secured subsidized land from the Saudi government.²²⁰ Other Takamul executives have served in senior positions at SPIMACO and ACDIMA, which are both primarily state-owned enterprises, and will serve as the new venture's largest customers. Officials involved in the offset bureaucracy also frequently hold positions in other government agencies that determine the incentives provided to foreign investors and their domestic partners, making political connections even more rewarding. In Kuwait the Council of Ministers appointed the NOC's General Manager to a simultaneous position on the Foreign Capital Investment Committee, which not only approves projects but also determines the allocation of incentives and certifies which projects meet relevant investment objectives.²²¹

Predictably, most of the promotional literature published by chambers of commerce, industry associations, banks and government agencies that outline the benefits available to potential investors willing to participate under the rubric of the offset program portray those subsidies as incentives financed by the defense firm. One particularly interesting example is a booklet written by an academic working as an economic advisor to the Saudi British Bank (SABB), which handled most of the financial transactions pertaining

²²⁰ 12 July 2006. "Dishman ropes in SPIMACO in Saudi Arabian JV." *The Economic Times* (India).

²²¹ NOC Newsletter. September 2009. 2(3).

to the Al Yamamah offset program. The booklet, titled “The Al Yamamah Economic Offset Programme: A Guide to Business Procedures in Saudi Arabia” is part of the *Helping Business in Saudi Arabia Series*, and is included in the chapter appendix for reference. Although the text outlines all the various subsidies, it characterizes these incentives as being provided by BAE, the prime contractor for the Al Yamamah deal. Yet because BAE inflated the cost of the original arms contract by some 32% – according to government telegrams obtained by the UK’s Guardian newspaper – it is really the Saudi government budget that is bearing the cost of these subsidies.²²² Nonetheless the booklet is an excellent example of the type of institutional literature that perpetuates the (crucial) misconception that defense firms are the ones bearing the costs of offsets. Taken together, these materials form an important component of the dense web of misinformation that allows such economically perverse practices to continue.

Defense Offsets and Wealth Concentration

The features of Gulf economies that most influence the political and economic role of defense offsets in the region are the high degree of wealth concentration and the robust networks of state patronage that underpin it. The region’s private economy is dominated by a relatively small number of politically well-connected and highly-diversified conglomerates whose operations run the gamut from importing goods like coffee and construction equipment to operating shipping lines and travel agencies, currency exchanges, insurance brokerage firms, real estate development, tourism, light

²²² 32% figure comes from D. Leigh and R. Evans. 28 October 2006. “The Secret Whitehall Telegram that Reveals Truth Behind Controversial Saudi Arms Deal.” *The Guardian* (UK).

manufacturing, financial services and telecommunications.²²³ This degree of ownership concentration not only ensures that obligor firms have domestic business partners with ready access to the subsidized infrastructure and cheap loans required to launch joint ventures, but also allows these firms to solidify their relationships with elites who have access to high-level decision-makers – the same ones who will determine the recipients of future military contracts.

These conglomerates are remarkable not only for the magnitude of assets under their control, but also for the breadth of economic activities in which they engage. As one author puts it:

A merchant who has a string of shipping agencies and a normal run of other businesses will make sure that the shipping lines he represents will buy fuel from his bunkering service, air-tickets for relief crews through his travel agency, and will have their ships unloaded by his stevedoring company. Where possible, cargoes will be insured through the merchant's insurance business. Any of the crew who have to spend a night or so ashore before flying home will likely find themselves booked into the merchant's hotel.²²⁴

Today, approximately 95% of businesses in the Gulf are family-owned; half of these have roots dating at least to the 1950's, during the phase of intense state-consolidation and the incorporation of elite factions.²²⁵ This is not a coincidence, as oil money began to flow in earnest into Saudi Arabia in 1946 – and all the Gulf economies by the 1950s – laying the

²²³ Michael Field. 1985. The Merchants: The Big Business Families of Saudi Arabia and the Gulf States. New York: Overlook Press, p7.

²²⁴ Michael Field. 1985. The Merchants: The Big Business Families of Saudi Arabia and the Gulf States. New York: Overlook Press, p8-9.

²²⁵ “Can Gulf Family Businesses Keep Up?” *The Economist*. <http://qfc.economist.com/tabid/89/Default.aspx>. Accessed 20 February 2010. This is compared to about 65-80% of businesses globally. A very small percentage of these businesses – only 8% - were publically traded as of 2010. Faisal Alsayrafi. 7 February 2010. “The Changing Dynamics of Family Business in the Gulf.” *Arab News*.

groundwork for the massive expansion of public infrastructure and distributive institutions that would reach an apex during the 1970s hike in oil prices.

One business intelligence publication reported that, “If foreign suppliers want their goods to be seriously considered they are urged to join forces with Saudi Arabia’s big merchant families.”²²⁶ Defense offsets provide a streamlined – and cheap – method for U.S. and European defense firms to do just that. Lastly, defense offsets are appealing to the region’s ruling families because they provide legitimate, institutionalized channels for transferring economic subsidies to loyal domestic elites while also obscuring the origin of the funding.

The Economic Fundamentals of Defense Offsets in the Gulf: Official Narratives vs. Outcomes

Although offset obligors bill their investment activities as innovative methods of fostering ‘industrial cooperation’ and ‘economic enhancement,’ the most striking feature of the economics of defense offsets – in the Gulf and elsewhere – is undoubtedly the high cost they impose on purchasers.²²⁷ Offsets frequently finance projects that generate large financial returns in a short period but provide little in the way of sustainable jobs or genuine economic diversification; a preference for these rapid return investments among foreign investors (here, the defense firms) is also associated with high levels of corruption.²²⁸ The proliferation of offset investment funds – which is most extensive in

²²⁶ CTO Newsletter. 14 August 2006. 24(15).

²²⁷ This phenomenon is examined in detail in Chapters 1 and 2.

²²⁸ B.K. Smarzynska and S. Wei. 2000. “Corruption and the Composition of Foreign Direct Investment: Firm Level Evidence.” Working Paper 7969. Cambridge, MA: National Bureau of Economic Research.

the GCC – has been criticized by many, including those *within* the offset services industry. David Hew, the founder of the Asia Pacific Countertrade Association (and former offset advisor to Kuwait) stated that:

The essence of an offset program is to enable effective knowledge transfer and ensure job creation for nationals...[yet] some offset models in the GCC are based on venture capital models which strips the basic idea behind an offset program.²²⁹

One particularly large project was the \$2.1 billion offset (financed by a coalition of several obligor firms) that went to Abu Dhabi's Aldar real-estate company to finance development of the Al-Raha Beach project – a 5 million square meter luxury residential and commercial space built on a platform of dredged sand. Aldar – established in 2000 by the UAE's Offset Program Bureau – is the Emirate's largest real estate developer; the company's board of directors includes several of the UAE's wealthiest merchant families that are invested in other offset projects or have served within the UAE's offset bureaucracy, or both – including the Al Suwaidi, Al Jaber, Al Mazrouei and Al Sayegh families.²³⁰ It seems this project did not even meet the minimal standard of adding value to the Emirati economy, since the government was forced to bail out Aldar during the recent financial crisis. In a moment of rare public candor, when pressed by a conference attendee Matar Al Romaithi of the UAE's OPB admitted that “a few” of the OPB's current projects could have been launched outside the framework of defense offsets.²³¹

²²⁹ Comments made at “Corporate Governance and its Role in Economic Development” conference in Oman. 8 June 2009. CTO Newsletter. 27(11).

²³⁰ Ahmed Ali Al Sayegh is on both boards (Chairman of Aldar and a board member of the UAE Offsets Group); the Suwaidi family has two members on Aldar's board and is also represented in various official agencies that deal with offsets, including the UAE's central bank, the Abu Dhabi Investment Authority and the Bin Jaber Group; the Al Jaber family has one spot on Aldar's board and has been the joint venture partner for previous offsets in the UAE.

²³¹ CTO Newsletter. 9 March 2009. 27(5).

Offsets and Employment

Official employment figures are difficult to square with the jobs rhetoric that permeates official pronouncements on offset programs. Major General Hamad Al Sugair, Secretary to the Saudi Economic Offset Committee, reported that about 6,500 jobs had been created by the offset program as of 2006, although only 56% of these are filled by Saudi nationals.²³² Independent calculations based on documents from the Economic Offset Secretariat yield a figure of 2,251 jobs as of year's end in 2001, 967 of them for Saudi citizens.²³³ These are a far cry from the projected figures provided by defense firms. For example, Boeing and the other contractors associated with the 1985 Peace Shield contract promised the creation of 75,000 jobs;²³⁴ research conducted by Janes defense publications put the number of jobs at 3,540 (with the Saudi proportion unknown) as of 2009.²³⁵ Similarly, recent statements made in the Saudi press cite the eventual creation of 15,000 local jobs based on aircraft assembly work that is part of BAE's most recent offset.²³⁶

Yet, BAE, which has been in the kingdom in one form or another since 1973 and considers the kingdom one of its "home markets" (the others being the UK, US, Australia, South Africa and Sweden) currently employs only about 2,500 Saudi nationals. And despite the kingdom's rhetoric on encouraging employment through offsets, UK

²³² CTO Newsletter. 12 March 2007. 25(5).

²³³ Ramady. *The Saudi Arabian Economy*, p289.

²³⁴ Sylvia Pfeifer. 10 June, 2010. "Overseas defence clients get tougher." *Financial Times*.

²³⁵ Sylvia Pfeifer. 10 June, 2010. "Overseas defence clients get tougher." *Financial Times*.

²³⁶ "Saudis countdown to Typhoon service entry." 13 May 2010. *Arabian Aerospace*.

officials involved in the program report that the focus has shifted to technology, and that labor-intensive projects are actively discouraged.²³⁷

Many industrial offset projects appear to employ more foreigners than nationals, but a large proportion of offset dollars also go to sectors not designed to generate any substantial employment opportunities at all. One offset worth \$2.1 billion – deemed “Project Alpha” by the offset service firm Blenheim Capital²³⁸ – went toward real estate development in the UAE: hardly the type of industry that provides sustainable employment for Gulf nationals or increases the economy’s productive capacity. The large-scale equipment leasing operations explored above are also projects that promise high financial returns – Al Waha claimed an after-tax profit of nearly \$50 million in its first year²³⁹ – but provide little by way of employment or diversification. The high concentration of investment in sectors such as finance and energy also crowd out investment in small and medium enterprises (SMEs), as such industries are seldom profitable on a reduced scale. This is reflected in the low levels of regional lending for SMEs; only 2 percent of bank loans in the GCC go to SMEs.²⁴⁰ The absence of SMEs ensures that the region’s economies will be chiefly composed of two groups: wealthy state-sponsored business elites who depend on their privileged market access to survive, and a vast lower class similarly dependent on state-subsidized jobs, housing and education.

²³⁷ CTO 8 August 2005. 23(15).

²³⁸ Blenheim Capital. “Offsets: Evolved.” Company Brochure.

²³⁹ CTO Newsletter. 24 March 2008. 26(6).

²⁴⁰ SME Bank Loans in the Middle East and North Africa. World Bank. November 2010.

When regimes do make explicit attempts to indigenize the labor force involved in offset projects, obligor firms frequently resist. For example, when the Saudi government pressured BAE to increase the “local content” of employment in the contractor’s domestic facilities, the firm warned that profits from extant offset ventures would be reduced. Saudi Arabia fired back, hinting that if returns did indeed drop the kingdom might be forced to reduce the annual payment of £1 billion in oil it is obligated to make to the UK under the Al Yamamah contract.²⁴¹ Yet for all this talk, offset-related employment figures in the Saudi Kingdom remain dismal. Independent estimates place the cumulative number of offset-related jobs for Saudi citizens at less than 3,000 since the U.S. initiated its first offset program in 1985,²⁴² yet firms involved in the offset business routinely offer much higher figures, often without providing evidence to back them up. Kuwait – by its own official estimates – fares even worse: reporting the creation of 50 offset-related jobs annually.²⁴³ There are also specific provisions in Kuwaiti offset policy allowing “permissible levels of foreign labour;” quite striking given the political salience of employment for nationals across the GCC States.²⁴⁴ Given the high cost of financing and subsidizing offset ventures, the pricetag for these jobs is enormous. These figures suggest that employment generation is in fact not a key concern for either governments or obligor firms. The absence of such genuine pressures provide firms and

²⁴¹ CTO. 10 January 2005. 23(1).

²⁴² Ramady. *The Saudi Arabian Economy*; Sylvia Pfeifer. 10 June 2010. “Overseas defence clients get tougher.” *Financial Times*.

²⁴³ Comments of NOC Chairman Mazen Mahdooch to conference delegates at offset meeting in Ankara. CTO Newsletter. 8 March 2009 27(5).

²⁴⁴ CTO Newsletter. 28 July 2003. 21(14).

policy-makers with more leeway in distributing offset projects – making them a prime channel for distributing patronage to the most powerful domestic business elites.²⁴⁵

Offsets & Regime Prestige: Aquaculture, Academics and Aircraft

Despite their poor economic record, offsets do succeed in creating the illusion of foreign investment, economic diversification, modernization, and official efforts to generate employment for Gulf nationals. Because the state is able to obscure its role in subsidizing the foreign defense firm making the investment *and* its own role in choosing the domestic partner to participate in the project, the state appears to be both judicious in its procurement policy and a neutral arbiter in the process of administering the offset investment. In Kuwait, the NOC retained the services of *Epicos*, an offset services firm based in Greece, to act as a third-party administrator and facilitator for the country's offset program.²⁴⁶ The firm devised a project named “Empower the Private Sector in Kuwait,” and its official announcement of the program stated that the “main objective” of the NOC was,

to support the development of the private sector in Kuwait through the transfer and settlement of appropriate modern technology, the creation of high-skill jobs for Kuwaiti nationals and advancement of education & training opportunities in Kuwait...[t]he Kuwaiti government is keen on decreasing Kuwait's dependence on oil to fuel its economy by transforming it into an industrial and commercial

²⁴⁵ Hertog cites the lack of historical populist mobilization in the Gulf as one of the key determinants for the above-average performance of the region's state-owned enterprises. Hertog, Steffen. 2010. “Defying the resource curse: explaining successful state-owned enterprises in rentier states.” *World Politics*. 62(2): p261-301.

²⁴⁶ *Epicos* describes its own activities on behalf of the Kuwaiti NOC as “Using a structured approach, the project aims at increasing and enhancing the involvement of the private sector companies in the Offset Program in Kuwait as a foundation of sustainable business relationships with foreign partners while providing a comprehensive package of valuable business and offset support services to a number of private sector companies and the NOC.” Website of *epicos.com*. “Kuwait Industry & Offset Portal.” <http://www.epicos.com/kuwait/Portal/Main/Home/Pages/AboutUsKuwait.aspx>. Accessed 18 May 2012.

hub for the region. Great effort has been made by the government in order to support the private sector's growth.²⁴⁷

Unlike their counterparts elsewhere in the Middle East – where the role of military aid and the legacy of military-dominated economies makes drawing linkages between defense spending and economic growth especially dubious – offset committees in the Gulf States spend enormous energies publicizing offset-generated ventures. Regional media outlets routinely run stories on offset partnerships and showcase interviews with public officials involved in offset policy. Because the funds for the offset investment are financed by increases in the procurement cost but dispensed by the defense firm, they appear to be coming from the firm rather than the state budget. This pretense is facilitated in a number of ways – including by advertising these newly created ventures as “Economic Offset Program Companies” – a phrase displayed prominently on the masthead of many Saudi company webpages. The advert insinuates a public-private partnership model – since the foreign defense firm's participation is also publicized.

Yet, as I hope the above examination of offset dynamics made clear, we know the firm's participation *and* the participation of the domestic investor are both heavily subsidized by the procuring country's public budget – making it less a partnership than a patronage mechanism. Likewise, reports compiled by government agencies or state-allied media frequently highlight the role offsets play in the creation of public joint-stock companies – which are especially idealized because their “modern” organizational form is considered superior to the traditional familial partnerships or private LLCs that still characterize most economic ventures in the Gulf. Yet this too is often a chimera, since in many cases

²⁴⁷ Website of [epicos.com](http://www.epicos.com). “Kuwait Industry & Offset Portal.” <http://www.epicos.com/kuwait/Portal/Main/Home/Pages/AboutUsKuwait.aspx>. Accessed 18 May 2012.

the only shareholders of these companies are the states' sovereign wealth funds, quasi-public banks, and the same family-owned conglomerates that dominate the rest of the economy.

Many of the projects initiated in the Gulf under the auspices of offset programs are high-profile ventures intended to depict the regions' regimes as forward-thinking technocrats – in much the same way that ill-fated land reclamation projects provided earlier generations of Arab leaders with an opportunity to demonstrate their engineering prowess. Such projects are what rentier-state theorist D.A. Yates termed “prestige-oriented industrialization” – the types of projects pursued by national governments whose aim may have more to do with demonstrating grandiose vision to a disenchanted population than with maximizing investment or responding to market incentives.²⁴⁸ One project that demonstrates the flawed economic logic of many offset ventures is the Arabian Shrimp Company, part of an extensive initiative to develop aquaculture that investors claim will be the “lynchpin” in the Saudi kingdom's efforts to promote “economic diversity, national employment and import substitution.”²⁴⁹

The Arabian Shrimp Company is a joint venture between AquaFarms and the Saudi Offset Limited Partnership (SOLP), the latter of which is funded 70% by Raytheon, and 30% by the French defense firm Thales.²⁵⁰ DevCorp, the fund manager of SOLP,

²⁴⁸ Yates, Douglas Andrew. 1996. The Rentier State in Africa: Oil Rent Dependency and Neocolonialism in the Republic of Gabon. Trenton NJ: Africa World Press, p26-7.

²⁴⁹ <http://www.aquafeed.com/article.php?id=1749§ionid=1>

²⁵⁰ CTO Newsletter. 25 December 2006. 24(24).

estimates the total cost of the project to be around \$226 million, with 5,000 Saudis eventually employed in building, ice-making, transport and maintenance.²⁵¹ Yet, the sustainability of such projects – in both financial and environmental terms – is questionable.

A 2001 article from the journal *Aquaculture Economics and Management* found that of 23 intensive fish farms they surveyed in Saudi Arabia, every single one was operating below the profit-maximizing point, and most were operating well below the minimum efficient scale despite interest-free loans and economic and feasibility studies provided free from the government.²⁵² According to FAO Fishery statistics, the kingdom farmed about 18,500 tons of aquatic species in 2010, and in 2007 caught about 70,000 tons and imported another 60,000 tons. The industry contributed only .04% of GDP in 2003 - providing just 18% of total fish production (the rest supplied by imports and wild catchings) despite its relatively long history.²⁵³

Fish farms generally employ little labor - approximately 3,400 in Saudi Arabia as of 2003, and most of these laborers are migrants from beyond the Gulf. The authors of the 2001 article also conclude that the lack of water would prevent any further expansion of the industry, as it depends heavily on already scarce underground water supplies. So why pursue such ill-advised ventures?

²⁵¹ CTO Newsletter. 15 January 2007. 25(2).

²⁵² Ahmed M. Elhendy and Abdulaziz Alzoom. 2001. "Economics of Fish Farming in Saudi Arabia: Analysis of Costs of Tilapia Production." *Aquaculture Management and Economics*. 5(3/4).

²⁵³ FAO. Regional review on aquaculture development. Near East and North Africa – 2005. http://www.fao.org/fishery/countrysector/FI-CP_SA/3/en.

In addition to their prestige (raising fish in the desert!), the resource-intensity of these large aquaculture projects provides another possible political benefit to the ruling family: they deplete the water supplies upon which many of the nomadic and peasant communities in the Kingdom rely – the same communities which have resisted incorporation into the central Saudi state for decades.²⁵⁴ Without access to these resources, such vulnerable populations will find themselves at the mercy of the official institutions they had previously defied. An aquaculture project in the UAE has been similarly marked by poor performance. The International Fish Farming Holding Company (Asmak), which was established through an offset with the French defense firm Dassault, abandoned aquaculture altogether in 2010 after its entire stock was decimated by an epidemic of red tide. The firm now primarily acts as a broker for international seafood importers and is working to diversify into more traditional sectors in the UAE – notably construction, landscaping, infrastructure and labor camp management.²⁵⁵

Like large aquaculture schemes, private (and frequently for-profit) universities have become a preferred destination for offset dollars.²⁵⁶ This has partially been fueled by a reverence for American-style educational institutions in a region where tight-control by political and religious bureaucracies has prevented existing educational establishments from producing skilled graduates. However, as John Waterbury, former president of the

²⁵⁴ Ahmed M. Elhendy and Abdulaziz Alzoom. 2001. “Economics of Fish Farming in Saudi Arabia: Analysis of Costs of Tilapia Production.” *Aquaculture Management and Economics*. 5(3/4). See also Toby Jones. Spring 2010. “Saudi Alchemy: Water into Oil, Oil into Water.” *Middle East Report*. No. 254.

²⁵⁵ Bradley Hope. 9 February 2011. “Asmak casts net beyond fish farms.” *The National* (UAE).

²⁵⁶ See “America’s Hot New Export: Higher Education,” also “Education: An American Growth Industry in the Arab World”

American University of Beirut has pointed out, these private institutions tend to raise their funds from “sectarian, ideological or” (as is the case with offset-funded universities) “programmatically supporters.”²⁵⁷ Consequently, institutions like Al Faisal University (the kingdom’s first private university) of which Boeing is a ‘founding member,’ train students in technologies necessary to operate and maintain the kingdom’s vast defense arsenal, creating another network in Saudi society interested in maintaining high defense spending and a strong relationship with Western defense firms.²⁵⁸ Al Faisal’s Vice President for Research, Maher A. Alodan, has expressed a desire to establish corporate-sponsor scholarships to subsidize the university’s high admission’s cost as well as exchange programs between students and corporations that would bring in professionals to lead classes, workshops and conferences.²⁵⁹ The Dean of the College of Engineering, Ashraf M. AlKhairy, voiced similar hopes for “systems engineers at Boeing to come on site and teach and build internships into [the university’s programs].”²⁶⁰ Saudi Arabia’s assistant defense minister Prince Khaled bin Sultan recently identified the kingdom’s many scientific and research institutes as a necessary stepping stone to the long-term goal of achieving self-sufficiency in arms production.²⁶¹

²⁵⁷ John Waterbury. “Hate Your Policies, Love Your Institutions.” *Foreign Affairs*. January-February 2003. 82(1), p64-65.

²⁵⁸ The president of Boeing-Saudi Arabia sits on the university’s board of trustees, and its engineering curriculum was developed in consultation with the Massachusetts Institute of Technology and Cambridge University.

²⁵⁹ Maureen Jenkins. “A Gulf Giant.” February 2008. *Boeing Frontiers* (Corporate publication), p48.

²⁶⁰ Maureen Jenkins. “A Gulf Giant.” February 2008. *Boeing Frontiers* (Corporate publication), p48.

²⁶¹ Souhail Karam. “Saudi Arabia opens military supply to local firms.” 7 February 2010. *Reuters*.

The Political Benefits of Defense Offsets in the Gulf – Delivering Patronage and Incorporating Elite Interests

It is the claim of this research project that political benefits – not economic ones – drive the pursuit of defense offsets by Gulf regimes, and that these include the provision of patronage.²⁶² The flip side of the patronage coin is the ability of Gulf regimes to utilize defense offsets to weave the economic interests of powerful elites more fully into the fabric of the state. As of 2005, less than one-third of the region's privately-held assets were deployed – and 75% of these are controlled by only 5,000 family businesses.²⁶³ Although a good portion of these assets are held by the monarchs themselves, there are also many powerful families without royal blood, as well as marginal family members whose loyalty is dependent on their access to economic privileges. Such a large reservoir of uncommitted capital could serve as an economic weapon if the interests of the monarchies were to diverge substantially from those of their elite base and extended kin, and indeed relations with powerful merchant families and disgruntled kin has provided much of the historical script for struggles over regime consolidation.

The political history of the Gulf is defined by the Royal Families' efforts to incorporate influential families into the state apparatus, and, once there, provide those elites with access to new economic opportunities in exchange for exempting them from positions of political power. During the phase of state consolidation in the Gulf, would-be rulers and their erstwhile colonial patrons bestowed enormous privileges on family-based groups willing to lend their support to the struggling central authorities. Those families whose

²⁶² This conforms to academic observations about the political economy of the region as a whole – mainly that economic decision-making is always subordinated to political calculations. Bill and Springborg, p430.

²⁶³ "The Impact of Private Equity on the GCC." June 2007. Ithmar Capital, p8-11.

social prestige and economic strength pre-dated the era of oil often owed their influence to lineage (as the descendents of the prophet or his close companions), control over the pilgrimage and/or trade routes, or activities like pearling.²⁶⁴ As revenues from resource extraction increased, these loyal families (sometimes more or less distant kin of the ruling family) were rewarded with enormous state-largesse – often in the form of construction contracts or monopoly privileges for foreign imports – and subsequently developed into the family-owned conglomerates that dominate the region’s economy.²⁶⁵ Yet many of these same wealthy families hold considerable assets abroad in foreign banks and other investment vehicles that place them beyond the direct control of the state apparatus.

Offsets can provide a partial solution to this by linking the financial assets of these powerful families directly to state-sponsored ventures whose success depends on the good will of the Royal Family, but also by fostering business partnerships between these families and members of the monarchy. For example the Saudi regime must find investment outlets for its some 8,000 princes – often by coercing private businessmen to take the princes on as business ‘partners,’ or otherwise pay them substantial commissions or consulting fees. Indeed, a document obtained by Wikileaks cites the tendency of Saudi Arabia’s princes (and princesses) to forcibly expropriate land and other assets from wealthy businessmen as the key reason so much private Saudi money sits in overseas financial institutions.²⁶⁶ The most comprehensive study of the Saudi Royal Family’s

²⁶⁴ Niblock. *The Political Economy of Saudi Arabia*, p49.

²⁶⁵ Adam Hanieh. 2010. “*Khaleeji-Capital: Class-Formation and Regional Integration in the Middle East Gulf.*” *Historical Materialism*. 18: 35-76.

²⁶⁶ “Wikileaks: Saudi Royal Welfare Program Revealed.” *Reuters*. 28 February 2011.

private investments shows that a large number of offset ventures involved numerous princes (and princesses) as minor shareholders alongside prominent investors (or investor consortia) without Royal blood.²⁶⁷ Offset ventures may be appealing to wealthy businessmen because they include significant subsidies and ties to many of the world's top technology, finance and manufacturing firms, but access to these partnerships is also dependent on official sanction, which may necessitate a cut for the royals as the cost of doing business.²⁶⁸

The next, chapter of this dissertation will examine defense offsets in the cases of Egypt and Jordan. In contrast to the Gulf States dealt with in this chapter, offset investment in these two states has always concentrated on subsidizing production of military equipment. The thesis of this project is that states alter their offset policies in order to direct resources to their most critical domestic political constituencies: in the Gulf, this is primarily the influential merchant families, whose conglomerate companies become the domestic investment partners for offset projects. In Egypt and Jordan, the military has traditionally played a much more active role in politics, and is therefore a domestic institution that these regimes cannot afford to ignore. The resources generated through offset investment allow the militaries of these states to finance production facilities, employ rank-and-file recruits (or conscripts), and generate export earnings, while also creating the *illusion* of an economically-erudite and disciplined production force. As in

²⁶⁷ Sabri, Saraf. 2001. The House of Saud in Commerce: A Study of Royal Entrepreneurship in Saudi Arabia. New Delhi: I.S. Publications Pvt. Ltd.

²⁶⁸ The practice of coercing businessmen to take members of the royal family as business partners appears in Abir (1987), p163.

the Gulf States, the real cost of offset-generated projects are externalized – and borne by the overall state budget, which incurs the added costs associated with offset agreements.

Chapter 4: Defense Offsets in Egypt and Jordan: Feeding the Military Machine

“I would say that our major objectives of modernizing the Egyptian armed forces, maintaining a presence and access to the country, and enhancing Egypt's industrial base have either been accomplished, or are well on their way to being accomplished.”

Major General William A. Fitzgerald, Commanding General
U.S. Army Security Assistance Command, 1995

Unlike the Gulf States, which have focused on indirect/commercial offsets, Egypt and Jordan have used their arms imports to generate additional investment in domestic military production via direct offsets. In both cases, these direct offsets – the technology transferred, the facilities built to manufacture the military goods, the subsidies provided by the Egyptian and Jordanian governments, and the prestige accorded to domestic military firms engaged in producing the equipment of large multi-national defense firms – provide additional commercial benefits to military institutions and high-ranking officials, further amplifying their political leverage.

Defense Offsets in Egypt & Jordan in the Context of Historical State Formation

The political role of the military has long been a primary distinction that sets the oil-rich states of the Gulf apart from their more populous, resource poor neighbors. The security forces (both military and police) of the GCC states have historically been weak political actors, often composed of foreign forces or marginalized groups without strong ties to the rest of the population, and therefore more loyal to their respective ruling families.¹ By

¹ In the UAE an estimated 30% of the armed forces are expatriates, including nearly 20,000 members of the 65,000-man army. In Kuwait, membership in the National Guard is restricted to full Kuwaiti citizens, but the much larger regular army and police units are primarily composed of non-citizens known as *bidun jinsiyya*, meaning ‘without nationality.’ The *Bidun*, who are never made officers, today account for

contrast, the security forces of other Arab states have been central players in the major events shaping the histories of these states, from violent regime changes (coups d'état), to modernization projects (ISI and military-driven industrialization), and the management of extensive state programs of surveillance and repression.

The survival of incumbent political elites in Egypt and Jordan has rested largely on their ability to maintain the support of their respective militaries, a dependency that dates to the earliest days of the current regimes.² As Vatikiotis notes, the Jordanian army's original role was not that of an offensive force – it was there to suppress potential rivals to the monarchy³ – and afterwards, to provide a source of employment. In the 1950s, the Jordanian military was the second largest employer – after the agricultural sector – and between 1961 and 1975 the number of those employed in the military increased threefold, accounting for one-fourth of the domestic labor force.⁴ Likewise, the leaders of the military coup that initiated the line of Nasser, Sadat and Mubarak periodically re-asserted

approximately 40% of soldiers in Kuwait's regular army, down from a high of 90% in the mid-1980s. Although Saudi Arabia has a larger number of citizen-nationals to draw from, the military is not viewed as a particularly good channel for achieving social mobility, and traditionally Pakistanis have provided much of the manpower for the Saudi armed forces. Virtually all the members of the National Guard battalion that fought under the American Joint Forces Command during the 1990-91 Gulf War were Pakistani. See N. Hasbani. March 2006. "The Geopolitics of Weapons Procurement in the Gulf States." *Defense & Security Analysis*. 22(1): 73-88. See also Ghanim Al-Najjar. "Challenges of Security Sector Governance in Kuwait." Working Paper – no. 142. Centre for the Democratic Control of the Armed Forces, Geneva.

² As Vatikiotis notes, the Jordanian army's original role was not that of an offensive force – it was there to suppress potential rivals to the monarchy P.J. Vatikiotis. 1967. Politics and the Military in Jordan: A Study of the Arab Legion, 1921-1957. New York: Praeger. Likewise, the leaders of the military coup that initiated the line of Nasser, Sadat and Mubarak periodically re-asserted themselves in Egyptian politics until their interests were sufficiently institutionalized that servicing them no longer required overt interference.

³ P.J. Vatikiotis. 1967. Politics and the Military in Jordan: A Study of the Arab Legion, 1921-1957. New York: Praeger.

⁴ A.M. Baylouny. Privatizing Welfare in the Middle East, p53. Baylouny also cites Richard Antoun. 1972. Arab Village: A Social Structural Transformation of a Trans-Jordanian Peasant Community. Bloomington: Indiana University Press.

themselves in Egyptian politics until their interests were sufficiently institutionalized that servicing them no longer required overt interference. In the immediate post-independence period and during most of the Cold War, the Egyptian and Jordanian regimes were operating in an atmosphere of bureaucratic authoritarian politics characterized by populist and nationalist discourses focused on achieving economic independence, often by building indigenous defense capacity and using the military as an engine for economic development and social mobility. Unlike the Gulf States – where the colonial footprint was light by comparison – Egypt and Jordan (Transjordan as it was known until 1949) inherited extensive military, police and intelligence structures formed by colonial authorities, first to enforce their own rule, and later to mobilize the domestic population in support of the Allied war effort.⁵

This trajectory of state formation has manifested itself in the pursuit of offset projects that directly benefit the regimes' domestic security constituencies in a number of ways.

Under licensed or co-production arrangements – the most frequent form of direct offset – procuring country militaries benefit from the construction of manufacturing facilities and related infrastructure like roads, power generation stations, worker housing, etc.; the transfer of technology and production techniques; the provision of employment for the vast pool of unskilled laborers among the armed forces – including conscripts in Egypt, as well as employment opportunities for the large number of engineers and trained managers that emerge from the region's military-technical colleges; earnings generated

⁵ For the legacy of colonial security policy see Martin Thomas (2008). Empires of Intelligence: Security Services and Colonial Disorder After 1914. For the role that war mobilization played in the shaping of regional militaries and internal security forces see the many case-specific chapters of Steve Heydemann (ed). (2000). War, Institutions and Social Change in the Middle East.

by exports or buy-backs of co-produced weapons components; the ability to use the above-mentioned facilities and trained labor in the production of *other* non-military goods and services that the armed forces may market domestically or abroad; and the prestige associated with being ‘chosen’ to partner with multinational firms that produce technologically sophisticated products. The provision of these offset-generated benefits is an extension of the preferential access that the military in Egypt and Jordan have always had to scarce public goods such as industrial materials (iron, steel); infrastructure (roads, factories, warehouses); land; and hard currency – and reflect the historical role played by these militaries in their respective economies.

Defense Offsets in the Context of Economic Liberalization

In both states the military has been one of the few institutions to emerge relatively unscathed from the neoliberal reform process – indeed their corporatist interests are consolidated in the economic structures of the state even more than before. In Egypt, the military’s factories and service providers – which offer everything from tanks and exercise equipment to pasta and child care – were among the few public sector enterprises that did not go on the privatization chopping block, and some civilian-operated public sector companies were even handed over to military management.⁶ The role of the major arms exporters (and their host governments) in this process cannot be ignored, since they were often at the forefront of efforts to pressure the international

⁶ Robert Springborg. 12 February 2011. “The vast and complex military machine will decide its nation’s future.” *The Independent* (UK).

financial institutions to rescind demands for slashes in defense spending.⁷ It is illustrative that, although the US State Department has cut economic aid to Egypt (it fell below \$500 million in 2006, the lowest since the Camp David agreements in 1979), it recently announced a plan to lock in \$13 billion in military aid over the next ten years, not counting the ‘cash flow financing’ option unique to key US-allies that allows them to spread out their payments for arms shipments over many years, or the Excess Defense Articles program that allows the Pentagon to transfer overstocks of combat material to allies free of charge.⁸ This uptick in military aid will likely include a parallel increase in offsets, supplying more unaccountable patronage resources to the Egyptian regime.

In her study of Jordan’s economic liberalization program, A.M. Baylouny finds that, in the aftermath of structural adjustment, “the main group that continues to benefit from the state is the military,” whose subsidies, pensions and employment programs actually increased – as did the military’s overall budget – while budgetary allocations for social services delivered to non-military populations decreased.⁹ This growth was enabled by a range of specific policies undertaken in the early 1990s – including the granting of additional months salaries to all employees in the defense and security establishment, annual increases in pension expenditures, an increase in retiree benefits, and substantial

⁷ See Gordon Adams. 1982. The Politics of Defense Contracting: The Iron Triangle. New Brunswick: Transaction, p24.

⁸ Sean L. Yom. Spring 2008. “Washington’s New Arms Bazaar.” *Middle East Report*. No 246.

⁹ A.M. Baylouny. Privatizing Welfare in the Middle East, p57-8.

housing subsidies, as well as the maintenance of existing benefits – like public health insurance, free higher education for family members,¹⁰ and subsidized military co-ops.¹¹

Defense offsets represent a contemporary form of subsidization that follows the basic trajectory of these other privileges, but comports better with the liberal strictures against state intervention in the economy because offsets appear to be generated by the commitments of foreign manufacturers via market mechanisms like foreign direct investment and technology transfer. Because offsets result in the construction of tangible facilities, coproduction ventures, and supply contracts for domestic producers, they provide a highly visible (if false) indicator of the military's contribution to the national economy. The employment opportunities these projects supposedly generate are also ephemeral – especially in the case of Egypt. The endless supply of conscripts available to work on the military's assembly lines means that those who have completed their service are unlikely to be retained as full employees as new classes of conscripts are always available – and the dearth of private sector manufacturing enterprises means the skills that conscripts gain during their employment in these factories is unlikely to land them a job once they leave the military.

Likewise, since the investment appears to come from a private foreign firm it is classified as FDI (foreign direct investment), and therefore not only inflates perceptions of the efficiency of domestic military producers, but also obscures the cost incurred by the state

¹⁰ Baylouny notes that this is achieved through a quota system, meaning that even if the number of potential enrollees increases and facilities remain static, the family members of army recruits are still guaranteed a spot.

¹¹ A.M. Baylouny. *Privatizing Welfare in the Middle East*, p57-8.

to subsidize these producers.¹² In this sense, offsets provide a subsidy to the military in the same way as other common practices – such as the “recommendations” received by private sector business elites to hire veterans of the military and/or security services, and the similar practice of granting contracts to businesses owned by former officers in order to avoid more direct attempts at extortion such as kick-backs.¹³ The provision of economic benefits – through offsets and otherwise – are a critical component of the “coup-proofing” strategies employed with great success for decades by the region’s authoritarian leaders. Although the content of the strategies employed by the Gulf States examined in the previous chapter may differ from those in Egypt and Jordan – in the *type* of offsets they seek and in the institutions they use to distribute offset-generated subsidies – their goals are the same: to harness patronage resources in order to consolidate and maintain the support of pivotal domestic constituencies.

Although strategic independence and a thriving domestic manufacturing industry are still hallmarks of development, the liberalization of trade has made the ability to generate export earnings a central preoccupation of developing country governments, including those in Jordan and Egypt. Military representatives often claim that production in Egyptian and Jordanian military ventures is profitable – a dubious claim that is used to generate public acquiescence to large military budgets and investment in military

¹² In Egypt for example, the last 6 months of a conscripts term is spent not in physical training or military education, but working in the military’s factories – a huge source of free labor for Egypt’s military industry. In the Summer of 2010, eight employees of Military Factory 99 in Helwan were put on trial for “disclosing military secrets” and “illegally stopping production” after they organized a strike (disbanded by the military) demanding safer working conditions in the aftermath of a boiler explosion that killed one and injured six others. They were eventually acquitted or given suspended sentences, but the trial demonstrated that the right to strike (provided under Egyptian law) did not extend to those working in military factories. “Succession Gives Army a Stiff Test in Egypt.” *NYTimes*. 11 September 2010.

¹³ “A Special Report on Egypt: No Paradise.” 15 July 2010. *The Economist*.

production.¹⁴ The Jordanian government has been particularly adept at generating positive reviews for its military industry. One example can be viewed at www.marcopolis.net/Jordan-industry-sector.htm. The site – which looks like a news aggregator, with the *NYTimes*, and *International Herald Tribune* mastheads running across the top of the page – is in fact operated by a French public relations firm that produces economic literature on behalf of Arab governments. The particular report available at the above site labels the Jordanian military’s industrial arm – the King Abdullah Design and Development Bureau –one of the “greater success stories” of Jordan’s industrial sector, and cites a “turnover of \$100 million,” per year as part of the bureau’s ability to “bring in value to the government.”

Although neither state releases any statistical information on military budgets or military production that would substantiate or refute claims of profitability,¹⁵ it is clear that military-affiliated enterprises enjoy many advantages that non-military enterprises do not, including exemption from corporate taxation and regulation, a proscription against strikes and other union activities in their factories, and subsidized access to inputs and intermediate goods like land, raw materials and foreign imports.¹⁶ The additional

¹⁴ The Jordanian government has been particularly adept at generating positive reviews of its military industry. One example can be viewed at www.marcopolis.net/Jordan-industry-sector.htm. The site looks like a news aggregator (with the *NYTimes*, and *International Herald Tribune* mastheads running across the top of the page) but is in fact a private, for-profit public relations outfit hired by national governments to produce positive literature on various aspects of their economies. This particular report labels the military’s KADDB one of the industrial sector’s “greater success stories.”

¹⁵ Egypt ranks last (with scores of zero) on Global Integrity’s index measuring citizens’ access to information about the government. Springborg (2011) states that domestic media reports on the nation’s military were more comprehensive and numerous in the 1980s than they are today.

¹⁶ In Egypt, the last 6 months of a conscripts term is spent not in physical training or military education, but working in the military’s factories – a huge source of free labor for Egypt’s military industry. In the Summer of 2010, eight employees of Military Factory 99 in Helwan were put on trial for “disclosing

investment in military enterprises generated by defense offsets is an important component of this system of benefits and helps promote the false narrative that the military's entrepreneurial activities deserve to be supported because they provide an engine for economic growth, employment, industrial modernization, and export earnings.

The next section of this chapter will provide empirical data on offset activity in Egypt and Jordan – identifying the co-production and technology transfer components of particular arms sales and aid-financed construction projects that have resulted in the expansion of the military's economic footprint in both states. Although there are many similarities in the programs of Egypt and Jordan, there are likewise important differences. Among these is how the respective states have organized and managed their offset programs. In Jordan, the military's manufacturing operations are highly centralized around a single entity: the King Abdullah Design & Development Bureau (KADDB). Established in 1999 by royal decree, the KADDB is characterized by the Jordanian government as “an independent government entity within the Jordan Armed Forces (JAF),” that “aims to be the globally preferred partner in designing and developing defense products and security solutions in the region.”¹⁷ Most of Jordan's offset-related programs are administered under the umbrella of the KADDB – which allows for a more coherent and comprehensive examination of the impacts of defense offsets.

military secrets” and “illegally stopping production” after they organized a strike (disbanded by the military) demanding safer working conditions in the aftermath of a boiler explosion that killed one and injured six others. They were eventually acquitted or given suspended sentences, but the trial demonstrated that the right to strike (provided under Egyptian law) did not extend to those working in military factories. “Succession Gives Army a Stiff Test in Egypt.” NYTimes. 11 September 2010.

¹⁷ http://www.kaddb.com/Public/Main_English.aspx?site_id=1&page_id=308

By contrast, in Egypt – where the political power of individual military officers and factions within the various branches produced a gradual ratcheting up of the military’s economic operations over a long period – the military’s expansion into defense and commercial production has been more diffuse. The result has been the multiplication of centers of production and a great deal of overlap, especially as the country’s successive presidents conferred additional privileges and economic benefits to the military in their constant efforts to maintain institutional loyalty. For example, the National Service Products Organization (NSPO) was a relatively marginal player in the national economy until General Abu Ghazala expanded its mandate (and budget) in the mid-1980s, after which it became the dominant supplier of many agricultural goods and the primary vehicle for Egypt’s many land reclamation projects.¹⁸ Many of the privileges and benefits that accrued to the Egyptian military under its offset program did so through the expected channels – the Arab Organization for Industrialization (AOI), the Ministry of Military Production (MMP), and the National Service Products Organization (NSPO), all entities that operate under the full control of the military.

But many benefits were also channeled through the various military-controlled enterprises that officially fall under the authority of state-owned holding companies, as well as via private sector entities owned or operated by high-ranking military officers. This decentralization necessitates additional evidence, provided largely through the examination of corporate boards, shareholders, joint venture partners, and client and project lists, which introduces an additional degree of complexity and demands a more

¹⁸ Robert Springborg. July/August 1987. “The President and the Field Marshal.” *Middle East Report*, p14.

judicious evaluation of some of the empirical material. With that caveat in mind, the proceeding sections will outline the projects that comprise Jordan and Egypt's respective offset programs, illustrating how they generate benefits for military institutions and the officer corps, before turning to a discussion of how both governments seek to extract the maximum patronage benefit while downplaying not only the role played by foreign military aid, but also the excess cost these programs impose on their own budgets.

Defense Offsets in Jordan: The King Abdullah Design & Development Bureau

Although the King Abdullah Design & Development Bureau (KADDB) has only been in operation for a little over a decade, it manufactures a wide range of military products – from MREs (pre-packaged field rations) and boots to backpack portable UAVs and armored vehicles. According to the bureau's own promotional literature, these products result from joint venture partnerships with 26 different foreign defense companies.¹⁹ The KADDB's website²⁰ and joint press releases issued by offset partners show over 20 different product lines being jointly manufactured with defense firms from Australia, Austria, Belgium, Canada, Italy, Germany, the Netherlands, Russia, Saudi Arabia, South Africa, South Korea, Sweden, Switzerland, Turkey, the US, UK, and UAE, as well as a

¹⁹ Zaina Steityeh. "Out of the Dusty Labs." *Jordan Business* (corporate publication). My own research shows the following companies with joint ventures: Jankel Group (UK), SHP Motorsports (UK), CLS Systems (UK), Raytech (Austria), Seabird Aviation (Australia), Dewina Holdings (Malaysia), Daedalus Aviation (Netherlands), Aselsan (Turkey), Securitas (Sweden), SWESCO (Sweden), XS Design (Germany), NP Aerospace (UK), Hemaia Security (Saudi Arabia), Mechanology Design Bureau (South Africa), Paramount Logistics (South Africa), Hanwah Corporation (South Korea), Alliant TechSystems (US), Land Warfare Resources Corporation (US), Wildey Guns (US), RiverHawk (US), Bin Jabr Group (UAE), Selex Galileo (Italy), Zenair Ltd. (Canada), Oboronprom (Russia), Rosoboronexport (Russia), Allied Defense Group (US), MERCAR SA (Belgium). Other larger firms – like Raytheon, L3 Communications, and General Dynamics have participated in individual MRO programs on specific land platforms, but may no longer be engaged in these projects, which necessarily end once the existing fleet of vehicles is upgraded (unless export orders are forthcoming).

²⁰ <http://www.kaddbinvest.com>; also see the KADDB industrial park website: <http://www.kaddb-ipark.com>.

project with a commercial firm from Malaysia.²¹ Most of these joint venture deals have been with smaller defense firms that primarily act as subcontractors or suppliers to the largest defense companies; the latter are often referred to as ‘Tier-One’ contractors or ‘OEMs’ (original equipment manufacturers) and include firms like BAE, Lockheed Martin, General Dynamics, Raytheon, Thales, Finmeccanica, etc. Nonetheless, KADDB has been able to launch some collaborative projects with even the largest firms, including several major MRO programs that provided substantial manufacturing technologies and engineering expertise for KADDB’s factories and technicians. Some of these contracts were clearly the result of Iraq’s defense procurement budget coming back on-line in the wake of the U.S. invasion, which makes Jordan an ideal location for a base of operations – a phenomenon explored in more detail below.

KADDB’s collaborative production processes qualify as offsets because they are a *quid pro quo* for selling defense equipment to Jordan; that is, foreign firms must agree to shift some degree of technology and/or production to KADDB in order to qualify as a seller. Although codifying this requirement in law is problematic for both Jordan and Egypt, which draw the majority of their defense budgets from U.S. aid, and are therefore restricted from formally demanding offsets of American companies or paying premiums to co-produce with foreign firms, it has not impeded either states’ ability to grow their defense industrial base through collaborative ventures. The tit-for-tat dynamic is visible in numerous cases – where firms that sell off-the-shelf items to Jordan are simultaneously

²¹ The UAE partner is the Bin Jabr Group – a family-owned conglomerate partnering to build tactical vehicles with custom-cooling systems for use by the UAE Armed Forces. The Malaysian company is Dewina Holdings, which partners with KADDB to produce “Arab Ready Meals” – pre-packaged meals for use by Jordanian soldiers.

engaged in co-production activities with KADDB. In 2000, when *CLS Systems* (UK) signed an \$8.8 million contract to supply 25 auxiliary power units to the Jordanian Armed Forces, it announced that the units would be built in Jordan; two years later *CLS Jordan* was established.²² The UK's *Jankel Group*, which has a number of joint ventures with KADDB, also supplies finished products to the Jordanian Armed Forces, such as four Aigis 4X4 armored vehicles acquired by Jordan's Special Operations Command in 2000.²³

When Jordan began exploring options to acquire surplus F-16s from European fleets in early 2009, jets were ultimately purchased from Belgium and the Netherlands;²⁴ that same year, *Strategem*, a logistics firm with offices in Belgium and the Netherlands, received a contract from the Dutch Agency for Economic Development to conduct feasibility studies for establishing an F-16 maintenance facility in Jordan,²⁵ which is now currently being constructed by the Dutch company *Daedalus Aviation*.²⁶ Likewise, three years after Jordan purchased six Russian-made KA-226 helicopters in 2003, the manufacturer *Oboronprom* signed an agreement with KADDB to establish an in-country production and maintenance facility for the helicopters. These joint ventures are possible, in part,

²² Steve Pain. 10 June 2000. "CLS manoeuvres into Jordanian battle tank contract." *Birmingham Post & Mail (UK)*.

²³ Rupert Pengelley. 2000. "Aigis special operations vehicle on order for Jordanian surveillance troops." Jane's Information Group.

²⁴ "More Belgian F-16s for Jordan." 26 January 2009. *Defense Industry Daily*. <http://www.defenseindustrydaily.com/More-Belgian-F-16s-for-Jordan-05261/>

²⁵ "KADDB Inks Five Major Deals." 19 November 2009. *Jordan Times*. <http://www.jordantimes.com/?news=21735>

²⁶ The final report recommended two joint ventures: one for MRO and another for technical training. http://www.stratagemgroup.nl/?page_id=832

because Jordan frequently purchases decommissioned or previous generation hardware on the global market (or receives it through the U.S. Excess Defense Articles program), which often means the armor, mounted weapons systems, electronics, etc. are quite old. This enables Jordan to focus on collaborating with the smaller subcontractors and suppliers that produce these systems individually (before they are integrated into the final product by Tier One firms). A joint venture that yields guaranteed future sales to the JAF, geographic proximity to other regional markets, and various subsidies – such as tax exemptions and free factory space – are significant incentives that many small defense manufacturers are eager to accept.

KADDB's scope and scale of activities has increased dramatically since operations began just over a decade ago. Initially, many projects were geared toward modifying and updating some of the large armored vehicles employed by regional governments by adding enhanced fire control systems, re-fitting tanks and other armored personnel carriers with more powerful artillery and larger engines, improving the mobility of equipment, and adding accessories like remote operating capability.²⁷ Unlike the upgrade kit that Egypt developed and hoped to market for the M113 (see below) KADDB's modifications have been successfully exported; as of 2011, KADDB subsidiary *Jordan Light Vehicle Manufacturing* (formed with UK's *Jankel Armouring Ltd.*) has shipped upgraded armored vehicles to over 20 countries. Recently, KADDB has expanded into the modification of aircraft and large naval vessels – a technological step up from land-systems modification. Aircraft modification programs include the *Alliant*

²⁷ List and description of projects is available at: www.kaddb.com.

TechSystems/ATK-KADDB joint venture transforming old CASA-235 transport planes into light gunships,²⁸ and a recent agreement to establish an MRO facility for the F-16 – designed to service not only the RJAF’s fleet but those from neighboring states as well.

KADDB companies also produce many smaller-scale products, including helmets and clothing made with ‘*Dyneema*’ – a patented body armor plate produced by *NP Aerospace Jordan* (formed with *NP Aerospace* of the UK); several types of unmanned aerial vehicles (UAVs), as well as unmanned patrol boats and robots designed to dismantle bombs and check for IEDs; grenade launchers; side arms; ammunition; boots; field rations; numerous types of defense electronics, including imaging equipment, sensors, radar, etc.; and security services for banks, critical infrastructure, and VIPs. Like the Gulf States, Jordan has also capitalized on its technology partnerships to create academic linkages, such as the Prince Faisal Information Technology Center (in partnership with the UK’s Cranfield University Defence Academy), and the Center for Applied Industrial Research (in partnership with the UK’s Royal Scientific Society). In addition to becoming important platforms for exchange between JAF soldiers and their foreign counterparts, these institutions also generate prestige for the KADDB, which is seen as augmenting its manufacturing activities with R&D (research & development) efforts, which are considered the highest rung on the ladder of military-industrial development.²⁹

Regional Instability and Collaborative Arms Production in Jordan

²⁸ 19 February 2011. “Jordan’s KADDB Awards Contract to ATK to Modify Two CASA-235 Military Transport Aircraft.” *Barron’s*.

²⁹ Krause (1992).

Regional instability and arms races have been a boon for KADDB's business operations. A significant share of the bureau's manufactured exports have gone to Iraq and the Coalition Provisional Authority,³⁰ and several Tier-One defense firms have sought partnerships with KADDB in order to exploit Jordan's proximity to Iraq. A collaborative project between KADDB, *ITT* (US) and *Thales* (France) to overhaul Iraqi armored vehicles, is one clear case.³¹ In addition to this case, one year after the maritime defense firm *RiverHawk* set up its joint venture with KADDB, the Iraqi Navy issued a \$70 million tender for the same type of vessel. The contract was immediately awarded to *RiverHawk* because the Iraqi government identified the firm as the only supplier whose equipment they were interested in purchasing.³² Additionally, several of KADDB's partner firms were borne out of the post-war reconstruction boom, such as *Terex Jordan* – a firm that provides industrial construction services.

Other KADDB partner firms are owned by Iraqis, and are therefore well placed to target Iraq's new military as a major customer. *Jordan Aerospace Industries (JAI)*, which launched a joint venture with KADDB in 2001 to design and manufacture military UAVs, is owned by the Al-Samaraee family of Iraq, whose patriarch is the grandson of

³⁰ documented exports to the CPA include 100 'modernized' tanks in 2004 and an unspecified number of UAVs (un-manned aerial vehicles) called SEEKERS, also in 2004.

³¹ Jomana Amara. 2006. "Military Industrialization and Economic Development: Jordan's Defense Industry." Defense Resource Management Institute (Naval Postgrad School); working paper series. According to the employment profile of Aref Samawi, who served as project manager for the overhaul operation, the KADDB plant was refurbishing vehicles at the rate of about 250/month.

³² "Offshore Support Vessel for the Government of Iraq." 16 November 2009. www.fbo.gov. Solicitation Number: N0002410R2222. Riverhawk's announcement of the contract did not mention the sole-source contract, but did point out that the pending "turnover of security responsibilities to the Iraqi Government" made "expedited deliveries of these vessels of paramount importance." <http://rhfsf.com/2010/03/don-award-released/>

the man who established Iraq's first defense industrial projects in the early 20th Century.³³ Although the Iraqi and Jordanian Air Forces are currently the only customers of the firm's small trainer/reconnaissance aircraft, the *SAMA CH2000*, *JAI*'s joint venture with KADDB (called *Jordan Advanced Remote Systems*) has now produced several prototype UAVs that look poised to yield significant export opportunities in the future.

KADDB's CEO Shadi Ramzi also has significant Iraqi contacts, primarily through his uncle Abdel Hadi Al Majali. Abdel Hadi's company MID Contracting (Shadi previously served as General Manager for MID's Qatar office) has performed several projects in Iraq, including construction of hospitals, power stations, and lavish government 'guest houses.'³⁴ MID has also completed numerous contracts on behalf of the U.S. Army, as well as for the various Jordanian government ministries where Abdel Hadi has family connections.³⁵ Abdel Hadi sits on the board of the enormous conglomerate *General Mediterranean Holding/GMH*, owned by the Iraqi-born billionaire Nadhmi Auch.³⁶

³³ http://www.sama-aircraft.com/al_samaraee/index.html

³⁴ A full list of MID projects is available here: http://www.mid-contracting.com/pro_new?page=0%2C0%2C0%2C0

³⁵ Government entities that have awarded major construction contracts to MID include the Aqaba Special Economic Zone (where Shadi Ramzi is CEO of the Aqaba Development Corporation); Mawared (aka NARIDEC, for the National Resources Investment & Development Corporation), which was previously overseen by Abdel Hadi's son Sahl Al Majali; as well as the Ministry for Housing & Public Works, where both Sahl and Abdel Hadi had previously served as Minister.

³⁶ Auch's dossier includes a long list of scandals and accusations too lengthy to enumerate here. They include accusations of being an arms broker with Italy on behalf of Saddam Hussein; implications in the oil-for-food scandal and a major kickback scheme involving Spanish and French oil companies (for which he was eventually found guilty). The dossiers of GMH's board members are equally dubious, and include Lord David Steel, a board member of Heritage Oil & Gas. Heritage was founded by Tony Buckingham and operated primarily in Angola. Buckingham formed the infamous private security firm Executive Outcomes with a number of retired mercenaries from South Africa in order to recover Heritage's equipment after it was seized by UNITA rebels; the Angolan government subsequently hired Executive Outcomes to completely oust the rebels from Angolan territory. Heritage recently landed a major concession to operate in Iraqi Kurdistan.

Although GMH has no *direct* subsidiaries in Iraq,³⁷ it has granted numerous construction contracts to MID for other regional projects, including hotel construction in Jordan and Lebanon,³⁸ and several construction projects in the UK on behalf of GMH subsidiaries.³⁹

Collaboration in regional military production is especially visible in the burgeoning defense relationship between the UAE and Jordan. The Emirati conglomerate *Bin Jabr Group* and the Jordanian military co-own a production facility located in the *Dulayl* industrial park, where their joint venture *Advanced Industries of Arabia (AIA)* manufactures the NIMR (Tiger) tactical vehicle.⁴⁰ One of KADDB's earliest projects, commissioned by the UAE armed forces, was to overhaul tank-cooling systems to enable them to cope with the extreme temperatures of the Arabian Peninsula. *AIA* modified 500 such armored vehicles for the UAE in 2005, and, according to the *Bin Jabr Group's* company website, it exported a number of the vehicles to Libya and Lebanon as well.⁴¹

³⁷ GMH has 87 subsidiaries, a large number of which are registered in tax havens, including 18 in Luxembourg, 13 in the British Channel Islands (Jersey, Guernsey, etc.), 11 in Panama, 6 in the British Virgin Islands, 2 in Mauritius and 1 in Switzerland. Auchi does have financial stakes in projects that are ongoing in Iraq (despite the fact that these do not show up on corporate account sheets), including his stake in Orascom, which was one of three mobile phone operators to be granted a license by the new Iraqi government.

³⁸ Le Royal Hotels & Resorts

³⁹ The GMH subsidiary that granted the UK projects to MID is Tucan Investments Plc. According to GMH Tucan has more than \$200 million in property assets in the UK.

⁴⁰ The park is the King Abdullah Design & Development Bureau (KADDB) Industrial Park, owned by the Jordanian Armed Forces. Operations at the park receive a host of services and exemptions similar to those in any free trade zone. The Bin Jabr Group also manufactures uniforms for the UAE Armed Forces through its company – Italian Textile Solutions – based in Zayed Military City; it also has a garment manufacturing plant in Jordan's Ad-Dulayl Industrial Park called 'Mediterranean Resources Apparel Industry,' which primarily employs guest workers and has been cited numerous times by international human rights organizations for abuse of its workers. KADDB also operates several factories in Ad-Dulayl.

⁴¹ KADDB is the manufacturing arm of the Jordanian military. The vehicles will be assembled in Jordan and fitted with cooling systems provided by the Bin Jabr Group especially designed to withstand the Emirates' temperature extremes.

In addition to the participation of the *Bin Jabr Group*, the UAE has assisted Jordan's military in other ways. The UAE's Offset Program Bureau (the official Emirati state agency that deals with offset policy) dedicated some of its offset-generated resources to supplement the procurement of aircraft for the state-owned Royal Jordanian Airlines, in which the Jordanian Armed Force's pension fund (the *Development and Investment Fund for the Armed Forces and Security Services*) is one of the five largest shareholders, although the UAE Government, members of the UAE Royal Family, and prominent Emirati elites are also major shareholders in some of *Royal Jordanian's* subsidiary companies.⁴² Some big-ticket purchases by the JAF (including 50 armored personnel carriers from the Ukrainian company *Malyshev* in 2000) were also allegedly financed by the UAE government.

This collaboration is largely in keeping with previous Gulf efforts to subsidize the Jordanian military, notably in the financing of equipment procurement and the construction of military housing.⁴³ The Gulf States have also historically advocated for the sale of advanced U.S. weapons to Jordan.⁴⁴ These types of Gulf support may actually have contributed indirectly to the Jordanian government's efforts to diversify the military's sources of income: Jordan faced a difficult situation in the mid-1980s when Saudi Arabia withdrew financial support that Amman had been using to pay its military

⁴² The state-owned Dubai International Financial Center, SHUAA Capital, Abraaj Capital, and Nowais hold shares in the following Royal Jordanian subsidiaries: Abraaj Capital (in which Nowais, DIFC, and several members of the UAE Royal Family are shareholders) owns an 80% stake in Jordan Aircraft Maintenance Limited (JorAMCO); the Alpha Airports Group (100% owned by the state-owned Investment Corporation of Dubai, through its subsidiary Dnata) owns a 35.87% stake in Royal Jordanian's flight catering company; and the Joramco Academy, a flight training company. Zawya Business Profiles.

⁴³ Laurie Brandt. *Jordan's Inter-Arab Relations*, p93.

⁴⁴ Laurie Brandt. *Jordan's Inter-Arab Relations*, p106.

officers.⁴⁵ An indigenous, export-oriented defense sector can at least supplement the employment of officers and engineers, providing a degree of breathing room for a cash-strapped state.

Evidence of collaborative arms production in Egypt is less visible. Notwithstanding recent Egyptian overtures to the AOI's former Gulf partners, there are few contemporary cases of such regional cooperation with Egypt. Two instances occurred in the late 1980s/early 1990s involving joint Turkish-Egyptian manufacturing, one to manufacture components for the F-15s that would be assembled in Turkey and later sold *back* to the Egyptians using U.S. military aid – the so-called Peace Onyx Program.⁴⁶ Another is the possible construction of an ordnance factory in Egypt by the Turkish firm *The Mechanical and Chemical Industry Corporation* (MKEK) in the late 1980s.⁴⁷ The only other signs suggest a rather limited collaboration between Egypt and the UAE. Both countries have made similarly-timed purchases from two rather small defense firms: including *Hamiltonjets/Teknicraft* from New Zealand and *Yonca Onuk* of Turkey – both firms manufacture naval vessels. Although the UAE has its own shipyards – and so would not necessarily gain any productive capacity by coordinating with Egypt – this might be an example of a financially-flush Gulf State using its market leverage to encourage private defense firms to intensify their collaboration with regional allies.⁴⁸

⁴⁵ Laurie Brandt. *Jordan's Inter-Arab Relations*, p106.

⁴⁶ GAO. 22 June 1994. "Military Exports: Concerns Over Offsets Generated With U.S. Foreign Military Financing Program Funds." GAO/NSIAD-94-127, p7.

⁴⁷ Omer Karasapan. January-February 1987. "Turkey's Armaments Industries." *Middle East Report*, p29.

⁴⁸ The waterjet powered fireboat (with 4X4 vehicle deployment ramp) built in 2004 by the Egyptian military's *Helwan Company for Machining & Equipment (Factory 999)* is based on design technology and

Given the region's political dynamics, equipment used for internal security/police purposes is particularly in demand, and many of KADDB's companies cater directly to this market. Much of the equipment KADDB markets is designed for internal security operations like riot control, peacekeeping, reconnaissance, and surveillance. Examples include the *Stallion* four-wheeled armored vehicle equipped with .50 caliber weapons stations, which KADDB classifies as a "peacekeeping, internal security and patrols," vehicle, and *SkyWatch*, a surveillance vehicle that KADDB markets for:

VIPs dignitary protection, outdoor activities such as concerts and sporting events, large prisons and correctional facilities, vehicle and equipment storage or parking lots, border entries, long range surveillance, [and] military activities such as deployment, transport and exercises.⁴⁹

Private Profit in Jordan's Burgeoning Defense-Industrial Complex

The involvement of private capital in Jordan's indigenous defense industry has been relatively limited thus far – but current trends suggest that private sector entrepreneurs will gain an added foothold in Jordan's defense sector in the next few years. According to KADDB's Chairman Shadi Ramzi al-Majali – a 12-year veteran officer of the Jordanian Armed Forces and a graduate of both the Military College of South Carolina (US) and the George Washington University (US) – the ultimate goal is indeed to

materials provided by *Teknicraft Design* and the local Egyptian agent of *Hamiltonjet* (both of New Zealand). These companies (which are relatively small) have done lots of business with UAE entities. These include Nico International shipyard in Fujairah (UAE), which chose *Teknicraft* designs for its 19-meter *Nemo* catamaran and its 30-meter *Topaz* catamaran (aluminum vessels used to service the offshore shipping fleet of oil tankers and container vessels). *Teknicraft* also designed ships for the *Kanoo Group* (KSA) also constructed at the *Nico* shipyard, and the New Zealand Trade and Enterprise office responsible for investment relations with Egypt and other Middle East and African countries is located in Dubai. *Yonca Onuk* (the Turkish firm) sold 34 fast interceptors to the UAE in 2009, and signed a coproduction agreement for four vessels with the Egyptian Navy in 2011.

⁴⁹ www.kaddb.com.

transform the group's activities into a platform for a private sector defense industrial capacity,

We always envisaged KADDB as being the catalyst for the creation of an independent, sustainable, defense industrial base...[t]he defense sector in advanced industrial countries is owned and managed by the private sector, and KADDB is adopting the same approach. Therefore, we are working closely with the private sector and encouraging it to invest in the defense sector...[o]ur strategy is that once a product is commercially viable, it is passed on to our joint venture companies for manufacturing. We offer our international partners a gateway to the Middle East, and for our Jordanian partners we provide access to programs, markets and international exposure that otherwise may not be available.⁵⁰

Shadi himself is the nephew of Abdel Hadi Al Majali, a former Army Chief of Staff who has held several other government positions, including Director General of Public Security and ambassador to the U.S.⁵¹ Abdel Hadi started some of Jordan's very first private security ventures in the mid-1980s, including the Middle East Defense & Security Agency (MEDSA).⁵² Despite the central role KADDB plays in attracting investment and technology from foreign firms, regional private sector businessmen have taken a large role in some of KADDB's operations, including several joint ventures with *Jordan Aerospace Industries*, owned by the Al-Samarae family of Iraq, and *Advanced Industries of Arabia*, a JV with Al-Suwaidi's *Bin Jabr Group* of the UAE. Jordanian nationals have also capitalized on KADDB's investment activities, among them Yazan Al-Moufti, whose commercial telecom company *Jordan Radio Paging (MIRSAL)*, formed a joint venture with KADDB called *Applied Defence Systems* to develop defense electronics. In 2003 *ADS* was chosen to partner with a BAE-Finmeccanica consortium to

⁵⁰ Zaina Steityeh. "Out of the Dusty Labs." *Jordan Business* (corporate publication).

⁵¹ Other positions include House Speaker and Minister of Public Works & Housing (a position Abdel Hadi's son Saleh held as well).

⁵² Shadi sat on the board of MEDSA until 2003.

develop a high-frequency over-the-horizon system for Jordan's IFF (identify-friend or foe) system, which was part of ADS's portfolio.⁵³

Other examples are Majdi Al-Yacoub, whose company *Orangeville Consultants* received support from KADDB to build an assembly and maintenance facility for Russian helicopters, and Ziad Al-Yacoub, whose company *Gravity Integrated Solutions* is a reseller for many of the same items produced by KADDB, including ballistic resistant enclosures (BREs), vehicle armoring technology, engine kits and spare parts, and other "special forces supplies."⁵⁴ The current Chairman of *Gravity Integrated Solutions*, Aref Samawi, spent seven years working for KADDB, and twenty years before that in the Jordanian Armed Forces and the Royal Maintenance Corp. These few cases suggest that the composition of private sector interests operating in the emergent military industrial complex may well correspond to the rough breakdown in other sectors, with Jordanians of Palestinian origin dominating much of the private sector component – including investment and ownership of joint operations, and those of East Bank origin providing the manpower and engineering expertise for KADDB and its subsidiaries.

Although Jordan's military budget is small in overall terms, it is a huge chunk of the Kingdom's GDP (nearly 8%) – and represents a solid profit-making opportunity for foreign defense firms that produce inputs and provide intermediate services, since procurements for large items is comparatively rare. It also gives these firms a foothold in

⁵³ "Coastal protection venture tabled, MIDDLE EAST/AFRICA." 18 October 2002. *Jane's Defence Weekly*. The venture was cancelled when the BAE-Finmeccanica partnership was dissolved in 2005.

⁵⁴ <http://gravityjo.en.ec21.com/>. <http://www.gravity-jo.com/>.

the far more lucrative regional market, and having production facilities located closer to wealthy Gulf customers is an asset often cited by firms that enter into joint ventures with KADDB. The Jordanian armed forces recognize this comparative advantage, and by requiring firms to establish joint production facilities as a condition of securing a sale to the Kingdom, the Jordanian Armed Forces has ensured a continued supply of jobs, export earnings and prestige for its members.

Domestic Subsidies Provided to KADDB

In addition to the promotional literature developed for KADDB (such as the *marcopolis* profile described above), the Jordanian state has also provided the organization with many of the same supplementary services and infrastructure accorded to the military-industrial sector in the U.S. and Europe. KADDB's list of assets includes a commercial investment division staffed with finance experts (known as the KADDB Investment Group) that evaluate potential partnerships,⁵⁵ its own industrial park with free-zone status, and SOFEX, an annual defense equipment exhibition held in Amman, which provides KADDB with a platform for advertising its products to private sector executives and government procurement officials from around the world. SOFEX (Special Operations Forces Exhibition & Conference) is unique in that it focuses explicitly on equipment and new technologies applicable to special operations and homeland security – the same sectors in which most of KADDB's manufacturing activity are concentrated. KADDB also participates in other international defense exhibitions, including the 2011 DSEi Exhibition (Defense & Security Equipment International) in London – where KADDB

⁵⁵ The KADDB Investment Group (KIG) was established in 2010 to facilitate financing options for co-production projects.

managers took pains to note they were the only Arab participants.⁵⁶ KADDB also benefits from the services of its defense attaches – which promote the organization’s products and services overseas, as well as from its links to the government, which ensures that visiting defense officials and corporate executives get a tour of KADDB’s facilities.⁵⁷ Lastly, KADDB has also been active in forming strategic partnerships with defense industry trade publications – notably *IHS Insight*, which owns *Jane’s Defence Group*, the most prominent collection of defense industry publications – which has further heightened KADDB’s profile.⁵⁸

In addition to these formal institutional benefits, KADDB enjoys a host of special economic privileges through the KADDB Industrial Park – the first free zone in the region to specialize in military production – which boasts:

top quality infrastructure; reliable electricity and water; a network of paved and lit highways; storm sewers and sanitation networks; attractive landscaping; management services (cleaning, maintenance, security for the perimeter, public areas and road systems); assistance with registration and licensing of new businesses, ongoing support for issuance of documentation, invoice certification, [and] transfer of ownership of goods and other paperwork required for international trade.⁵⁹

The park’s other amenities include a ballistics missile lab and a “high security environment” all subsidized by the Jordanian government. This last feature is probably provided by KADDB subsidiary *JoSecure*, which also has contracts to provide security at

⁵⁶ KADDB Investment Group Newsletter. August/September 2011.

⁵⁷ Zaina Steityeh. “Out of the Dusty Labs.” *Jordan Business* (corporate publication).

⁵⁸ KADDB Investment Group Newsletter. August/September 2011.

⁵⁹ KADDB Industrial Park website.

the Aqaba Special Economic Zone, Jordanian Customs, the Public Security Directorate, the General Intelligence Directorate, Greater Amman Municipality, and the Jordanian Petroleum Refinery Company, among others.⁶⁰ In 2009 Josecure launched a JV with the Swiss security firm *Securitas*, which will provide services to the private sector, including leasing armoured vehicles and providing armed protection to cash-in-transit vehicles.⁶¹ Even the 1,235-acre King Abdullah Special Operations Training Center (KASOTC), which was built with \$99 million in U.S. aid and designed by the U.S. Army Corps of Engineers and prime contractor *General Dynamics*, is a profit-generating operation.⁶² The facility, which is 100% owned by KADDB and modeled on Blackwater's training facility in North Carolina, is open for training of "coalition allies." In 2010 the U.S.-led Multi-National Security Transition Command in Iraq earmarked funds to send 20-30 elite members of the Iraqi National Counterterrorism Force to KASOTC for training.⁶³

KADDB executives (mostly retired officers) boast of significant profits for the armed forces from KADDB ventures; a recent estimate priced export income from the industrial

⁶⁰ Virginie Collombier. September 2011. "Private Security...Not a Business Like Any Other." Arab Reform Initiative.

⁶¹ The firm is called *Al Sharika Al Mutafawwiqa li-Khadamat Al Amin wa Al Himaya* (the Excellence Company for Security & Protection Services); *Al Mutafawwiqa* for short.

⁶² According to the U.S. Army's *AL&T magazine*, the KASOTC includes "multiple indoor and outdoor shooting ranges; bays for explosive, mechanical and ballistic breaching; a fully instrumented urban operations facility; a 5-story live fire "shoot house;" vehicle mock-ups; a driver's range; classroom facilities; and an Airbus 300 aircraft on an airport tarmac complete with a control tower" (presumably to simulate high jacking situations). LTC Rod Aleandre and SGM David Lanham. October-December 2009. "Training Center KASOTC Provides Capabilities for Coalition Forces." *Army AL&T Magazine*, p64. Other contractors include Stanley Consultants and Archirodon (two of the largest contractors specializing in military construction; both have also worked on contracts in Egypt and the Gulf). KASOTC's project director is Maher Halaseh.

⁶³ "Measuring Stability and Security in Iraq." December 2009 Report to Congress in Accordance with the Department of Defense Supplemental Appropriations Act of 2008. Published 29 January 2010. P67.

park at nearly \$400 million a year. And although the salaries of KADDB's workers are paid through the Jordanian Army budget, the revenues accrue to the books of the specific ventures, granting them significant financial independence. KADDB's free zone status also exempts it from corporate income taxes, import fees and customs duties, as well as building and land taxes.⁶⁴ Quasi state-owned companies also provide services to KADDB, including *Orange Jordan*, which penned an agreement this year to provide an integrated telecommunications infrastructure for KADDB and its affiliate companies. Although the contract is not public – and therefore, it is impossible to know for sure if these services are being provided at a discounted rate – the JAF pension fund is a partial shareholder in *Orange Jordan*, and the military's long history of subsidized services would suggest that this partnership also comes with preferential terms. KADDB's operations may also be supplemented by MAWARDED (the National Resources Development Company), which has some overlap in its leadership structure with KADDB.⁶⁵ Like the Egyptian military, the JAF has significant holdings of very valuable land, and MAWARDED generates profits for the armed forces partially through management of this land via commercial development, including by “selling land, doing master planning and managing real estate.”⁶⁶

⁶⁴ www.jordaninvestment.com/BusinessandInvestment/Wheretoinvest/FreeZones/tabid/270/language/en-US/Default.aspx

⁶⁵ While acting as MAWARDED's Managing Director, Moayyad Samman, was also the Chairman of KADDB.

⁶⁶ “KADDB Success Story.” Produced by Marcolpolis (PR Agency specializing in business and tourism reports on emerging economies).

Because subsidies to the military – and in particular, the large percentage of GDP dedicated to the JAF – are politically sensitive issues, officials from KADDB focus more on the economic benefits of the program than its potential strategic advantages. Unlike in Egypt and certain Gulf States, rhetoric from KADDB’s managers does not focus on developing an indigenous capacity to secure the domestic supply of defense material, but rather to export its products and services to neighboring states and therefore contribute to institutional revenues (making the JAF financially self-sufficient, not materially self-sufficient). In one KADDB profile that appeared in a Jordanian promotional publication, the majority of the text deals not with military-readiness or national security, but with KADDB’s success at “providing vital linkages between Jordan’s public and private sectors...scores of employment opportunities for Jordanian graduates...[and] ongoing training schemes for Jordanian engineers and technicians.”⁶⁷ At the 2010 annual SOFEX exhibition KADDB signed contracts for about \$100 million worth of exports to Kenya, Oman, Saudi Arabia and Yemen.⁶⁸ Its *Desert Iris* – an armored personnel carrier – has also been a popular regional seller. In fact, the KADDB has become so successful it is now signing its own offset agreements – including a deal inked in 2011 to transfer technology for body armor to the Ministry of Defense & Industry in Azerbaijan, which will produce KADDB’s products in its own factories.

Despite assertions by KADDB executives, extant scholarly research is nearly unanimous in demonstrating that indigenous military-industrial production is a net drain on

⁶⁷ Zaina Steityeh. “Out of the Dusty Labs.” Jordan Business (corporate publication).

⁶⁸ <http://home.janes.com/events/exhibitions/sofex2010/sections/daily/day3/kaddd-signs-contracts.shtml>

resources, both because of the enormous subsidies required to carry out productive operations and because similar levels of investment in non-military production yield greater gains in terms of export earnings and domestic employment.⁶⁹ Proponents of military-industrial-driven development base their conclusions on potential spillover – backward linkages from military production that feed new technologies and skill sets into commercial industries – but because most of KADDB’s activities are based on modifying military platforms, it is unclear what spillover potential actually exists, and the substantial subsidies granted to KADDB may in fact draw both investment and skilled technicians away from non-military industries that do not receive similar levels of subsidization.⁷⁰ KADDB’s current manufacturing activities do not extend significantly into the provision of civilian goods or agricultural production as is the case in Egypt, although a small number of KADDB’s products have been used in civilian applications, including a number of UAVs utilized to monitor and map critical infrastructure, as well as the refurbishment of some automobile parts that are sold on the domestic market.⁷¹ Supply of both passenger vehicles and heavy construction vehicles has been a hallmark of the Egyptian military’s commercial economic ventures, and KADDB executives have likewise cited this sector as a key target for their own industrial expansion.⁷²

⁶⁹ Brzoska, “World Military Expenditures.” Batchelor and Willet, Disarmament and Defence Industrial Adjustment in South Africa. Brauer, Arming the South.

⁷⁰ Batchelor and Willet, Disarmament and Defence Industrial Adjustment in South Africa. Brauer, Arming the South.

⁷¹ Zaina Steityeh. “Out of the Dusty Labs.” *Jordan Business* (corporate publication).

⁷² http://www.jordan-business.net/magazine/index.php?option=com_content&task=view&id=196&Itemid=40

The benefits that KADDB's activities have achieved for the Jordanian regime are not (nor were they meant to be) economic; they are political. Because military service has traditionally been an avenue of social mobility for East Bank Jordanians, making more high-skilled technical jobs available within the military is an absolute necessity in the face of mounting demographic pressures. Resentment over the allocation of scarce state resources to military pensions, healthcare systems, subsidized housing, and other perquisites is also somewhat attenuated by the perception – whether valid or not – that the military is 'earning its keep' by contributing to state revenues, hence the concerted effort to publicize KADDB's partnerships with foreign firms and its exports.

Defense Offsets in Egypt: Building the Army's Empire

Like KADDB, Egypt's military factories began production with offset arrangements that provided technology, equipment, and facilities via joint production with Western arms manufacturers. However, in Egypt the process began earlier (in the mid-1970s) and was primarily achieved through individual agreements for a discrete number of co-production runs or licensing agreements for particular components, rather than the joint venture model present in Jordan.⁷³ Although KADDB's joint venture model carries the connotation of a longer-term collaboration (when compared to a foreign firm's

⁷³ This difference in approach (joint ventures vs. co-production) is more related to changes in the global defense industry than in strategic decisions taken by Egyptian and Jordanian military or political leaders. In the 1970s and 1980s, co-production was the prevailing form of coordinated defense production, whereas joint ventures are a relatively new practice. JVs generally entail a longer-term commitment than co-production, which can end once a specified number of weapons have been produced. JVs are more common today because defense firms are more willing to enter into binding agreements in order to secure sales, and these joint projects are also much easier to execute – since global supply chains have expanded and many firms have administrators and executives based internationally. Because Jordan had little or no domestic production capability until quite recently, it did not have pre-existing arrangements that favored the co-production model.

commitment to co-produce a pre-set number of weapons in Egypt under a single arms deal) in fact many of Egypt's co-production projects have continued to operate for decades. This longevity is largely the result of political imperatives, including the desire of the U.S. and its European partners to ensure regime stability in Egypt by securing the loyalty of the armed forces. But it also underscores the political sensitivities to the outsourcing of defense production present in the domestic politics of donor countries, where military-industrial jobs are one of the last remaining sites of high-paying manufacturing jobs. These sensitivities demand a less overt and more fluid provision of offsets in Egypt, achieved by dispersing co-production programs across numerous factories under the control of different military-entities.

To date, the largest weapons projects in Egypt have included manufacturing tanks (the M1A1 Abrams)⁷⁴ and armored recovery vehicles (M88A2); MRO (maintain, repair, overhaul) activities, including major modifications of armored personnel carriers (M113s) and the overhaul of engines for major weapons like tanks and aircraft; producing components for the F-16 under the Peace Vector IV program;⁷⁵ and the

⁷⁴ The following parts of the M1A1 tank are produced in Egypt: road wheels, caterpillar track-links, beams and drive wheels, and the 120-mm tank gun. The following items are considered sensitive, and so are manufactured in the U.S. and shipped to Egypt for final assembly: the tank armor (depleted uranium), laser range-finder, armaments, gas turbine engine, transmission, fire control systems, and other electronics.

⁷⁵ The F-16 co-production scheme was actually facilitated by the US, but involved the participation of Egypt's AOI factories in producing components for F-16s manufactured by Turkish Aerospace Industries (TAI), the state-owned company whose own F-16 production line was the result of a previous offset agreement with Lockheed Martin. Although the Egyptians wanted F-16s manufactured in the US (their state concern was one of quality) the US needed Turkey's cooperation in the first Gulf War, which was looming on the horizon. The Turkish authorities asked US diplomats to convince the Egyptians to purchase their F-16s from TAI instead of from the U.S. – a purchase that was made using US military assistance funds. Procuring the planes from Turkey ultimately cost more (due to the co-production component), which resulted in a complaint being lodged by Lockheed Martin against the U.S. Government, when the latter tried to reject some of the additional expenses (\$17 million), which would have reduced Lockheed's profit

HAWK Missile rebuilding programs, as well as the domestic manufacturing of numerous smaller items like night vision equipment, machine guns, tank ammunition, and battlefield electronics that are also produced under license from foreign firms.⁷⁶ Most recently, the Egyptian military has secured agreements to co-produce several additional weapons systems – including Chinese fighter jets, two types of naval vessels designed by U.S. and Turkish companies, and a pending deal to locally build Pakistani jet trainers – and continues to utilize US military aid to construct factories for maintaining and overhauling many components of its large weapons arsenal.⁷⁷ Before we move on to the examination of these and other programs, I will provide a rough sketch of the Egyptian military’s economic holdings in order to provide some basic scaffolding for our discussion.

The Structure of the Egyptian Military’s Economic Holdings

Producing a comprehensive list of the Egyptian military’s economic holdings (in order to determine which operations have benefited directly from offsets) is virtually impossible, as both the military’s budget and its revenues from commercial operations are considered

on the contract. Lockheed eventually won the case. Armed Services Board of Contract Appeals (court documents). Nos. 49530 and 50057.

⁷⁶ The two US firms with the most co-production activities in Egypt are General Dynamics and United Defense. The earliest co-production agreement with the U.S. that I was able to find was for 105mm tank ammunition, produced at the Heliopolis Company for Chemical Industries (Factory 81) and signed in 1979. “Status Report of Coproduction Programs.” 31 December 1993. United States Army Security Assistance Command. Although this report is compiled twice/year, this document is the only one available in the DOD’s FOIA reading room.

⁷⁷ The Pakistani agreement, still pending, is for local assembly of approximately 50 JF-17s (a joint Chinese-Pakistani design) in one of AOI’s factories. Chinese officials told a defense industry trade publication that if a customer made a commitment to purchase a “significant number of aircraft” they would be willing to set up an indigenous assembly plant. Siva Govindasamy. 19 July 2010. “Farnborough: Pakistan and China eye export JF-17 customers.” *Flight Daily News* (Singapore).

state secrets. Periodic attempts to subject the military's manufacturing operations to customary auditing procedures have repeatedly failed, including efforts by opposition politicians in 1986 to bring military accounts under the jurisdiction of Egypt's Central Auditing Organization, as well as current opposition to efforts by the Supreme Council of the Armed Forces to secure their budgetary immunity by enshrining it in Egypt's new constitution. Despite the absence of concrete information, many of the businesses operating under the military's three main organizations – the *Ministry of Military Production (MMP)*, the *Arab Organization for Industrialization (AOI)*, and the *National Service Products Organization (NSPO)* – have an online presence, and many are recorded in region-specific business intelligence databases such as *Zawya* (a subsidiary of Dow Jones that specializes in MENA corporations). In addition to these databases, I have also used professional profiles and employment histories available online – through services like *LinkedIn* – to find the names of firms where individual Egyptians had fulfilled their military service requirements, which strongly suggests these firms fall under military jurisdiction. I also include public-sector firms whose chairmen and boards are dominated by military officials, including the *Holding Company for Maritime & Land Transport*, whose many subsidiary operations are also managed by military officials.

The Ministry of Military Production (MMP) operates 16 factories; The Arab Organization for Industrialization (AOI) – the only remnant of a failed attempt at regional coordination in arms production – operates another 10.⁷⁸ Of these factories, at least six

⁷⁸ The AOI was housed outside the Ministry of Defense in the Ministry of Industry to encourage regional financial and technological support for its production ventures.

are currently coproducing defense equipment under U.S. license.⁷⁹ Many more produce under license from (or using technologies transferred by) European manufacturers as well as firms from the ‘emerging economies,’ like China and Turkey,⁸⁰ and post-Soviet states, including Ukraine.⁸¹ Lastly, The *National Service Products Organization* (NASPO), a subsidiary of the Ministry of Defense, is also active in both military and commercial production in Egypt. NASPO operates at least three companies: including *Arab International Optronics* (a 51/49 joint venture with the French defense firm *Thales*), which produces military goods like night vision goggles, periscopes and machine guns.⁸²

These military operations churn out a wide range of commercial goods that are produced on the same factory floors as military equipment, and either used as inputs for other military-owned operations, or sold on the domestic market. These inputs include machining tools for use in textile factories, vehicle assembly plants, agriculture, and food

⁷⁹ Margaret Keshishian. “Egypt: Export Opportunities in the Security & Defense Sectors.” U.S. Dept of Commerce. Presentation slides from US Embassy in Cairo: Commercial Section. 2011. These factories include the Tank Factory (Factory 200); Abu Zaabal Engineering Industries Company (Factory 100); Abu Zaabal Company for Specialty Chemicals (Factory 18); Heliopolis Company for Chemical Industries (Factory 81); Helwan Engineering Industries (Factory 99); and Maasara Engineering Industries (Factory 45). Embassy Cairo. 17 June 2009. “Egypt responds positively to End-Use Training.”

⁸⁰ The products manufactured under Chinese license include *inter alia* (the K-8 fighter; the Type 63 multiple rocket launcher, known in Egypt as the RL812; the man-portable single rocket launcher, known in Egypt as the PRL-81). Turkish collaborative production includes F-16 components (under the Peace Onyx program sponsored by the U.S.), the naval vessels mentioned above, and production of 105mm tank shells under license from the Turkish weapons firm MKEK. Omer Karasapan. January-February 1987. “Turkey’s Armaments Industries.” *Middle East Report*.

⁸¹ Ukrspetseksport, Ukraine’s state-owned armaments company, signed a contract in 2009 to overhaul 200 of Egypt’s T-62 tanks and another 200 amphibious tracked armored personnel carriers. In exchange, the Ukrainian manufacturer agreed to transfer technologies to the Abu Zaabal Tank Factory and the Kader Factory for Developed Industries. “Ukraine to upgrade Egyptian Soviet-era T-62 tanks.” 20 August 2010. UPI wire service.

⁸² NASPO operations also include: El Nasr company for Services and Maintenance (aka, Queen Service) which markets services like childcare, pest control, and hotel administration; and El Nasr Company for Intermediate Chemicals, which manufactures fertilizers and household insecticides.

processing.⁸³ Some of the end-use items produced in military facilities are passenger vehicles, fire trucks and construction vehicles, agricultural equipment, medical equipment, consumer electronics, kitchen appliances, pharmaceuticals, and even the voting booths used in Egypt's most recent round of parliamentary elections. The military also operates large chicken and dairy farms, meat processing plants, chemical factories, and tourism companies, as well as facilities that manufacture basic commodities and more simple items like cooking oil, bread, pasta, purified water, shoe polish, kitchen cutlery, and cosmetics. The financing and technologies for a majority of these operations have derived from arms deals and foreign aid; as Robert Springborg puts it:

Instead of military industries emerging from the civilian manufacturing sector, as in the industrialized countries, they spring to life in Egypt as a result of bilateral agreements between the Egyptian military and foreign arms manufacturers.⁸⁴

Major Weapons Co-Production Agreements in Egypt

Although several of Egypt's major coproduction agreements were signed in the 1980s and 1990s, many continue to operate today. Some of the largest projects were for military aircraft, including the AlphaJet trainer/ground support fighter designed by a French consortium (Dassault, SNECMA and Thomson-CSF); assembly of Brazil's Al-Tucano training aircraft (Embraer); the Mirage 2000 designed by Dassault; British Lynx helicopters; and Aerospatiale Gazelle, Mi-8, and Mi-17 helicopters – which are still being repaired and overhauled at AOI's Arab British Helicopter Company.⁸⁵ AOI's Aircraft

⁸³ <http://www.enginefactory.com.eg/>. Under the section on “civil products” is a lengthy drop down menu of items produced by AOI.

⁸⁴ Robert Springborg. July/August 1987. “The President and the Field Marshal.” *Middle East Report*, p13.

⁸⁵ http://www.aoi.com.eg/aoieng/military/mil_pro.html

Factory also still builds component parts for Dassault and SNECMA,⁸⁶ some of which are sold back to the firms and incorporated into the finished product sold to other buyers,⁸⁷ as well as for the Egyptian Civil Aviation Authority.⁸⁸ Many missile systems are also locally upgraded under license conditions, including Hughes TOW antitank missile systems, the British-designed Swingfire antitank missile, and Matra Magic R-550 air-to-air missiles designed by the French firm Matra.⁸⁹ Although much of Egypt's military procurement comes from U.S. companies (facilitated by military aid), the major European producers have managed to maintain a presence in the Egyptian defense market as well. Often this is achieved through quasi-official channels, such as joint business associations and diplomatic channels. For instance, the point of contact for the Cairo-based division of EADS (the French-German-Spanish defense consortium) is the Egyptian-French Business Association.⁹⁰

The Ministry of Military Production and AOI also have numerous contracts to co-produce and maintain military-grade vehicles (tanks, armored personnel carriers, recovery vehicles, etc.); many are designed to bear antitank weapons and rocket systems

⁸⁶ <http://www.enginefactory.com.eg/english/pages/defense/spare%20parts/spare%20parts.html>

⁸⁷ Jim Paul. February 1983. "The Egyptian Arms Industry." *Middle East Report*.

⁸⁸ http://www.aoi.com.eg/aoiarab/aoi/aircraft_web/home_a.html

⁸⁹ These include the Russian-made AT-3 Sagger missile,

⁹⁰ the point of contact is mfarahat@cafe.org.eg. (for the Club d'Affaires Franco-Egyptien). This is an email address of the Egyptian-French Business Association. <http://www.egypt-business.com/Association/details/Egyptian-French-Business-Association>. The Association is a division of the French Chamber of Commerce, and regularly hosts French elected officials in Cairo. Here, Raymond Forni (while President of the French people's assembly) delivers a speech to the CAFÉ: <http://www.assemblee-nationale.fr/presidence/discours/3eba0065-1.asp>

that are also assembled in-country.⁹¹ These include three different models of military-grade Chrysler Jeeps produced at MMP's Arab American Vehicle factory (where they are also fitted with machine guns and rocket launchers)⁹²; Daimler-Chrysler's Mercedes Benz G-series SUVs built at the AOI's Kader Factory for Developed Industries;⁹³ the Russian-designed Ural 4320 utility truck; and the MTT (medium tactical truck) from Oshkosh Defense, co-produced at the Tank Factory.⁹⁴ In 2009, Oshkosh was awarded another \$20 million contract from the U.S. Government, this time to co-produce the M1070 tank transport and refueling vehicle – also at the Tank Factory.⁹⁵ Benha (Banha) Electronic Industries produces a range of battlefield communications equipment under license from companies like Westinghouse, Plessey (UK) and Racal (UK), as well as electronics components for the aircraft and land vehicles produced in other AOI factories.⁹⁶

Other AOI factories also overhaul and repair a number of foreign-designed engines, including those made by Rolls Royce (UK), Snecma, Turbomeca, and Dassault, (France), General Electric (US), as well as Pratt & Whitney (Canada). These engines are used in co-produced systems as well as systems that are imported fully assembled, including the

⁹¹ Jim Paul. February 1983. "The Egyptian Arms Industry." *Middle East Report*. See also LTC Stephen H. Gotowicki, U.S. Army. 1997. "The Role of the Egyptian Military in Domestic Society." See also GlobalSecurity.org Although the vehicles themselves are based on American designs, the features that weaponize them are based on equipment provided to the Egyptians by the Soviets during the 1970s.

⁹² http://www.aoi.com.eg/aoieng/military/mil_pro.html.

⁹³ "Armoured personnel carriers (wheeled). 4 October 2007. Jane's Armour and Artillery (part of Jane's Defense Publications, UK).

⁹⁴ "Egypt orders FHTV Trucks as Armored Support." 8 March 2010. *Defense Industry Daily*.

⁹⁵ <http://www.oshkoshdefense.com/news/233/oshkosh-defense-awarded-20-million-contract-to-supply-egypt-with-heavy-equipment-transporters#>

⁹⁶ The jets include the Tucano, AlphaJet, Gazelle, and K8-E.

C-130 and Russian MiGs.⁹⁷ Interestingly, the Chinese K-8 fighters produced in Cairo are outfitted with the Honeywell (US) TFE731 engine, which is also maintained and overhauled by Egyptian military technicians.⁹⁸ Numerous guns and ammunitions are also produced locally under license from European and American firms, including pistols produced under license from Switzerland, variants of the Beretta produced under license from Italy, and machine guns, assault rifles, sniper rifles, and grenade launchers designed by Germany, the U.S., the Soviet Union and Belgium, as well as various types of military communications equipment from French and American companies.

The Triumph of Patronage in Egypt's Military-Industrial Production

The high cost and duplication of capabilities inherent in Egypt's co-production programs contradict the idea that strategic independence is a central goal for Egypt's military and political leaders. Most of Egypt's co-production continues to center on older technologies – owing partly to security sensitivities over releasing more advanced technology, but primarily due to political pressure from the vested interests that support these projects – whose logic is often expressed in outdated tactical arguments about the importance of numerical superiority rather than the modernization of equipment.⁹⁹ Although it is difficult to determine if some of Egypt's military factories are still producing certain items – government restrictions make current estimates difficult to come by – many

⁹⁷ <http://www.enginefactory.com.eg/english/pages/defense/amra/amra.html>

⁹⁸ The TFE731 is made by the US firm Garret Engines (now part of Honeywell Aerospace), which exported a large number of these engines to China in the early 1990s. The Honeywell engine may be used because the Russians have been reluctant to grant China the right to use its Klimov RD-93 engine in exports.

⁹⁹ Once the initial co-production agreement has been signed and the necessary technologies and facilities transferred, there is little incentive for any party to halt production. For the Egyptians these programs provide important sources of jobs and prestige; for the contracting firm they provide an important source of revenue – often for product lines that have long since ceased in their host country.

weapons systems have now been co-produced for a decade or more.¹⁰⁰ Many of the longest-running projects are for infantry vehicles like tanks and armored personnel carriers, in no small part because Egyptian Army officials have a great deal of control over the military budget and procurement process relative to the other branches.

The Egyptian Tank Plant (Factory 200) is perhaps the largest military factory in the region. U.S. financing for construction of the plant – which was built explicitly to co-produce main battle tanks – was approved by the U.S. Defense Security Assistance Agency (DSAA)¹⁰¹ in 1984, four years before any agreement had been reached (or serious discussions initiated) between the U.S. and Egyptian governments over the actual co-production activities that would take place in the factory. Officials from both the State Department and DOD later complained (in a GAO report) that the construction of the factory duplicated capabilities already available in other Egyptian facilities (Workshop 101), and railroaded the U.S. Government into approving the co-production component of the subsequent tank sale, without which the newly-constructed factory would have been useless. This demonstrates the primacy that patronage considerations have historically taken over concerns about the cost of weapons or their strategic utility.

Because the factory construction was concluded as a commercial contract (rather than a government-to-government, or FMS, sale) neither DOD nor State had significant input into the agreement. Furthermore, the U.S. Government retroactively granted approval to

¹⁰⁰ For example, SIPRI figures on Egyptian arms exports end in 1992. The majority of exports recorded were for APCs (armored personnel carriers).

¹⁰¹ This is now the Defense & Security Cooperation Agency (DSCA).

finance the factory construction (and in-country procurement of factory equipment for the plant¹⁰²) with military aid – something very unusual for commercial contracts.¹⁰³ The firm contracted by the Egyptians to construct the tank plant – General Dynamics Land Systems (GDLS) – was of course awarded the follow-on contract for tank co-production. Like the *quid pro quo* conditions cited for the Jordanian case above, these supplementary facilities and co-production elements ensure that foreign firms are able to act as suppliers to Egypt’s military. Although Egypt possesses more tanks than all of Latin America and Sub-Saharan Africa combined,¹⁰⁴ since the first co-production run began in 1991 *ten* subsequent co-production phases have been added, most recently in 2011, when an additional sale was announced for 125 tank kits worth \$1.3 billion.¹⁰⁵ This is despite the fact that severe cost overruns in the program (of more than 70%) have been documented by the GAO since as early as 1993, limiting the amount of technology transferred to the Egyptian military and reducing the overall number of tanks produced – (although, it should be noted, not reducing the sums paid to GDLS).

Not only did the Egyptian military acquire less advanced technology and fewer tanks (while expending more of its military assistance funds) due to increased program costs, but it also failed to meet the secondary economic goal that was purportedly the basis for

¹⁰² Employment profile of Charles B. “Burt” Jackson (LinkedIn), who acted as Procurement & Subcontracts Manager for General Dynamics in Cairo, Egypt from February 1990 – December 1993.

¹⁰³ If FMF financing had not been approved, there is a very real possibility that Egypt would have simply refused to pay General Dynamics for the factory construction. Bringing in FMF financing ensured that the US Government would pay General Dynamics directly.

¹⁰⁴ Keith Krause. 1992. Arms and the State: Patterns of Military Production and Trade. Cambridge, Cambridge University Press, p187

¹⁰⁵ http://www.defenceweb.co.za/index.php?option=com_content&view=article&id=17054:egypt-getting-ready-to-purchase-m1a1-tanks&catid=50:Land&Itemid=105

pursuing co-production in the first place – mainly exporting tanks to neighboring states, which was cited by Egyptian military officials as a key goal in the original 1988 negotiations.¹⁰⁶ The only sign of pending export of the M1A1 tanks – nearly 20 years after coproduction began – is a possible sale of 140 units to Iraq.¹⁰⁷ Likewise, the Egyptian Tank Plant is also engaged in the modification of Egypt’s arsenal of 2,650 M113 armored personnel carriers. Originally produced and sold to Egypt by United Defense, the modifications (which include upgrades of the engine, armor, and weapons systems) are done in collaboration with BAE Land Systems, which purchased United Defense in 2005. Although both AOI and BAE advertise the Egyptian Infantry Fighting Vehicle (EIFV) as a stand-alone product, which can either be sold (by Egypt) as a modification kit to enable other countries to upgrade their M113 fleet, or exported as a new product¹⁰⁸ – to date the project has generated no exports.

Where the construction of the tank factory (and the successive co-production contracts) *has* succeeded, is in expanding the military’s production of commercial equipment that is sold on the domestic market. Today the Egyptian military produces a number of components for the tank systems that are also commonly used in the production of

¹⁰⁶ GAO. “Tank Coproduction Raised Costs and May Not Meet Program Goals.” July 1993.

¹⁰⁷ Wikileaks cable. Although Iraq under Saddam Hussein was Egypt’s biggest arms customer, this is most likely a sale engineered by the U.S. for political reasons (much like the U.S.-engineered sale of Turkish produced F-16s to Egypt in the run-up to the first Gulf War, despite the Egyptians insistence that they wanted planes produced in the U.S.). It is unlikely that the U.S. could convince any other regional states to purchase advanced military equipment produced in Egypt unless the transaction is essentially a form of military aid (from the Gulf States) or concluded with a pariah state that cannot secure supplies produced elsewhere. It is worth noting that Egypt has been unable to sell the M1A1s it assembles despite a lower sale price; I have seen military chat forums that quoted a price of \$2.4 million for Cairo’s version, compared to about \$4.8 million for the American-built tank.

¹⁰⁸ <http://www.uniteddefense.com/www.m113.com/eifv.html>. M88A2 Hercules armored vehicle conversion program.

construction vehicles (earth-movers, etc.), which are also built at the Tank Factory. A 1993 GAO document reviewing the tank coproduction program reported that the Egyptian Army had approached several U.S. corporations regarding the development of a construction vehicle assembly line, including General Electric, Westinghouse, FMC Corporation (today part of BAE Systems), General Motors, and Caterpillar, as well as firms from the UK, Germany, and Japan.¹⁰⁹ Today, there are more than 50 separate U.S. contractors working on the project¹¹⁰ – which provides a lot of opportunities for new collaborations. According to a profile posted by an employee of the tank plant on extrade.net (an export-import advertising site), the plant manufactures equipment under license from a number of firms. These items include fire trucks designed by Pierce Manufacturing (a wholly-owned subsidiary of Oshkosh of Wisconsin); construction loaders designed by the now-bankrupt Hydra Mac Inc. of Minnesota; and machining equipment designed two firms: Ingersoll of Illinois and Noble & Lund of the UK.¹¹¹ All these items – and a number of other products and industrial services listed without specific foreign manufacturer data – are available for purchase. According to 2007 shipping manifestos the tank plant has also exported unknown goods to Hofmann-Mondial of Virginia – a company that manufactures grenade launchers, wheeled combat vehicles and armor.¹¹²

¹⁰⁹ GAO. “Tank Coproduction Raised Costs and May Not Meet Program Goals.” July 1993. These American companies are the same ones that produced the various components used in the construction of the M1A1 tanks. Talks with the Japanese construction machinery firm Komatsu were apparently quite advanced.

¹¹⁰ Employment Profile (LinkedIn) Doug Brimmer. Chief, Coproduction Field Office, US Army TACOM, Cairo.

¹¹¹ <http://www.extrade.net/76/1807176.html>

¹¹² importgenius.com (maritime shipping industry database).

The successive rounds of co-production have also increased the prestige of military producers in Egypt. Today the Egyptian Military claims to perform 95% of the work on the M1A1 tank – up from around 80% in the late 1990s/early 2000s. However, the degree of technology that is actually transferred along with these production activities is difficult to estimate. A 1998 source lists welding (for armor), mechanization, assembly, and inspection as the primary M1A1 activities that took place in Egypt.¹¹³ Even this far into the co-production program the fully-assembled tank is flown on a C-130 cargo plane from Egypt to the Yuma Proving Ground in Arizona (meant to mimic the conditions of North Africa) in order to undergo testing.¹¹⁴

Other co-production agreements appear to have been similarly costly. The 2005 agreement to co-produce 120 Chinese K-8E jet trainers at the AOI Aircraft Factory in Helwan¹¹⁵ had a price tag of \$345 million. This yields a per unit cost of about \$4.3 million, but the K-8E usually runs between \$3-3.5 million.¹¹⁶ Although Egyptian officials marketed the K-8E to Cairo's African neighbors, this project also failed to generate exports.¹¹⁷ However, the added cost appears to have secured two non-strategic goals for the military: first, the AOI factory assembling the planes claims that 94% of the

¹¹³ Gil Feiler. 1998. "Military Industries in the Arab World in the 1990s." In Efraim Inbar and Ben Zion Zilberfarb. The Politics and Economics of Defence Industries. London: Frank Cass, p172.

¹¹⁴ Mark Schauer. 8 September 2009. Egyptian Tank Tested at YPG. *Yuma Sun*.

¹¹⁵ CTO Newsletter. 2005. 23(17).

¹¹⁶ CTO Newsletter. 2005. 23(17).

¹¹⁷ African customers – including Namibia, Zambia and Zimbabwe – instead chose to purchase the K-8 directly from China.

work will be performed in Egypt¹¹⁸ - which represents a substantial increase over the proportion of manufacturing work transferred under previous co-production arrangements, and second, the nearby MMP Factory 360 – the Helwan Metallic Appliances Company – now has a brand new production facility churning out *Hisense* (a Chinese state-owned company) air conditioning units under license.¹¹⁹ By contrast, the facility's other assembly lines, which produce washing machines, gas stoves, refrigerators, and water heaters under license from Italian and American companies, are dilapidated, and do not appear to be manufacturing many units. In addition, the state-owned Chinese oil company *Sinopec* recently launched a joint venture with one of the public sector companies in which MMP has significant holdings – *Tharwa Petroleum Company*.¹²⁰

The types of equipment that Egypt co-produces also belies the claim that they are strategic in nature, because Egypt's real shortcomings are in communications systems and other high-technology components – and this shortage makes much of its heavy equipment less effective, not to mention incompatible with the advanced equipment of its regional allies. This was reflected in a cable made available by Wikileaks, in which Margaret Scobey, the U.S. Ambassador to Egypt, summarizes recent diplomatic attempts to encourage Defense Minister Hussein Tantawi to shift the military's focus away from arming for a conventional land battle in order to better combat border smuggling and other unconventional threats. Although Scobey claims that smuggling is a looming threat

¹¹⁸ http://www.aoi.com.eg/aoiarab/aoi/aircraft_web/home_a.html

¹¹⁹ http://www.helwan360.com/assembly_lines.htm

¹²⁰ Tharwa also recently inked a joint venture deal with the Italian oil company *Breda*.

to Egypt's national security, she laments that Tantawi is hesitant to take advantage of U.S. coordination due to his "concerns that FMF funds may be directed away from more high-profile programs like M1A1 tank coproduction."¹²¹ This supports the theory that the continued viability of the military's production portfolio and its related prestige is more important than having the most advanced weapons or technological capabilities.

The Egyptian government continues to insist on the co-production method not only because of the jobs and prestige it bestows on the military, but also because the potential economic losses (in foregone technology transfer and increased expenditure from the Egyptian budget to compensate for the cost overruns) are irrelevant to the cost calculus of the most powerful political incumbents. Despite heavy subsidies (and the general lack of

¹²¹ Cable Cairo 000181. E.O. 12958: DECL: 2020/02/09. Subject: Scen setter for Admiral Mullen. Classified. Margaret Scobey. Like Jordan, the Egyptian military has also enriched itself through commercial development of its land-holdings. Many of the most lavish residential suburbs and commercial complexes on the outskirts of Cairo were built by military developers or their close associates. They too benefited from ring roads, bridges and other costly infrastructure whose construction was heavily subsidized by the state. Attracted by these heavy subsidies, investors (both foreign and domestic) gravitated toward real estate development, making it one of the top investment destinations in the Egyptian economy. Many economists fault these arrangements for encouraging speculative (ie, non-productive) investment that generates quick returns at the expense of manufacturing, which would generate jobs and export income. And also like Jordan, the rank-and-file of the Egyptian armed forces enjoy privileges like free housing (which is often financed by US military aid, since the acquisition of major weapons systems requires constructing new bases to house these assets) as well as dining and recreational facilities and subsidized commissariats. These enterprises provide much-needed jobs for the military's rank-and-file – who as conscripts provide cheap labor to military producers – while an extensive network of high-end social clubs and generous retirement benefits ensure loyalty among the officer elite. As in Jordan, the Egyptian military's capacity as an engine for manufacturing and economic growth is belied by the scant estimates that do exist. Conservative estimates suggest that the Egyptian military's economic operations account for between 10% and 15% of the national economy, while other analysts put the figure as high as 30% or even 45%. But if the military is supposed to be a driver for industrialization and economic diversification, it has failed miserably. The Egyptian state still exports fewer manufactured goods than Costa Rica, whose population is 1/16 the size, and Egypt's military factories are most likely not a significant source of export earnings. Yet both institutions continue to elicit casual observations of efficiency, observations which seldom address the role that offsets and other subsidies play in facilitating output and enhancing the illusion of productivity. This illusion further enhances the military's economic prestige, which in turn encourages foreign investors and international firms to partner with the military – whether in real estate, service provision or manufacturing – crowding out potentially more efficient investment in enterprises not controlled by the military.

available information on military balance sheets) some military factories are known to be heavily in the red.¹²² Some estimates from the mid-1980s put revenues from Egyptian arms exports (primarily to Iraq) at between \$800 million and \$1 billion per year,¹²³ while former Minister of Military Production Sayed Meshal reported income of about \$350 million/year. Egypt did supply some used equipment (F-7s) and a large number of Sakr rocket-launchers to Iraq during the latter's protracted war with Iran – which also kept feeder factories producing cartridges, shells, rockets, and spare parts running at near capacity – but this largely ended with the war itself. Other sources indicate that some of this money was paid to Egypt because it was a transit point for shipping arms produced elsewhere, and for the sale of excess Soviet equipment to third parties, including T-55 tanks sent to Iraq.¹²⁴ The fact that the military budget is secret means that shortfalls can easily be mended without marring the military's reputation for efficiency or eliciting public protest over diverting scarce public funds to military ventures.¹²⁵

In the Driver's Seat: Defense Offsets and the Military's Production of Passenger Vehicles

The Egyptian military's production of commercial passenger vehicles is an excellent case for demonstrating the central role that defense procurement has played in the military's civilian industrial production. The American firm Chrysler – which was the original

¹²² Robert Springborg. July/August 1987. "The President and the Field Marshal." *Middle East Report*, p10.

¹²³ Robert Springborg. July/August 1987. "The President and the Field Marshal." *Middle East Report*, p9.

¹²⁴ Keith Krause. 1992. *Arms and the State: Patterns of Military Production and Trade*. Cambridge, Cambridge University Press. P161.

¹²⁵ Egypt ranks last (with scores of zero) on Global Integrity's index measuring citizens' access to information about the government. Springborg (2011) states that domestic media reports on the nation's military were more comprehensive and numerous in the 1980s than they are today.

producer of the M1A1 tank (before the division was sold to General Dynamics in 1982) as well as the earlier M60 model, which Egypt acquired in large supply shortly after the Camp David Accords – also owns a 49% stake in the *Arab American Vehicles Company* (AAV), where the AOI produces military versions of the Jeep Cherokee and Jeep Wrangler, as well as civilian versions for commercial sale.¹²⁶ In 2010, Egypt signed a new FMS contract with Chrysler for \$33 million worth of unassembled jeeps, tools, and spare parts destined for the AAV factory.¹²⁷ Two military models – the Jeep TJL and the Jeep J8 – are exclusively produced at the AAV factory, and have been exported to two-dozen countries, including Libya,¹²⁸ where pro-government forces deployed the TJL during skirmishes with protestors in Tripoli. But, as in the Gulf States, where US defense firms with offset obligations were the recipients of investment from Gulf conglomerates and state-owned funds, Chrysler also derived certain privileges in exchange for continuing its co-production efforts in Egypt.

In the last two years, Chrysler's parent company (Diamler-Benz)¹²⁹ has agreed to pay nearly \$200 million to settle charges that it bribed foreign officials, including Egyptian General Abdel Hamid Wasfi, the Chairman of AOI's Kader Factory for Developed Industries (which builds the Mercedes Benz G320, known locally as the Kader-320), in

¹²⁶ These trucks include the AM720, and a number of other models. The company's production history is available here: <http://www.aav.com.eg/Pathtosuccess.html>. AAV also produces cars under license from the Chinese firm Jianghuai Automobile Co., Ltd.

¹²⁷ Aram Roston and David Rohde. 5 March 2011. "Egyptian Army's Business Side Blurs Lines of U.S. Military Aid." *New York Times*.

¹²⁸ <http://www.aav.com.eg/export.html>

¹²⁹ Chrysler is now owned by the Italian car manufacturer Fiat – but the activity in question occurred between 1998 and 2007, during the time that Chrysler was merged with Diamler.

exchange for guarantees that Wasfi's factory would place orders for parts and supplies with Daimler-Benz instead of a competitor.¹³⁰

In addition to the Chrysler case, there are several examples of Egyptian military factories receiving civilian production technologies and equipment from the same firms that sell them military hardware. The Helwan Aircraft Factory signed several technology transfer contracts with Silfe SRL, an Italian distributor of IVECO Military Vehicles – a division of Fiat Industrial.¹³¹ These contracts – signed sometime before 2008¹³² – included two CKD (complete knock-down) kits for the assembly of vehicle air conditioner production lines at AOI's Helwan Aircraft Factory and El Nasr Automotive Factory; the construction of a hot-dip galvanizing plant (the galvanizing process prevents erosion of numerous metals) and the supply and construction of machinery for a furniture factory (both for the Helwan Aircraft Factory); as well as the supply of mobile ambulance units to the Ministry of Health.¹³³ I was unable to determine whether the provision of these contracts was linked to any *specific* defense sales – but several late-model (nearly brand new) *IVECO* armored trucks were used in confrontations between state security forces and

¹³⁰ The factory is the Kader Factory for Development Industries in Heliopolis, which produces (or once produced) trainer aircraft, bombs, mortars, and armored vehicles. The bribes were delivered through a shell company that Daimler-Benz established called "Consulting Egypt."

¹³¹ Silfe (the acronym for Italian Company for Supplies & Works Abroad) focuses on the MENA geographical market. <http://www.silfe-srl.com/>

¹³² These contracts are listed on the cached version of Silfe's website; which provided a list of all overseas contracts the company had concluded between 1990 and 2008. There is no way to tell from this site when the particular contracts were concluded with Egypt.

¹³³ <http://www.silfe-srl.com/references.xml>. (cached site).

protestors during the recent uprisings.¹³⁴ Also, AOI factories have produced Fiat passenger cars for sale on the domestic market in the past,¹³⁵ and with the recent acquisition of Chrysler by Fiat, it is likely these factories may bring more Fiat models onto their production lines.

Egypt also has a program to overhaul and maintain HMMWVs¹³⁶ (military-grade Humvees) at one of the AOI factories. Like the M1A1 tank facility, the \$7 million HMMWV MRO facility was also financed with US military aid, and its construction was overseen by the USACE. Here the HMMWVs are fitted with anti armor weaponry, including TOW, Milan, Swingfire, and HOT missiles produced locally under license, as well as the Avenger low-altitude air defense system, which is made on local production lines by combining *Stinger* missiles (which Egypt acquired in 2009 and 2011) with .50 caliber machine guns and adding sensors and tracking equipment.¹³⁷

Like the overlap in military/commercial production evident in the M1A1-Chrysler case, the HMMWV facility also appears to have generated some commercial opportunities for the Egyptian military. *Predator Hummer Egypt* – a private domestic distributor and service provider that appears to have links to the American company *Predator*

¹³⁴ <http://milinme.wordpress.com/2011/01/28/army-intervention-in-egypt/>. For more evidence of the new IVECO acquisitions see Christopher Week's self-published 2011 book *Egyptian Police Vehicles*. IVECO Egypt (a local agency/distributor) was also the intermediary for IVECO trucks sold to Iraq in the late 1990s/early 2000s while it was under a UN Arms Embargo. www.justice.gov/opa/documents/flat-iveco-info.pdf.

¹³⁵ <http://www.aav.com.eg/Pathtosuccess.html>

¹³⁶ The prime contractor is AM General LLC of Indiana.

¹³⁷ 6 October 2011. "Stingers for Egypt and Turkey." *Defense Industry Daily*.

Motorsports Inc., which contracts with the U.S. military¹³⁸ – claims to perform service on all models of the military-grade Humvee (HMWWV), and to “support the special forces.”¹³⁹ According to a 2004 report from Middle East Newline (a regional wire service), U.S. officials approved a Defense Department plan to “establish facilities required for the maintenance and repair of Egypt's fleet of high-mobility multipurpose wheeled vehicles (HMMWVs)” in order to “help Egypt to expand its defense industry.”¹⁴⁰ *Predator Egypt* may be an outgrowth of this recent collaboration.¹⁴¹ Additional contracts have also been awarded for the construction of new facilities for depot-level maintenance of military vehicles (the most sophisticated form) as well as for the expansion of existing facilities, including a 2006 contract to expand Workshop 101 – the army facility where M60 tanks are repaired – and a 2011 contract to build a repair facility for Egypt’s 200-plus tank transporter vehicles.¹⁴²

¹³⁸ Predator Motorsports Inc. was founded by in 1998 by Ryan Wilson, and according to the company’s website, “weeks after 9/11 Predator was contracted to develop extended range system for HMMWV’s leading the war in Baghdad. Within hours prototype systems were developed and sent out for approval resulting in thousands of units being implemented for our armed forces.” <http://www.predatorinc.com/the-predator-crew/>.

¹³⁹ <http://www.predatoregypt.com/about.asp>

¹⁴⁰ <http://www.menewline.com/article-17506-EGYPT-PLANS-TO-ESTABLISH-HMMWV-FA.aspx>. The primary U.S. contractor was Accent Controls Inc.

¹⁴¹ In personal communication with the author, Wilson stated that his firm did not have a formal relationship with the Egyptian company – although the latter has clearly copied elements of the US firm’s website for their own site, and using language that implies a formal relationship with the US firm. The Egyptian firm lists address: 172 Joseph Tito Street, El-Nozha El-Gedida, Cairo, which is very close to the National Authority for Remote Sensing and Space Sciences (located at 23 Joseph Tito Street, El-Nozha El-Gedida, Cairo). This is past Ain Shams and about 20 km northeast of Cairo along the Cairo-Ismailiyya Desert Road.

¹⁴² Both contracts went to the same company – the Advanced Technology Systems Company; <http://www.atscva.com/news.html>. The 2011 contract is cited here, the 2006 contract is available on the USACE webpage: http://www.tac.usace.army.mil/Contracting/contract_awards.html.

Resources provided through U.S. military aid are also used by the Egyptian Navy to secure its own corporatist benefits. Although the Navy has historically been much weaker politically than the other branches of the Egyptian military, because Cairo *leases* (rather than purchases) many of the big-ticket naval weapons systems in its arsenal, upgrades to maritime facilities are necessary to maintain the equipment according to the contract terms [functioning in much the same way as the Pacer Force program]. These leasing conditions ensure that the more hardware the Egyptian Navy acquires, the more resources must be directed to maritime maintenance and repair facilities. Some projects financed by the US include massive dry-docking facilities for ship repair.¹⁴³ *Timsah Shipbuilding Company* (a subsidiary of the Suez Canal Authority, which is managed by Egyptian Naval Officers) advertises its repair and maintenance services for both Egyptian and foreign vessels using these dry-docking facilities installed previously by the USACE.¹⁴⁴

The issue of whether these aid-financed facilities directly contribute to the military's commercial operations is particularly acute because in most cases commercial vehicles are produced on the same factory floors alongside military equipment, as in the case of

¹⁴³ Robert P. Grathwol and Donita M. Moorhus. 2009. *Bricks, Sand and Marble: US Army Corps of Engineers: Construction in the Mediterranean and Middle East, 1947-1991*. Washington DC: Center of Military History and Corps of Engineers, United States Army, p588. Projects include: \$14 million dredging project at Alexandria Harbor in the late 1980s, which included the provision of syncrolift equipment to move ships in/out of the dock to maintenance facilities and a further \$40 million for new maintenance facilities, equipment and renovations; the construction of a \$5 million torpedo maintenance facility in Alexandria in 1993/4, which included the construction of power stations, buildings and paved roads; a Harpoon Missile Weapons Station at King Maryut (Mariout) Harbor in Alexandria, which included \$6 million for torpedo repair facilities, and \$14 million for additional syncrolift equipment. See Also USAID, "A Feasibility Study for the Establishment of an Egyptian Ports Training Center." Alexandria Ports Authority (now part of the Holding Company for Maritime and Land Transport). February 1981. http://pdf.usaid.gov/pdf_docs/PNAAL704.pdf

¹⁴⁴ <http://www.timsahshipbuildingoffshore.com/ship%20repair.html>. Another \$7 million syncrolift was just purchased by the Suez Canal Authority in 2001, primarily for repairing Nile River ferries near Luxor. http://www.rolls-royce.com/marine/news/2001/010110_syncrolift.jsp

the Chrysler military Jeeps, which are produced on assembly lines right next to the commercial Jeeps that the military sells on the domestic market, as well as the M1A1 tanks, that are produced alongside construction vehicles that are also sold locally by the military.¹⁴⁵ Under the U.S. *Pacer Forge* program, any Egyptian military facility (including factories and shipyards) housing US-made weapons would be built and maintained by the U.S. Army Corps of Engineers using US aid, which included the provision of things like water and sewage systems, housing for military conscripts and engineers staffing the factories, roads, and power generation stations.¹⁴⁶ Because the military workers and factories that rely on these inputs are producing both military equipment and commercial goods, these aid programs directly supplement both production processes.

One Degree of Separation: the Egyptian Military's Interests in Private Sector Firms

In addition to the formal operations of the MMP, AOI and NPSO, there are many other channels through which military firms and individual officers embed their interests in the domestic economy. These channels include the purchase of shares in private sector companies by MMP and AOI (firms that frequently employ military-owned subcontractors and suppliers) as well as the practice of securing lucrative employment for officers and engineers on aid-financed military projects that are contracted to private sector construction conglomerates. This demonstrates a shift in the method employed by

¹⁴⁵ Charles Clover and Roula Khalaf. 28 February 2011. "Egypt military uneasy over business ties." *Financial Times*.

¹⁴⁶ Robert P. Grathwol and Donita M. Moorhus. 2009. Bricks, Sand and Marble: US Army Corps of Engineers: Construction in the Mediterranean and Middle East, 1947-1991. Washington DC: Center of Military History and Corps of Engineers, United States Army, p588.

the military to extract benefits from large aid-financed construction projects and weapons acquisitions, a response to changing donor requirements and the prevailing discourse on economic development, which increasingly necessitates the incorporation of private sector investors and entrepreneurs. As mentioned previously, the Egyptian military has shareholdings in subsidiaries of other state-owned companies, such as *Tharwa Petroleum Company* and the *Egyptian Satellite Company (Nilesat)*, but it also has joint ventures with private sector investors.

The Kuwaiti group *M. A. Kharafi and Sons*—whose late patriarch ranked seventh on the 2010 Rich List of the magazine *Arabian Business*—has proven a particularly eager partner. Since 2001, it has joined the Egyptian military in a number of ventures, including the *Arab Company for Computer Manufacturing*, Egypt’s only producer of computer hardware and laptops, in which Kharafi owns 71 percent of shares and the AOI and a Ministry of Military Production subsidiary each own 5 percent.¹⁴⁷ The company, which draws on *Aopen*, a Taiwanese firm, for technology inputs, had start-up capital of \$140 million and produces 750,000 computers per year.¹⁴⁸ Via a subsidiary, Kharafi controls approximately 60 percent of the *International Pipe Industry Company*, of which the Ministry of Military Production owns 10 percent. This company is the largest manufacturer of oil and gas piping in the region, reporting sales of \$104 million in 2008, and former Minister of Military Production Sayyid Mish‘al has described it as a “model

¹⁴⁷ The Benha Electronic Industries company (a subsidiary of MMP) owns 5% of ACCM; while AOI owns another 5%.

¹⁴⁸ *Daily News Egypt*, 26 December 2005.

of cooperation” between the state and private sector.¹⁴⁹

The military and Kharafi also run an operation called *Maxalto*, which relies on technology from the German firm *Schlumberger* to manufacture smart cards. In addition, there are a number of joint ventures between Kharafi’s Egyptian subsidiaries and divisions of state-owned holding companies widely perceived to be under the army’s aegis. Lastly, the facility for the Arab Company for Computer Manufacturing is located at the Obour Factory northeast of Cairo, which is very near the site of the new state-owned £3 billion EGP *Mubarak Complex for the Defense Industry* being constructed along the Belbeis Desert Road.¹⁵⁰

In addition to direct shareholdings by Egyptian military companies, private firms owned by former military officials have also benefited through securing numerous contracts with EMAK, the Egyptian subsidiary of the Kharafi Group. Several firms owned by retired Egyptian military engineers have acted as subcontractors and suppliers for EMAK, including *MAST Group*, which is owned by a former Egyptian military engineer provides and has provided industrial water services for three EMAK projects.¹⁵¹ The founder of *TAB Company* (the *Engineering Company for Testing and Balancing Services*) spent 12 years in the Egyptian military (and 18 years in a military posting in Kuwait), and has likewise landed several contracts for EMAK facilities, as well as five contracts for

¹⁴⁹ *Al-Ahram*, April 2, 2005.

¹⁵⁰ 24 August 2010. “Minister: Egypt’s annual military production reaches £2.7 billion EGP.” *Al Masry Al Youm* (English edition). “Dr. Ali Sabri: Military Production growth was 5% despite the country’s circumstances.” 23 October 2011. *Al Ahram*. <http://www.ahram.org.eg/Investigations/News/108501.aspx>.

¹⁵¹ <http://mast-group.net/Team.html>. These were two paper mills and a “smart card factory.”

USACE projects and a number of projects for MMP and AOI subsidiaries.¹⁵² *TAB's* founder also started another industrial service company – *MechaTronics* – with other Egyptian military engineers,¹⁵³ which also secured contracts with MMP and AOI subsidiaries.¹⁵⁴ Some of the engineers working for *TAB* and *MechaTronics* had previously worked for firms controlled by Mamdouh Moukhtar, a Brigadier General in the Egyptian Army.¹⁵⁵

Many of the smaller subcontractors and equipment supply firms working with large private sector construction conglomerates are also owned and/or managed by former military officers. One example is the *Abou El Soud Group*, whose Chairman Mohammed Hussein Abu Al Saud¹⁵⁶ served as an Egyptian Army Officer for 15 years, as Assistant Secretary General for the Ismailia chapter of the ruling NDP, and also briefly acted as

¹⁵² the EMAK facility is the Al Kharafi Factory for Advanced Technology in Obour City; the USACE projects include: Helwan Air Base, El Bassateen Logistics Depot, TOW Missile facility, Hook facility, and the Cairo West Air Base. In addition *TAB* (known as *ProServices* until 2004) has also been a subcontractor for the Benha Electronics Institute (owned by MMP), and a number of different port facilities that operate under the HCMLT. <http://www.tab.com.eg/pdf/TAB%20Company%20Profile.pdf>. The owner is Sherif Mohamed Noweir/Nowair; the General Manager, Tarek A. Omar, is also a member of the Society of American Military Engineers.

¹⁵³ Yousef Borhan worked as an engineer in one of the military's factories in Helwan (Delta Steel), then went on to work for the Iraqi Ministry of Defense and subsequently, Al-Kharafi.

¹⁵⁴ *Mechatronics* installed HVAC systems for Benha Electronics Industry (of MMP), and also for the military's operations at the East Delta Flour Mill, which produces numerous types of pasta for the domestic market. <http://www.mechatronics.com.qa/projects/project.html>

¹⁵⁵ Moukhtar is the Chairman of *Power Egypt Corporation*, which produces refrigerators and air-conditioners, and was the early domestic distributor for General Electric equipment.

¹⁵⁶ Different sources give Abu Al Saud different names: a Bloomberg profile of Ismailia Misr gives his name as Mohammed Al Afifi; while the Zawya profile of the company gives his name as Gamal Hasan Afifi Abou Al Saud; the parent company's listing on the Egyptian stock exchange (Arab Gathering Investment) gives his name as Gamal Hassan Afifi: <http://www.mubasher.info/portal/case/companyDetails.html?siteLanguage=en&companyId=1445&goToHomepageParam=true>; as does his profile on the Egyptian Businessman's Association page: http://www.eba.org.eg/Main/MemberDetails.aspx?mem_id=7. Here he is listed as managing director of Dallah for Real Estate (a subsidiary of Dallah Al Baraka). There is also a General Mostafa Afifi, a former Governor of Sinai.

advisor to the Kuwaiti Defense Minister in the late-1980s. (This is also when Kuwait placed an order for approximately 100 Egyptian-built Fahd armored vehicles – a particularly prestigious order, since other sales were restricted to Sub-Saharan African states or states under Western sanctions). Al Saud’s firm *Egyptian Company for Electronics & Training Equipment* (aka, *Misr Specialized Electronics & Training Equipment Company*), was a subcontractor with the U.S. defense firm SAIC on a contract to establish a combat training facility – the Egyptian National Training Center.¹⁵⁷ The *Egyptian Company* began in 1988 as a joint venture established within the Ministry of Military Production, and has since constructed shooting ranges for the Egyptian Ministry of the Interior, the private security force of Sheikh Mohammed of the UAE, and has exported equipment and provided training to security forces in Bahrain, Kuwait, Libya, Qatar, and Saudi Arabia.¹⁵⁸

In addition to developing shooting ranges, the company also provides services in land reclamation, HVAC, electromechanical engineering, water and sanitation, telecom, and investment banking.¹⁵⁹ Al Saud is also a shareholder and board member for *Ismailia Misr*

¹⁵⁷ The National Training Center in Egypt is modeled on the one used by the US military in California (also designed/built by SAIC). Egyptian Chief of Staff General Halaby was said to have been very impressed upon visiting the US facilities shortly after the first Gulf War – and expressed a desire to see a parallel facility in Egypt. The initial contract for the National Training Center was signed in the mid-1990s, with the first phase completed around 2000. U.S. ARMY MATERIEL COMMAND: Logistics Oral History Interview with Major General William A. Fitzgerald; U.S. Army Security Assistance Command. 28 July 1992 - 24 June 1994

¹⁵⁸ http://misr-shooting.com/english/about_us.php. The factory is located in industrial zone A2 in Cairo.

¹⁵⁹ http://misr-shooting.com/english/about_us.php.

Refrigeration,¹⁶⁰ which has received sizeable loans from the state-owned *Banque Misr*.

The biannual joint military exercise “Bright Stars” also funnels millions into the coffers of the Egyptian military and the domestic businesses they designate to provide supplies for the operation; both American and Egyptian officials critical of the military’s role in the economy have cited unusually high fees paid to these local businesses under the auspices of the exercise.¹⁶¹

The military also issues tenders for its own projects to domestic private sector conglomerates, which in turn employ Egyptian military engineers and officers. Initially, in the late 1970s when the USACE began implementing large construction projects in Egypt, the latter’s military played a direct role in construction, with the Egyptian Air Force and Army Engineers closely involved in the design, procurement, construction and management phases. It was always the case that the military aid used to purchase weapons and construct military facilities must be spent with US companies – although Egyptian firms were usually joint venture partners in major construction projects, and some firms operating under the Ministry of Military Production also participated as subcontractors.¹⁶² These military firms included *Mohktar Ibrahim*, a subsidiary of the *National Company for Construction & Development*, which worked on Workshop 101, a

¹⁶⁰ *Ismailia Misr Refrigeration* is a subsidiary of *Ismailia Misr Poultry*, which is owned by *Arab Gathering Investment Company*. This firm is majority owned by *Dallah Al Baraka*, which is in turn owned by Saleh Kamel – widely believed to be a front for ownership by Saudi Prince Waleed Bin Talal.

¹⁶¹ Charles Clover and Roula Khalaf. 28 February 2011. “Egypt military uneasy over business ties.” *Financial Times*.

¹⁶² One example is El Nasr Building and Construction Company (formerly Egyptian Building Systems Company, or EGYCO, previous to the firm’s nationalization in 1964). El Nasr is a subsidiary of the National Company for Construction and Development, and worked on the Computer Center that formed part of the Hawkeye Program.

facility that built armored vehicles before the construction of the M1A1 production line at Factory 200. But over time this shifted – now firms affiliated with the Government of Egypt are explicitly prohibited from bidding on USACE contracts¹⁶³ (although this does not appear to be a hard and fast rule, since *Safi Water*, owned by the Egyptian military’s National Service Products Organization, has a contract to supply purified water to US Central Command, which dispenses it to the thousands of U.S. troops stationed in the region).¹⁶⁴

Today, these large construction contracts are awarded to an array of large multinational construction firms, architectural design firms, and equipment suppliers¹⁶⁵ including *Contrack International*, a subsidiary of *Orascom*, the Egyptian conglomerate owned by Naguib Sawiris. *Contrack International* worked on a number of USACE contracts, including the Western Ammunition Workshops in El Haikstep, the Peace Vector IV Air

¹⁶³ Because the different branches of the U.S. Military conclude arms sales agreements under FMS terms with the Egyptian Government, in the past these branches were often responsible for hiring the architects, engineers and construction firms that built the associated facilities, and may themselves have been more likely to contract with firms affiliated with the Egyptian military. However, the branches slowly transferred responsibility for construction projects (which account for a large chunk of US military aid to Egypt) to the USACE, which may have been less likely to rely on firms affiliated with the Egyptian military, accounting for some of this shift.

¹⁶⁴ Charles Clover and Roula Khalaf. 28 February 2011. “Egypt military uneasy over business ties.” *Financial Times*.

¹⁶⁵ These firms include: American International Contractors Inc./AICI, a subsidiary of the Greek conglomerate *Archirodon*; *Sorenson Gross*, which partnered with the Egyptian-owned construction firm *Osman Group*¹⁶⁵ on a number of military projects; Encorp International; Wallace O’Conner; Metcalf & Eddy International; the Frank E. Basil Company; General Dynamics; Burns & McDonnell Engineering; Black & Veatch; Melley Energy Systems; Turner International Industries; Willbros Butler; Perini International; EBASCO Overseas Corporation; Taylor Woodrow Inc.; Morgan International; Allen & Hoshall; J.A. Jones Construction; Interdyne; Rolls Royce Naval Marine Inc.; Philip Holzmann; A.G. Jan De Nul; Washington Group International; General Electric; BMAR & Associates; Blue Tee Corp.; Terex Corporation; Oshkosh Corporation; Stafford Development Company; Caterpillar; Putzmeister America; Tesmec; International Truck & Engine Corp.; Thrustmaster of Texas; War Horse Companies; Techmaster Inc.; Stanley Consultants; Jacobs Engineering; Michael Baker Jr. Inc.; Tetra Tech; CH2M Hill; and Louis Berger Group.

Bases in Gianaclis and Sakara, the Peace Vector V Air Force Base in El Bassateen, the Peace Vector VI Main Operating Air Force Base in Fayed, the Al Maza Airfield Systems at Al Maza Airbase, the F-16 Air Force Base Depot Facilities in Helwan, the Pacer Forge Facility Support project at Abu Sueir Air Base, the Spare Parts Main Depots 63, the Pier 7/8 Abu Qir Naval Base in Alexandria, and the C-130 Maintenance Hangar at West Air Base in Cairo.¹⁶⁶ Although the interests of the Egyptian military in maintaining the economic viability of public sector companies has often been used as a foil for this broader trend toward economic liberalization, private sector magnates like Sawiris (and the Osman family, as well as the al-Kharafi family of Kuwait) operate business enterprises that are deeply involved with Egyptian military construction and supply contracts. Although this looks like an example of private sector interests trumping the demands of the military, a very large number of Egyptian Army Engineers are employed by these contractors – often at greatly inflated salaries.¹⁶⁷

Domestic Subsidies to the Egyptian Military

Like Jordan's KADDB, Egyptian military factories also receive substantial subsidies directly from their own government (ie, not through foreign military aid), including through the massive agricultural and food processing operations (operated primarily under the NSPO) that provide for its enormous conscript workforce and network of

¹⁶⁶ Although Contrack was originally an American company, Orascom bought 45% of the firm in 1998, and now owns all of the company. Because Sawiris also holds U.S. citizenship, Contrack is eligible to bid on classified U.S. Government contracts as well, and the company – which has offices near the Pentagon in Virginia – has worked on various military installations overseas on behalf of the U.S. military in Iraq, Afghanistan, Bahrain, and Qatar.

¹⁶⁷ Robert Springborg. July/August 1987. "The President and the Field Marshal." *Middle East Report*, p15. Also see "A Special Report on Egypt: No Paradise." 15 July 2010. *The Economist*.

commissaries.¹⁶⁸ This is also the case in the area of energy inputs. Although many domestic manufacturers are able to skirt a law requiring that they pay the market rate for energy inputs, the military's enterprises are universally exempted from the requirement – paying only about 25% of the market price for petroleum inputs and around 50% for electricity.¹⁶⁹

In addition to traditional subsidies, the Egyptian military has also been able to exploit its control over aid-financed infrastructure that is not immediately identifiable as military infrastructure, including transportation facilities and public health services, which enhance the military's ability to subsidize its economic operations and generate profits for both the institution and high-ranking officers. One well-known case is the *International Medical Center*, which was equipped with state-of-the-art technology funded by \$163 million dollars in US military aid.¹⁷⁰ Although the facility was meant to provide free healthcare to the Egyptian military and their families, it is in fact being operated as a for-profit hospital, advertising its well-maintained facilities – including a “lavishly furnished Royal Suite” – and costly medical equipment to attract wealthy Egyptian civilians and international patients.¹⁷¹ The hospital was getting enormous subsidies (via US aid) to perform facility maintenance and purchase new equipment – allowing the military to pocket the proceeds from treating civilians. Although U.S.

¹⁶⁸ Robert Springborg. July/August 1987. “The President and the Field Marshal.” *Middle East Report*, p14.

¹⁶⁹ Robert Springborg. July/August 1987. “The President and the Field Marshal.” *Middle East Report*, p9.

¹⁷⁰ Charles Clover and Roula Khalaf. 28 February 2011. “Egypt military uneasy over business ties.” *Financial Times*.

¹⁷¹ Aram Roston and David Rohde. 5 March 2011. “Egyptian Army's Business Side Blurs Lines of U.S. Military Aid.” *New York Times*.

military officials in Egypt reported that financing for the hospital was cut off around 2006, several contracts for new medical equipment have been granted since then, in 2008 and again in 2010.¹⁷²

Yet another case is illustrated by the construction of a VIP airport at the Al Maza Air Force base, which was financed by US military aid and overseen by the USACE. \$300 million in US military aid also paid for a fleet of Gulfstream jets (plus \$10 million/year in fleet maintenance) that Egyptian military officials insisted would be used for mapping and surveying – but in fact were used for VIP junkets – and became a popular symbol of the government’s excesses.¹⁷³ A number of private companies operate charters from the Al Maza airfield for VIP clients, oil & gas companies, and tourism companies, many of which employ Egyptian Air Force pilots – and Gulfstream jets. If the model of the profit-making hospital venture is an indicator of the way aid translates into personal gain for high-ranking officials, then it is also likely that air transportation facilities and equipment are likewise used to generate revenues.

Egyptian military firms may also be able to gain access to foreign equipment by executing purchases of items destined for military use under the authority of other government agencies. One potential example was the recent procurement of equipment from the U.S.-based technology firm 3COM, which was made under a Ministry of

¹⁷² Charles Clover and Roula Khalaf. 28 February 2011. “Egypt military uneasy over business ties.” *Financial Times*. Also see the USACE’s Transatlantic Programs Center website, which lists past contracts granted under the US military’s aid program.

¹⁷³ Aram Roston and David Rohde. 5 March 2011. “Egyptian Army’s Business Side Blurs Lines of U.S. Military Aid.” *New York Times*.

Education initiative on e-learning, but 3COM's partner was *Arab International Optronics*, a subsidiary of the military's National Service Projects Organization. In a press release issued by the Egyptian Government, *Optronics* Chairman Major General Nabil Amer (the former Chairman of Helwan Iron Foundries, an MMP subsidiary) stated that his firm would also work in conjunction with 3COM on "other government initiatives."¹⁷⁴ Although it is impossible to determine from where the money to purchase the 3COM equipment came, the acquisition was likely financed by the Ministry of Education – with *Optronics* potentially tacking on its own list of desired equipment. 3COM's domestic distributor in Egypt (*Almona*) was one of 30 firms identified by the U.S. Embassy's commercial attaché as a consultant for the Egyptian Ministry of Defense, and is owned by Seifallah Fahmy, a member of the political committee of the now defunct ruling party (the NDP).¹⁷⁵

The military's control of maritime and inland transport, which have benefited from substantial USAID and USACE projects, also generates significant institutional benefits, since commercial shipping accounts for a significant portion of Egypt's economic activity. During the push to privatize state-owned enterprises, public sector firms were consolidated under the authority of state-owned holding companies, like the *Holding Company for Textiles Industries*, the *Food Industries Holding Company*, the *Holding Company for Mining and Refractories*, the *Holding Company for Metallurgical*

¹⁷⁴ 7 November 2002. "3Com signs cooperation agreement with Arab International Optronics." (Press release). www.ameinfo.com/11669.html - United Arab Emirates.

¹⁷⁵ <http://www.almona.net/docs/index.html>. Also see report compiled by US Department of State, Counselor for Commercial Affairs. Hammam Nasr. 1998. "Defense Trade Opportunities in Egypt – International Market Insight."

Industries, etc. Although these holding companies technically fall under the authority of the Ministry of Investment, The *Holding Company for Maritime & Land Transport* – which controls the country’s ports, container terminals, and shipbuilding companies – does not. Two of the holding company’s three executive board members are Naval Admirals, as is the company’s president.¹⁷⁶ Many of the constituent companies are also managed by military officials, including the Alexandria Shipyard,¹⁷⁷ General Egyptian Warehouses Company,¹⁷⁸ The Alexandria Container & Cargo Handling Company, which was founded by officers who formerly worked at the Alexandria Port Authority, which has been accused of monopolization of infrastructure and various other practices;¹⁷⁹ the Egyptian Marine Supply & Contracting Company; Suez Mechanical Stevedoring,¹⁸⁰ Damietta Container & Cargo Handling Company;¹⁸¹ Port Said Container & Cargo Handling Company;¹⁸² the Nile Company for Goods Transport,¹⁸³ and the National Navigation Company.¹⁸⁴ Military officials also manage Egypt’s several Port Authorities (which have substantial influence over the operations of maritime transport firms – both public and private), and the military also owns some 52% of the barges shipping goods

¹⁷⁶ These are Atef Hassan Mohamed Marouni, Mansour El Helbawy, and Mohamed Ahmad Ibrahim Youssef.

¹⁷⁷ Admiral Hussein Mohamed Sinara

¹⁷⁸ Admiral Mohamed Zaki (joined Navy in 1972; became CEO in 2006)

¹⁷⁹ Robert Springborg. July/August 1987. “The President and the Field Marshal.” *Middle East Report*, p8. The Chairman of this company is Admiral Ahmed Mansour el Arabi.

¹⁸⁰ Rear Admiral Mounir Saad Abu Samra is Chairman of the Egyptian Marine Supply & Contracting Company and Vice-Chairman of Suez Mechanical Stevedoring.

¹⁸¹ The Chairman is Rear Admiral Mohammed Saad Zaghloul.

¹⁸² The Chairman is Rear Admiral Alaa Al Din Nada.

¹⁸³ The Chairman is Admiral Mohamed Khalil.

¹⁸⁴ The Chairman is Vice Admiral Tamer Abdel Alim.

along the Nile River.¹⁸⁵ The military recently founded a new river transport company *National Nile for River Transport* (known as Nile Cargo),¹⁸⁶ which promptly received contracts to ship goods from several large state-owned conglomerates, and will benefit from a nearly \$30 million planned investment in river transport infrastructure from the state.¹⁸⁷

The actual shipment of defense equipment also offers the opportunity to make substantial profit – and the military’s control over significant portions of Egypt’s maritime and inland transportation infrastructure ensures that benefits accrue to military balance sheets as well as influential officers. Because the cost to ship the weapons is also financed by U.S. military aid (a perk for which few other military aid recipients qualify), there is little incentive for the state to impose any conditions to hold down costs, since the shipping contracts themselves are a form of patronage for military officers. One such officer is Hussein Kamal Salem, a former military intelligence official who founded the Egyptian-American Transport & Service Company (EATSCo) in 1979, just in time to benefit from the huge influx of U.S. weaponry facilitated by the Camp David Accords. An investigation by the U.S. Government found that EATSCo – which was awarded an exclusive contract to arrange shipment for more than \$3 billion worth of American military goods – submitted bills equal to four times the customary charge for a

¹⁸⁵ “Egypt: Transport & Logistics.” 25 May 2010. *Capital Research*, p18.

¹⁸⁶ In 2010, the Ministry of Defense & Military Production issued Decree No. 3 to establish the National Nile for River Transport Company. “Egypt: Transport & Logistics.” 25 May 2010. *Capital Research*, p18.

¹⁸⁷ “NRPMC Inaugurates its River Port in Tanash with Strategic Shipments of Wheat.” (Press release). 23 February 2010. *Zawya.com*.

comparable shipment.¹⁸⁸ Although Salem eventually pled guilty to overcharging the U.S. Government and paid a small fee,¹⁸⁹ he went on to become a prominent businessman and close confidante of President Mubarak, who is now living out his exile in one of the many resort properties owned by Salem's investment company *HSK Capital*.¹⁹⁰ He is also on the board of a subsidiary of the influential telecommunications firm *Alkan Group*,¹⁹¹ which is listed in a U.S. State Department document as a consultant for the Egyptian military. Another case is Admiral Mohamed Khalil, the Chairman of *Nile Company for Goods Transport*, an HCMLT subsidiary that provides freight forwarding and container services out of Alexandria. Khalil also owns a much smaller company called *New Mar Med*, which also operates out of Dekheila Port in Alexandria, importing life rafts from China [likely aboard *Nile Company* vessels] and selling them to customers at the port.¹⁹² Several MMP ventures, such as *Abu Kir Engineering Industries*, also offer transportation and warehousing services for non-military commercial producers,¹⁹³ and

¹⁸⁸ Al Kamen and Scott Armstrong. 1 October 1982. "Cost of Transporting Arms to Egypt Probed by Justice." *The Washington Post*. Two CIA agents were also implicated in the deal as shareholders in EATSCo, which was incorporated in Virginia, since the arms contracts stipulated that US firms must be used to ship the material. Both agents insist the deal was okayed by the Pentagon in an effort to solidify relations with Egypt by passing on bribes to then-President Sadat, as well as Mubarak. Also see Joseph J. Trento. Chapter 26: The EATSCO Cover Up, p260-70. *Prelude to Terror: Edwin P. Wilson and the Legacy of America's Private Intelligence Network*. New York: Avalon Publishing.

¹⁸⁹ The USG investigation found \$8 million in overcharges, but only \$3 million was repaid through the firm, and Salem himself was only charged \$40,000.

¹⁹⁰ Avni Patel. 1 March 2011. "Where's Mubarak's Money? Ask 'Front Man' Hussein Salem." ABC News.

¹⁹¹ When Alkan Group lost to Orascom in a bid to takeover the state-owned MoboNil, the government issued a license for a second mobile phone operator to placate the group's owners. Timothy Mitchell. December 1999. "No Factories? No Problems: The Logic of Neo-Liberalism in Egypt." *Review of African Political Economy*. 26(82): 455-468.

¹⁹² <http://www.made-in-china.com/traderoom/newarmed>

¹⁹³ Zawya Profile.

because the military has a large fleet of heavy trucks at its disposal, these operations also provide for money-making opportunities.

Defense Offsets in Egypt and Jordan: Hiding in Plain View

Because Egypt and Jordan rely primarily on foreign aid, loans, preferential credit terms, and other subsidies to finance their military procurement, their offset programs have often drawn criticism for alleged ‘double-dipping,’ that is getting their equipment for free and in turn requesting *additional* benefits from private firms – including those whose host governments are major aid donors. The clearest evidence of this criticism was a major GAO report commissioned by the U.S. Congress in 1993-94 to look into offset programs in Egypt, Israel, Turkey and Greece – then the four largest recipients of U.S. military aid, and also some of the largest beneficiaries of defense offsets.¹⁹⁴ Unfortunately, the years covered by the GAO study are also the years in which the U.S. Government collected no comprehensive data on defense offsets, since responsibility for data-gathering and compiling reports was transferred from the Office of Management & Budget (OMB) in the late 1980s, but not taken up by the Bureau of Industry & Security (BIS) until 1995. However there is some anecdotal material that points to Egypt’s offset history, including the transcript of a speech delivered by then-OMB Director John H. Eisenhour to the Defense Industry Offset Association’s (DIOA) annual Spring meeting in 1989 which states that, “Egypt has also been authorized to use FMS financing for directed offsets.”¹⁹⁵

¹⁹⁴ GAO. 22 June 1994. “Military Exports: Concerns over Offsets Generated with U.S. Foreign Military Financing Program Funds” GAO/NSIAD-94-127.

¹⁹⁵ “Offsets in Military Exports: US Government Policy.” John H. Eisenhour, Chief, International Security Affairs Branch, Office of Management and Budget. Extract of Remarks presented to the Spring Meeting of the Defense Industry Offset Association in Scottsdale, Arizona. 9 May 1989.

In response to this criticism, Egypt adapted its offset techniques, and thus never appears in the BIS reports, even during the early period when figures were still being reported for individual countries. Despite the fact that co-production (the earliest and still quintessential form of offset) is still a major component of Egyptian procurement, DSCA announcements on sales to Cairo always include the disclaimer: “There are no known offsets involved in this sale.” Since co-production is still technically included in the BIS working definition of defense offsets, it is unclear how this statement could be factually accurate.¹⁹⁶ Periodic USG efforts to restrict the use of offsets in the defense trade – such as the creation of the Interagency Offset Steering Committee, which was tasked with convening talks with foreign governments on eliminating or reducing offsets – also include Egypt as a participant. It is unclear why Egyptian officials would be invited to participate in these talks if there were no offset agreements concluded between U.S. firms and the Egyptian military. Perhaps some Egyptian co-production activities – such as the M1A1 tanks – have been grandfathered in, and thus are not subject to U.S. regulations banning the provision of offsets in sales involving U.S. military aid funds – however new sales continue to be concluded with co-production requirements, including one with the U.S. firm United Defense in 2007.

Epicos – an Athens-based business intelligence publication that serves clients in the offset industry – reports that due to political pressure the Egyptian military demands

¹⁹⁶ Announcement of talks appeared in Federal Register: <http://fedgovcontracts.com/pe00-83.htm>. A lawyer for General Dynamics (one of the largest US defense firms) also noted the legal inconsistencies implied by this statement in a 2011 article published in the *Public Contract Law Journal*, in which the author states, “This language [“there are no known offsets”] seems to imply that the U.S. Government, as the broker for the FMS case, has special insight into the transaction and is almost certifying that there are, in fact, no offsets. Nothing could be further from the truth...[O]ffset discussions take place outside of government earshot...[A]nd the U.S. Government supposedly remains blissfully ignorant of their [offsets] existence.”

informal “concessions” and “discounts” in lieu of formal offset programs.¹⁹⁷ Blenheim Capital – another offset consultancy firm – advised an audience at the 2009 Abu Dhabi International Offset Conference (ADIOC) that Egypt’s “increasing focus on industrial participation [offsets] as a competitive discriminator requires participating contractors to identify local beneficiaries.”¹⁹⁸ However, the nature of these concessions is doubly opaque, because there is a complete information blackout on the side of the Egyptian government. Ironically, the political sensitivities over Egyptian offsets – and the subsequent decision by U.S. policy makers to remove the American government from the equation – left the practice of offset provision largely in place, but transferred responsibility for the negotiation and implementation to Egyptian military officials and executives from U.S. defense firms.

In fact, the 1994 GAO report referenced above appears to be the last serious official inquiry into the use of offsets in Egypt. It states that “brokers” and “independent contractors” were employed by U.S. contractors to fulfill their offset obligations – which sounds significantly like the “fixers,” “agents” and “intermediaries” that have historically permeated the region’s arms trade.¹⁹⁹ The result was that official channels disappeared, while relationships between individual Egyptian officers, their agents, and American executives became more important – and the Egyptian military became more

¹⁹⁷ “Core country offset reports: Egypt.” February 2009, Epicos.com (accessed 30 June 2009). According to the GAO, “concessions” are “commercial compensation practices whereby capabilities and items are given free of charge to the procuring country.” However, it is unclear if Epicos is using the term in the same sense as the GAO, since the term “concession” has a broad meaning in general usage.

¹⁹⁸ “Offsets in North Africa: Update of Activities.” Blenheim Capital Partners. Report presented at the 2009 Abu Dhabi International Offset Conference.

¹⁹⁹ GAO Report. 22 June 1994. “Military Exports: Concerns Over Offsets Generated With U.S. Foreign Military Financing Program Funds.” GAO/NSIAD-94-127, p19.

economically independent. The fact that the Egyptian army ultimately withheld its support for Mubarak during the recent uprisings may have been a reflection of this independence, since Egyptian military officials perceived (rightly or wrongly) that their commercial ties with U.S. defense firms had become independent of Mubarak’s presidency. Judging by the continued flow of military equipment to Egypt – they may indeed have been correct.²⁰⁰

Likewise, Jordan has also never appeared in a U.S. Government report on defense offsets, although this could be due to the fact that the BIS stopped reporting individual country figures around the same time that Jordan instituted its requirement that foreign sellers enter into joint ventures with KADDB.²⁰¹ Although Jordanian officials claim that Jordan has no formal offset policy, they are careful to insist that they reap the benefits of the practice. In an interview with the editor of the *Countertrade and Offset Newsletter*, an industry trade publication, the CEO of KADDB said:

We encourage that whenever we do an important procurement part of it is manufactured in Jordan as much as possible. *Although it is not technically described as an offset*, it is something that we would like to do because we would like to create jobs for our people. [my italics]

Likewise, spokespersons for the foreign firms entering into joint venture partnerships with KADDB make it clear that access to the Jordanian market is dependent on co-production. The CEO of *RiverHawk* – the U.S. shipbuilding company co-producing

²⁰⁰ See for example, a report on Egypt produced by the U.S. Department of Commerce, subtitled “Getting Back to Business,” which cites the “booming” import in security-related products in Egypt. Margaret Keshishian. “Egypt: Export Opportunities in the Security & Defense Sectors.” U.S. Dept of Commerce. Presentation slides from US Embassy in Cairo: Commercial Section. 2011.

²⁰¹ Joint ventures are also defined as a form of offset by U.S. Government agencies, including the BIS and the GAO.

patrol vessels with KADDB – stated that the joint partnership would enable *RiverHawk* to “exchange know-how with the Bureau” and market the vessels to both the Jordan Armed Forces and other militaries in the region.²⁰² This is echoed by the country report produced by *Epicos* (the industry trade publication referred to above) which states that KADDB’s strategy is to form “limited liability joint venture operations – often enough in the context of unofficial offset requirements.” So, despite the economic pitfalls inherent in granting offsets in military contracts, it appears that the coordinated response of actors on all sides has been to tailor terminology and cutback on information-gathering rather than fundamentally reform the system. Tellingly, both states also deploy representatives to regional offset conferences – usually sponsored jointly by a consortium of defense producers, offset brokers and regional governments – but stop short of characterizing their own supplemental procurement activities as “offsets.” Defense offsets in Egypt and Jordan are also obscured in another way – primarily in terms of their budgetary impact. Part of the appeal of defense offsets as a form of domestic subsidy to militaries rests on the perception that they are ‘self-financing’ because the foreign partner is fronting the capital for the production activities. Media reports help perpetuate this myth, as do statements issued by members of the indigenous military elite in procuring countries.

The Intensification of Offset Activity and Military Production in Egypt

Jordan’s defense industrial efforts are clearly intensifying, since a mere decade ago Amman had no military-industrial capacity at all, and the entry of private sector actors further suggests there are increasing opportunities available in that sector. In contrast,

²⁰² “KADDB signs an agreement of joint venture with RiverHawk WorldWide LLC.” (press release). 18 May 2009. <http://www.ameinfo.com/196943.html>

Egypt's military-industrial production appears to be enjoying a revival under the current system of offset-driven incentives after leveling off somewhat during the late 1990s. In addition to the Chinese and Pakistani co-production projects referenced above, there is evidence that the Egyptian military is intensifying its co-production and supply avenues to enhance its own defense production capacity. This includes reports from the US Embassy in Cairo in 2010 that TPT (third party transfer) requests from the Egyptian Armament Authority had increased considerably, signaling an expansion in Egypt's efforts to export weapons that contained technology of US-origin, including sales of M1A1 tanks to Iraq and ammunition to Saudi Arabia, as well as providing technical support for Turkey's arsenal of Hawk Missiles.²⁰³ Egyptian military officials have also recently requested permission to give tours of the tank factory (where M1A1s are produced) to officials from Iraq and tours of other military-production facilities to Tunisian defense officials.²⁰⁴

In 2008, the Pentagon announced that the American firm *Swiftships* (a subsidiary of *Halter Marine*) had signed a \$13 million contract to sell four 28-metre patrol craft to Egypt, but in February 2011 the contract was modified to allow for an Egyptian shipyard to "assemble" two of the patrol craft and "co-produce" the other two – at an increased cost of \$20 million.²⁰⁵ The same year Egypt signed a similar agreement with the Turkish

²⁰³ Embassy Cairo. 28 February 2010. "TPT Blanket Approval for Non-technology Transfer Requests."

²⁰⁴ Embassy Cairo. 17 June 2009. "Egypt responds positively to End-Use Training."

²⁰⁵ According to the Pentagon announcement, the contract includes "two co-assembly kits and two co-production kits to support the construction of the four 28-meter CPCs [coastal patrol crafts]. These kits, consisting of all material necessary for construction, will be shipped to Alexandria, Egypt, for construction by an Egyptian workforce, with oversight by Swiftships. US Department of Defense; issued 10 February 2011.

company *Yonca-Onuk JV* to manufacture six Onuk MRTTP-20 fast-intervention crafts “with technology transfer” at the military-owned *Alexandria Shipyard*.²⁰⁶ Industry trade publications have also reported that Northrop Grumman is in talks with the Egyptian Military to set up domestic facilities to replace the engines and navigation equipment in the country’s fleet of UAVs.²⁰⁷ The Egyptian Military branches also frequently supply GFP (Government Furnished Property) for certain weapons systems, such as the cryptographic, IFF (identification friend or foe technology), and refueling equipment the Egyptian Navy provided when it acquired several FAC (fast-attack craft) from *Lockheed Martin* in the early 2000s.²⁰⁸

In 2003, an executive at AOI claimed that his organization’s diversification strategy and a jump in demand had allowed them to overcome the limitations imposed by the withdrawal of Gulf State financing in the early 1980s. He also suggested that leaders in Qatar, Saudi Arabia, and the UAE should consider re-applying for membership, since AOI’s leaders always insisted the body would remain open for Egypt’s “Arab brothers.”²⁰⁹ These efforts suggest that we may see a further expansion in related commercial production in military factories as well – as was the case with the new Chrysler commercial co-production program and the Chinese air-conditioning assembly facility mentioned above.

²⁰⁶ Ipek Yezdani. 19 September 2011. “Egypt eyes to buy Turkish unmanned aerial vehicles.” *Hurriyet Daily News* (Turkey).

²⁰⁷ Peter La Franchi. 5 July 2007. “Egypt resumes Scarab UAV upgrade talks.” *FlightGlobal*. Egypt was actually one of the first countries in the region to employ UAVs; *Teledyne Ryan* developed the Model 324 *Scarab* for sale to Egypt in the early 1980s, when Egypt also acquired a number of BAE’s *SkyEye* UAVs.

²⁰⁸ <http://www.amiinter.com/samples/egypt/EG1401.html>

²⁰⁹ “Egyptian defence giant invites former partners.” 18 March 2003. *Asia Africa Intelligence Wire*.

Defense Offsets as Innovation in Patronage Politics

It is the argument of this project that defense offsets represent attempts by incumbent political elites to upgrade their patronage practices in order to take advantage of new opportunities (here, made possible by the region's booming arms trade) and adapt to prevailing conditions that shape the opportunities available to these regimes. Just as defense offsets in the Gulf mirror earlier forms of patronage, so do offsets in Egypt and Jordan build upon the system of privileges already available to the military: large equipment budgets, substantial negotiating leverage, sizeable subsidy programs, control of valuable assets like transportation infrastructure, raw materials, land, and labor, as well as the housing, education and pension programs they continue to enjoy even as the rest of the welfare state shrinks under the pressure of economic restructuring. Because regime authority in many Arab States is predicated on their allocation of economic privileges, ruling elites are compelled to generate resources that can be distributed to important constituencies.²¹⁰ Defense offsets are one of these resources, and part of a comprehensive strategy designed to tap new sources of privilege that emerge from the economic exchanges that now dominate regional trade.

Regional leaders have responded similarly to previous macro-shifts in regional political and economic realities that either obstructed access to existing sources of patronage or demonstrated the potential of new ones. In the past, switching superpower allegiances was one method of attenuating such challenges. In 1950s Jordan for example, growing political unrest over corruption led the British to demand political reform in exchange for

²¹⁰ Henry, Clement and Richard Springborg. 2001. Globalization and the Politics of Development in the Middle East. Cambridge University Press, p11.

continued aid.²¹¹ But instead of dismantling these aid-financed patronage institutions – which formed the very foundations of political support for the monarchy – King Hussein orchestrated even more unrest by firing his leftist prime minister and imposing martial law, quickly convincing the Americans that a substantial (and unconditional) aid package was necessary to counter the growing threat of Pan-Arab socialism.²¹² Similarly, President Sadat distanced his government from his erstwhile Soviet patrons by pursuing a rapprochement with the Americans, which ultimately supplied him with the economic aid he needed to lavish the military with new weapons,²¹³ provide the politically powerful officer corps with privileged access to business opportunities in the nascent private sector economy, and renew many of the domestic subsidies that had prevailed under his predecessor.²¹⁴ The Gulf States have demonstrated an analogous capability to adapt their distributional arrangements, primarily by expanding state patronage to incorporate groups of modernizing business elites and technocratic-minded civil servants in order to cultivate a buffer of support against anti-regime sentiment from radical Islamists, while also maintaining the system of privileges that binds the traditional merchant elites to their respective ruling families.

²¹¹ Moore and Peters. “Beyond Boom and Bust,” p268.

²¹² Peters argues that these same corrupt institutions persist today alongside parallel institutions financed largely by U.S. aid – the present-day legacy of the original aid package rushed through by President Eisenhower in 1957. These donor-sponsored institutions provide public and social services to the Jordanian people, while the institutions administered by the regime operate as employment mills for key political constituencies.

²¹³ This new weaponry was especially significant because denials and delays in arms deliveries by the Soviets were widely blamed for Egypt’s abysmal performance in the 1967 war with Israel, when the equipment only arrived after the fighting was over. See Keith Krause. September 1991. “Military Statecraft: Power and Influence in Soviet and American Arms Transfer Relationships.” *International Studies Quarterly*. 35(3): P318-9.

²¹⁴ Marvin Weinbaum. April 1985. “Egypt’s ‘Infitah’ and the Politics of U.S. Economic Assistance.” *Middle Eastern Studies*. 21(2): 206-222.

Similar political and economic shifts continue to confront regional rulers, who realize they must innovate and update their patronage-distribution activities to conform to these new demands and capitalize on their niche positions (as oil exporters, important geostrategic allies, aid recipients, and major defense customers) in the global economy. Because defense goods and services account for an increasingly large proportion of regional trade, it is a convenient (and abundant) channel for the transfer of patronage. Between 2001 and 2008 the value of U.S. arms transfer agreements with the Middle East was equal to 25% of all U.S. goods and services exported to the region.²¹⁵ The total stock of U.S. FDI in the Middle East as of 2004 was \$28 billion (1.4% of global U.S. FDI). A very conservative estimate of U.S. offsets as of 2004 is about \$5.1 billion,²¹⁶ meaning offsets during that period accounted for 18% of all U.S. investment in the region, most of which is concentrated in holding companies and other investment vehicles operated by a small number of prominent families²¹⁷ or in the oil and gas sector.²¹⁸

The course of economic liberalization in the region has also fundamentally altered both the composition of available patronage sources and the socioeconomic character of those

²¹⁵ According to the “Survey of Current Business” published by the Bureau of Economic Analysis in the U.S. Department of Commerce, U.S. exports of goods and services during the period 2001-2008 were equal to \$235 billion. During that same period, the Congressional Research Service reported arms transfer agreements between the U.S. and Middle East governments amounting to \$59 billion. “Conventional Arms Transfers to Developing Nations, 2001-2008.” p14.

²¹⁶ Figure from U.S. Bureau of Industry and Security annual offset report.

²¹⁷ U.S. Direct Investment Abroad: Financial Outflows Without Current Cost Adjustment, 2009. U.S. Department of Commerce, Bureau of Economic Analysis. “International Economic Accounts: U.S. Direct Investment Abroad: Balance of Payments and Direct Investment Position Data. <http://www.bea.gov/international/>

²¹⁸ “Middle East Free Trade Area: Progress Report.” July 3, 2006. Congressional Research Service. p6.

groups the regimes target for distribution. The traditional realms of state largesse – such as employment in the bureaucracy – are no longer compatible with the strictures of the global economy (or the demands of the international institutions that shape it). Instead, rulers look toward arenas such as the international arms trade to supply rents. The increasing prevalence of offset-generated joint ventures between domestic businessmen and defense firms are an excellent example, as are the partnerships that defense firms create with state-owned companies, which although nominally public entities, nonetheless become part of a private-public sector partnership, a favorite concept of development theorists and proponents of liberal reform.

By granting privileged access to the mechanisms of commerce, these regimes can supply patronage while also (by all appearances) adhering to the dictates of economic liberalism.²¹⁹ Likewise, the peasants, bureaucrats and urban poor that were the recipients of state oblations in the immediate post-independence period have been abandoned in favor of a more narrow pact that favors the military – including individual elite officers with extensive business interests of their own as well as the larger collective institution. These groups – the ‘winners’ able to exploit changes in regional economic policy – are now the elites that regional regimes must rely on for support. The emphasis on

²¹⁹ It is interesting to note that, although directing offset-generated investment to domestic merchants and/or military producers does not violate liberal economic standards according to the behavior of the *procuring* state – since the investment is portrayed as a type of FDI that goes to the most viable sector in the domestic economy – the practice of granting offsets is certainly a violation of free-market principles according to the behavior of the exporting firm, since it is the differential/particularized investment that determines the competitiveness of the firms’ bids – not the quality or price of their products. This double-standard: that the advanced industrial democracies should be able to subsidize their exports and engage in other non-competitive activities, while the developing countries should stick to the principles of liberal economics, is present in nearly all sectors of the global economy, but remains most entrenched in the global arms trade, where sales and negotiations are exempted from global trade regimes.

transparency and good governance also means that the traditional methods of privileging loyal elites, such as “sweetheart loans,” no-bid government contracts and the sale of public land or state-owned factories for nominal fees, are highly contentious and increasingly visible – even poor peasants identify anecdotal cases of cronyism and associate these with their dire living conditions, as do opposition activists, small-business owners, the IMF and World Bank and countless local NGOs.²²⁰ This contributes to the utility of defense offsets, which are not only obscure, but also easier to characterize as either apolitical private sector investment or efforts to enhance military self-reliance. And the perks that accompany offsets – low interest loans, etc. – are justified on the basis that they are achieved through financing provided by foreign firms or that the manufactured output contributes to much-needed export earnings.

Defense offsets may also factor into regime evaluations regarding internal security, since they provide access to sensitive technologies and weapons that can be used to repress internal opposition – even if exports of particular weapons systems cease, the facilities and capabilities transferred under offset programs remain. Despite the existence of legal controls, contractors are routinely convicted of violations of laws governing exports. In all, out of 18 coproduction programs examined by the GAO in 1989, five involved unauthorized technology transfer, and according to the authors of the report, “with few exceptions, no coproduction programs were directly monitored to ensure compliance with MOUs either by the responsible military services or by government personnel overseas.” Data on offset programs that include co-production of weapons systems is collected by

²²⁰ “A Special Report on Egypt: No Paradise.” *The Economist*. 15 July 2010.

the Department of Defense's Office of Foreign Contracting – and that data is, by GAO accounts, neither credible nor useful.²²¹ A 1989 report by the GAO indicated that:

DOD, State and other US government agencies do not directly manage or monitor coproduction programs to ensure compliance with agreement restrictions on production quantities and third-country sales.

Another GAO report, referenced in the testimony of William R. Hawkins, Senior Fellow at the U.S. Business and Industry Council, states:

The Office [of Foreign Contracting] has no mechanism for ensuring that contractors provide required foreign subcontract information, which contributes to the underrepresentation of foreign subcontract activity. Our review of selected subcontracts disclosed instances in which foreign subcontracts were not reported to the Office because contractors were unaware of the reporting requirement or misunderstood the criteria for reporting a foreign subcontract. The Office's poor database management also compromises the credibility and usefulness of its foreign subcontract data.²²²

It is likely that many of these same problems continue, and will be exacerbated as offset activity intensifies. This could prove a significant problem in the Middle East, where companies working with US prime contractors have been convicted in US federal courts of exporting controlled items and technologies to regimes that routinely violate norms of human rights, including Iran, Iraq, Libya and Syria. Although Egypt and Jordan are comparatively more benign authoritarian states, the increased access they gain to

²²¹ For instance, the BIS report lists some countries in the Middle East that require offsets even though it does not provide relevant figures; but it also completely leaves out other countries that routinely require offsets, such as Jordan and Oman. Testimony of William R. Hawkins, Senior Fellow, U.S. Business and Industry Council. 13 July 2007. "U.S.-China Commission Hearing on China's Proliferation and the Impact of Trade Policy on Defense Industries in the United States and China." Hawkins sites a GAO report that states, "The Office [of Foreign Contracting] has no mechanism for ensuring that contractors provide required foreign subcontract information, which contributes to the underrepresentation of foreign subcontract activity. Our review of selected subcontracts disclosed instances in which foreign subcontracts were not reported to the Office because contractors were unaware of the reporting requirement or misunderstood the criteria for reporting a foreign subcontract. The Office's poor database management also compromises the credibility and usefulness of its foreign subcontract data."

²²² Testimony of William R. Hawkins, Senior Fellow, U.S. Business and Industry Council. 13 July 2007. "U.S.-China Commission Hearing on China's Proliferation and the Impact of Trade Policy on Defense Industries in the United States and China."

sensitive technologies under coproduction arrangements will only enhance their ability to repress opposition, adding an enhanced coercive capacity to the existing structures of economic patronage that contribute to regime resilience.

The next and final chapter of this project will reiterate some of the general conclusions of this research project and address some of its limitations. It will also explore how offset activity might inform our understanding of the current domestic uprisings, especially in the case of Egypt, as well as how a shift in defense offset activity in the Gulf may be a reflection of the rising political profile of regional militaries. Because defense offsets have clear beneficiaries in all of the cases examined here, they provide a useful avenue for gauging the relative power of domestic constituencies, as well as the methods that regimes are likely to employ in order to maintain the support of critical groups during periods of intensified conflict (and enhance the distribution of patronage to groups that are increasing their levels of political influence). The chapter will conclude by introducing some material on the defense offset activities of other developing countries to provide some comparative insights and draw out some of the unique features that characterize this form of patronage in the Arab World, before addressing some potential areas of future research.

Chapter 5: Loose Ends & Looking Forward

This final chapter will address a number of issues. First, I will briefly note what I believe are the limitations of the project and reiterate what added-value the project represents. Second, I will provide some broader context by explaining how defense offsets fit into larger trends in the global economy, including the globalization of military production, recent trends in financial innovation, and evolving norms regarding corruption and bribery in the defense trade. I will also make some broad comparisons of defense offset programs in other countries, and address an emergent trend in Gulf State defense offset policy that suggests a renewed interest in indigenous arms production. Lastly, in light of the dramatic changes seen in Egypt since the resignation of President Hosni Mubarak, I will address some of the most recent collaborative military production activities in Egypt and outline what this may say about the shifting political role of the Egyptian Military.

What this Project Does (and Does Not) Attempt to Accomplish

The goals of this project have been threefold. First, to explore and document a phenomenon that has not received critical scholarly attention; second, to incorporate this material into the general theoretical literature on Middle East Political Economy, specifically that which deals with the distributive state and the fiscal sociology approach. The third aim of this project has been to examine how defense offsets have been integrated into the patronage systems of regimes where clientelism and the discriminatory allocation of economic privileges comprises an important aspect of regime maintenance strategies. With respect to this third goal, my intent has been to shed light on the

multiplicity of channels available to regimes seeking to secure the loyalty of domestic elites through the transfer of concrete economic privileges.

My intent has *not* been to produce some quantifiable measure of regime loyalty secured through the provision of defense offsets in relation to other sources of patronage. To develop such a measure would demand a number of dubious theoretical and empirical assumptions. For one thing, the internal calculus whereby these domestic elites ‘decide’ to grant their loyalty to the ruling regime is a complex one that is difficult (if not impossible) to observe, which leaves us to *infer* loyalty from their observed behavior (mainly their acquiescence or active support of regime authority). In reality, this loyalty derives from a complex and heterogeneous blend of material interests, socialization, fear of repression, inertia, and a number of other factors that are both unique to individuals and non-static. Measuring the relative weight of offset-related benefits in the decision calculus of domestic elites would require that we develop a measure of the patronage value each elite actor or elite institution has received from the regime (expressed in dollar values or some other convertible unit) and attempt to discern some threshold of patronage that ensures loyalty to the incumbent regime. Such an exercise is not only beyond the scope of this project, but also I believe, beyond the ability of scientists to develop.

Second, although I have made every effort to evaluate the available numerical data on offsets and present the shortcomings inherent in the accuracy of these figures, they should not be used to gauge the relative weight of defense offsets compared with other sources of patronage (such as foreign aid or mineral rents) in order to determine which sources

are the most influential. Both Chapter 1 and Chapter 2 highlight some of the methods used by defense firms, offset brokers, and governments to inflate or minimize values associated with defense offsets, which makes the values too unreliable (and the biases too unpredictable) to be used in statistical analysis. Third, operationalizing the concepts and processes examined in the previous chapters in order to undertake an analysis that would yield some numerical value of the variance in patronage attributable to defense offsets would require a modularization of these concepts and processes in order to compare quantitatively across cases. I do not believe that such modularization would accurately reflect the behavior of these concepts and processes in practice, which is why this project has focused on qualitative comparisons.

Although I do hope that this project represents a meaningful addition to scholarly understanding of patronage structures in the Middle East, it is also my hope that by elucidating the role of Western interests we can develop a more critical understanding of the functioning of the rentier state, specifically how beneficiaries on both sides of the defense offset system (and indeed, the systems of global oil markets and foreign aid as well) have shaped the exchange in order to derive particularistic benefits and ensure the growth and expansion of the exchange itself.

Defense Offsets in the Context of the Global Economy

Defense offsets are not only important indicators of change in the global arms trade. They also reflect deeper structural transformations, including the globalization of production, the ‘financialization’ of the global economy, and the evolving nature of

foreign direct investment – three important areas of global economic exchange that will be examined here. As I hope to demonstrate below, concentrating our focus on one particular type of transaction (here, defense offsets) reveals a great deal about the contemporary workings of the global economy and how it impacts discrete economic actors, including political incumbents and their influential domestic allies.

Defense Offsets and the Globalization of Military Production

William I. Robinson and other critical political economists have suggested that the emergent globalization of production has fundamentally altered the world economy. Theorists of the globalization of production argue this new phase has resulted in a transnational division of labor and capital accumulation that no longer adheres to our conventional understanding of core economies engaged in complex manufacturing and service provision and peripheral economies supplying raw materials and simple inputs. Instead, contemporary economic relations are defined by a new hierarchy in which transnational corporations operate above state boundaries in a system of globalized production.

The clearest examples of this phenomenon in the defense industry are systems like the JSF-35 (Joint Strike Fighter) and the ESSM (Evolved Sea Sparrow Missile) – both of which are collaborative projects with research and development (R&D), manufacturing, and testing facilities spread out across multiple countries. Although these weapons were conceived as collaborative projects from the beginning, most of the defense systems currently assembled in multiple locations (often quite far from one-another) have evolved

over time into collaborative production projects. The fact that new systems are being developed as joint projects *from the outset* (rather than slowly incorporating alternative sites for production) suggests that the trend of globalized production will intensify. The concept of globalized production provides a useful framework for understanding the phenomenon of offset-driven investment in commercial and defense enterprises in the Middle East.

A number of trends have transformed defense firms into transnational entities increasingly independent from their original host states. These include the practice of licensing production in overseas factories, building additional production facilities with domestic firms in major purchasing states, and forming strategic partnerships in order to qualify as a local producer or secure additional political support for the development of new weapons platforms.¹ One good example of a joint venture created to allow a major foreign firm to qualify as a local producer is that of *Emiraje*. *Emiraje* is a joint venture created in 2009 by the European defense consortium *EADS* and *Emirates Advanced Investments*, a company owned by a retired Emirati colonel.² Despite *Emiraje*'s relatively short pedigree, it was awarded a \$550 million C4I contract (command, control, communications, computers and intelligence) from the UAE Government in early 2011.

¹ Cases of collaboration are increasingly common. Some strategic partnerships include: Lockheed and Rafale (France); Northrop Grumman and Rafale; Northrop Grumman and EADS (EADS is a consortium of defense producers in France, Germany and Spain); Boeing and Alenia Marconi (Marconi was itself a 50/50 JV between the UK's BAE and Italy's Finmeccanica); BAE and Saab (Sweden); Finmeccanica and Thales; and Finmeccanica and Raytheon. See Mark A. Lorell, Julia Lowell, Richard M. Moore, Victoria Greenfield, and Katia Vlachos. 2002. "Going Global? U.S. Government Policy and the Defense Aerospace Industry." Santa Monica, California: RAND. (report prepared for the United States Air Force).

² At least two of EAI's subsidiaries are joint ventures with International Golden Group/IGG, another firm owned by a retired Emirati military official. The state-owned (and offset-funded) Tawazun investment fund is a major shareholder in IGG, and so is also indirectly supporting EAI.

This was the largest contract signed with any company at Abu Dhabi's annual international defense exhibition (IDEX). In addition to *Emiraje's* questionable capacity (given its brief existence) other evidence also suggests it is essentially a shell company designed to qualify *EADS* as a local vendor and provide its Emirati 'owner' with another income stream. These include *Emiraje's* efforts to recruit staff, which are all conducted by *EADS*' through the latter's website.³ Despite efforts to portray the formation of these companies as movements toward "Emiratization," the management personnel of *Emiraje* (and most offset-related ventures) are primarily foreigners with long histories of working for Western defense contractors.

As transnational entities, large defense firms actively disperse the supply chains, research facilities, and service depots that support their products. These processes not only transfer skilled Western technicians and financial managers into new joint venture divisions abroad, but also integrate domestic subcontractors and suppliers in the Arab World and elsewhere into the global system of military production. The erstwhile "host states" of these firms (mostly the U.S. and Europe, but also many of the so-called emerging economies) have less and less control over their overseas defense production and research activities. Under-regulation of the global financial markets has also contributed to the geographical dispersion of these firms by facilitating their use of foreign sales corporations and offshore banking hubs. The growth of subsidiaries, foreign sales corporations, and joint ventures have made these firms truly transnational entities that are

³ EAI has several subsidiaries that appear to exist for the sole purpose of providing international firms with a domestic agent. Including Global Aerospace Logistics, which signed similar agreements with Honeywell Aerospace, Lockheed Martin, and Eurocopter in 2011, as well as GECI International (of France) in 2009.

increasingly independent of their original host states and the complex web of international trade and financial regulations meant to govern the global economy.

Direct offsets are of course a key driver of the globalization of defense production. The resulting spread of military-industrial supply chains, service depots, research facilities, overseas distributors, influential shareholders, and collaborative training networks generate their own internal momentum by lowering the transaction costs of establishing additional overseas operations. As the necessary infrastructure and human capital are put in place through offset agreements, the number of overseas facilities equipped to engage in the production of defense material increases, which further adds to the momentum for direct offsets, and the cycle continues.

This is illustrated by the example of *Advanced Systems Integration* (ASI), a company set up on behalf of the UAE's offset program by the California-based firm *Decision Sciences Corporation* (DSC), which manufactures equipment used to detect the presence of nuclear and other hazardous material in cargo shipments. Although the technology (known as muon tomography) was developed by the Los Alamos National Laboratory, which is funded by the U.S. Department of Energy, DSC was granted an exclusive commercial license to manufacture the detection equipment internationally.⁴ Executives from DSC were promptly dispatched to Abu Dhabi (a major transit point for international cargo, and therefore a key market for the new technology) to set up a new outpost, which is now headed by Khalfan Al Shamsi, whose family is also involved in an offset venture

⁴ This is according to a press release posted on DSC's website. "Lab grants DSC exclusive commercial license for Muon Tomography." 7 October 2008. <http://www.decisionsciencescorp.com/news.aspx>.

established by the French firm *Dassault*.⁵ In addition to landing a \$815 million contract to provide security for all of Abu Dhabi's critical infrastructure, *ASI* is now collaborating with the German Research Institute for Artificial Intelligence (a privately-owned non-profit) on projects related to security robotics, civil security and crisis management.⁶ It is unlikely that *ASI* would be the chosen partner for such a venture, were it not for the firm's previous good fortune in securing a partnership with *DSC* and a follow-on contract with the Emirati government.

The globalization of military production has also been catalyzed by the persistent growth of state investment in arms development and production. Non-military manufacturing, in contrast, has contracted alongside global consumption, which has been reduced by the downward pressure on wages and ongoing reductions in state social spending. This is reflected in a global shift away from indirect offsets in favor of direct offsets. In the 1980s and early 1990s, indirect offsets grew in popularity, accounting for an increasingly large share of offset activity. This was driven in part by developing countries, which used indirect offsets to minimize the negative impact of defense expenditures on their current account balance sheets. The promised flow of offset investment (much of which we now know never materialized) allowed these countries to inflate the asset side of their budgets, partially masking the cost of defense expenditures. The intensification of the global economic downturn and the concomitant reduction in lending to commercial

⁵ This is the International Fish Farming Company/ASMAK (an offset from the French defense firm Dassault) of which Hamad Khalfan Al Shamsi is a director.

⁶ For information on the project with the German Research Institute see "Advanced Integrated Systems, German Research Institute for Artificial Intelligence announce strategic partnership." 7 March 2010. Press release (available at AMEinfo.org).

economic ventures has simultaneously strengthened the relative financial position of defense manufacturers – which benefit from investor perceptions that governments will continue to subsidize arms production. In short: military manufacturing can grow because state spending on defense is resilient, and defense manufacturers can relocate portions of their business activities overseas to take advantage of individual states’ military-industrial subsidies. The lack of demand for civilian manufactured goods (driven by rising income inequality) drives investors toward the military-industrial sector. Robinson identifies this problem of surplus absorption as the key driver behind state-sponsored military spending and the growth of global military industrial complexes – which are not subject to either the “race to the bottom” that has eviscerated manufacturing in the developed countries, or to the contraction in state budgets that has targeted all non-defense forms of state expenditure.⁷

In this framework, states like Egypt and Jordan become important nodes in the global defense industry supply chain because they offer low labor costs, large defense budgets (which are also resilient because they are financed by U.S. aid commitments), and geographical proximity to large neighboring arms markets. Although there are clear strategic implications involved in outsourcing defense production (the proliferation of sensitive technologies, etc.) much of what is produced in states like Egypt and Jordan is either utilized domestically, stored in a warehouse, or exported to other developing states. This aligns with the interest of defense firms because developing country customers are less discriminating than the wealthy Western or Gulf states in terms of the quality of

⁷ William I. Robinson. 2007. “Beyond the Theory of Imperialism: Global Capitalism and the Transnational State.” *Societies Without Borders*. 2: p20.

weapons systems (and therefore are more likely to purchase weapons produced in states like Egypt and Jordan). Additionally, the proliferation of sensitive technologies – whether licit or illicit – contributes to the demand for the development of new more advanced weapons systems, and so promotes state sponsorship of industry through the provision of research and development funds. Although collaborative production programs are most commonly framed as political imperatives that help cement important bilateral alliances, they are also reflections of these globalized relations of production.

The wealthy states of the Gulf provide another set of benefits to defense firms with offset commitments, and the increasing diversity of offset projects in the region reflect the changing dynamics of the global economy and its productive processes. Many of the earliest offsets functioned similarly to agency agreements, whereby a domestic business was established (or an existing business was granted a license) in order to import and distribute the goods of a particular foreign firm or engage in some trivial value-added manufacturing process that provided them with a new product to market domestically. But as financial markets in the Gulf grew more sophisticated, offsets were frequently discharged through investments in sovereign wealth funds; interest-rate swaps (as when the UAE utilized some of its offset benefits to provide the Jordanian government with a preferential interest rate in order to lease a new fleet of planes for the latter's state-owned airline); and investment in private equity firms and hedge funds, which then invest the proceeds in a range of domestic and foreign projects. Most recently, the Gulf's expansion in investment for research & development facilities has made the region an attractive destination for defense firms facing reductions in such budgets in the Western

capitols. As a result, the GCC countries are also entering the defense industry supply chain – albeit at a different point in the production process than states like Egypt and Jordan.

Defense Offsets and Financialization of the Global Economy

The proliferation of offsets in the defense trade is also related to the growing dominance of finance over industrial and agricultural activities in the global economy – what others have characterized as the “financialization” of the economy – and the concomitant intensification of innovation in financial instruments.⁸ Although the defense sector has fared much better than other forms of manufacturing in the U.S., defense firms draw an increasingly large portion of their revenues from financial activities – including offset provision – but also other services like structured financing, leasing programs, and designing public-private finance partnerships.⁹ For example, *Boeing Capital Corporation* – a division of *Boeing* founded in 2000 – provides all of these services, as well as business advice on the start-up of new commercial airlines. Similarly, *BAE* has a division that markets services like real estate and facilities management; its portfolio includes some 1,000 properties (3.4 million square meters of buildings and 9,000 acres of land in the UK, the US and Australia) worth more than \$1.6 billion.¹⁰ Many of *BAE*'s numerous property management contracts involve land remediation of former industrial

⁸ The most straightforward definition I found of the process of financialization is that it occurs when “financial services are bolted on to a firm’s activity mix in an attempt to boost return on capital employed and wealth accumulation for shareholders.” Tord Andersson, Colin Haslam, Edward Lee, Nick Tsitsianis. December 2008. “Financialization Directing Strategy.” *Accounting Forum*. 32(4); p261. Offset provision adheres well to this understanding, since it employs finance professionals (accountants, corporate lawyers, offset design firms) to return capital to the defense firm.

⁹ There is at least one academic study of the financialization of the defense industry. Unfortunately it is in French – which I do not read. Moura S. (2008). *L’Impossible Banalisation de l’Industrie de la Defense*. Doctoral Thesis, Universite Montesquieu Bordeaux IV.

¹⁰ http://www.baesystems.com/article/BAES_027495/real-estate-solutions?_afrLoop=30382028761000

sites slated for residential development, including an old cotton mill and a former landfill site as well as decommissioned ordnance compounds.¹¹

Still other firms are diversifying into other non-defense realms where both state spending and private capital are expanding, such as healthcare administration.¹² Both *Lockheed Martin* and *General Dynamics* have made major acquisitions of healthcare companies and launched their own divisions to market their new healthcare services to the federal government and other large organizations. These services provide an additional revenue stream to defense manufacturers, which, unlike manufacturing, cannot really be outsourced. The similarity between these non-defense activities and the provision of defense offsets is that defense firms are dedicating more staff and resources to both – signaling their growing importance relative to traditional manufacturing. This new orientation may further catalyze the outsourcing of production and transfers of technology via offsets as the influence of business units responsible for manufacturing wanes relative to divisions tasked with expanding the firms' activities in areas like finance and healthcare administration.

Defense Offsets as Exotic Financial Instruments

¹¹ <http://www.baesystems.co.uk/Businesses/SharedServices/Divisions/PropertyandEnvironmental/ContractCaseStudies/index.htm>. Munitions sites include factories belonging to Royal Ordnance, which was acquired by BAE Systems in 1987. This meant that local governments were essentially paying BAE to clean up manufacturing sites that were owned by BAE, some of which were subsequently also developed into residential and commercial properties by the defense firm. In some cases BAE's activities were criticized, such as when the company disposed of contaminated buildings by burning them (a method that was prohibited by the U.S. EPA in similar brownfield remediation cases). Other sites remediated by BAE include the Naden Cotton Mill & Rubber Products Factory; Holton Heath National Nature Reserve (site of the decommissioned Royal Navy Cordite Factory); Buckshaw Village (site of the Royal Ordnance Factory Chorley); Pilling Lane in Chorley (a truck and tank manufacturing site of British Leyland, sold by the UK Government to BAE in 1988, and subsequently sold by BAE to the German auto company BMW).

¹² Although healthcare service provision is not a financial activity, these defense firms gained access to the healthcare industry by acquiring the assets of existing healthcare companies (a financial transaction).

Defense offsets should also be viewed in the context of the proliferation of new exotic financial instruments. Similar to transferable tax credits and bundles of collateralized debt, offsets can be sold and swapped just like any other financial commodity. As financial institutions and enterprising individuals create formal channels for the movement of these commodities, the number of firms and brokers offering offset-related services has also ballooned. As outlined in chapter 2, an entire industry of offset brokers has emerged in order to take advantage of (and further extend) the use of offsets in the defense trade. Just as the number of exotic securities on offer from investment banks has increased – things like collateralized debt obligations, auction-rate securities, and interest-rate swaps – the type of offsets packages on offer have also become increasingly diverse and sophisticated.

Firms now market proprietary offset designs to procuring country customers – designing structured finance vehicles allowing governments to leverage predicted offset profits to finance additional defense purchases (similar to the “deferred-tax assets” that allow investment banks to write-off losses using predicted future earnings) or access credit to fund infrastructure projects. The booming market for offset services has relied on the same sort of obfuscation and mind-numbing legalese that prevented government regulators from managing the proliferation of complex financial instruments. And this is all to the better for defense firms, which have actively resisted government attempts to reign in offsets. In the words of the American author David Foster Wallace, “abstruse dullness is actually a much more effective shield than is secrecy.” In the realm of defense corruption it is the suitcases full of cash and truckloads of illicit machine guns that

capture headlines – but the real money often moves in the fine print of offset agreements drafted in the offices of attorneys and accountants drafting offset contracts.

Defense Offsets & Foreign Direct Investment

Examining defense offsets in the context of Foreign Direct Investment (FDI) is also enlightening. As mentioned in Chapter 1, FDI in the Middle East is very low compared to other regions. According to the U.S. Bureau of Economic Analysis (BEA), the total stock of U.S. FDI in the Middle East as of 2010 was \$54 billion, which accounts for less than 2% of global U.S. FDI.¹³ For purposes of classification, most governments consider defense offsets a subcategory of FDI, and money invested by foreign defense firms through the offset process is included in official FDI figures by both sides – that is, the arms exporting country and the procuring country.¹⁴ Public relations materials produced on behalf of regional governments also frequently refer to defense offsets within the context of FDI. An article published in the English-language daily *ArabNews* (which is majority-owned by members of the Saudi Royal Family) refers to defense offsets in the kingdom as “a special type of FDI.”¹⁵ The below excerpt from a publication produced by *Global Gulf Consulting of Spain* on behalf of the Saudi Commission for Tourism and Antiquities makes a similar connection:

¹³ Total U.S. FDI in 2010 was \$3.9 trillion. This figure represents U.S. Direct Investment Abroad on a Historical-Cost Basis. I calculated these figures by adding values for Egypt, Algeria, Libya and Tunisia (which are all categorized as ‘African’ countries for data-gathering purposes) to the BEA’s value for the *Middle East* category, which includes the states of the Gulf and Levant. <http://www.bea.gov/iTable/iTable.cfm?ReqID=2&step=1>

¹⁴ Niblock, p27.

¹⁵ ArabNews is owned by *Saudi Research & Marketing Group*, which is primarily owned by members of the Saudi Royal Family.

Attracting foreign direct investment (FDI) is a major challenge for many developing countries. But having the opportunity to make large government purchases abroad gives a country quite some leverage in the form of economic offset obligations it can impose on its suppliers. This was the exact line of thinking behind KSA's creation of the Economic Offset Program (EOP) in 1984.¹⁶

However, in contrast to traditional conceptualizations of the developmental impact of foreign direct investment (FDI), defense offsets are not assigned through an apolitical process characterized by market discipline. This is made clear in the statements of an executive from the *Carlyle Group*, who spoke to Saudi government officials and businessmen at a meeting on the Kingdom's offset program. In response to a question posed about distributing information throughout the country to alert would-be investors to potential opportunities under the offset program, the advisor stated,

We in Carlyle (Group) are trying to spread our network as best we can...[w]ith this kind of program, it does not do much good to put an ad in the paper. This kind of program is best developed by the kinds of sessions that we are having today, through word of mouth, people who have contact with key players in different industries or companies around the country.¹⁷

Where defense offsets and FDI do seem to converge is in their impact on wealth concentration. Existing research on FDI in the region demonstrates a positive relationship between increased FDI inflows and growing income *inequality* in the Arab world,¹⁸ because FDI transactions are fundamentally governed by political ties to the ruling elite – the same ties that determine the domestic partners chosen for offset projects. Yet both

¹⁶ FindMe in Saudi Magazine. The "FindMe" publications are described as a "lifestyle and business investment guide." This annual publication was commissioned by Prince Sultan and produced by the Global Gulf Consulting Group of Spain, which has produced similar reports for state entities in Bahrain, Qatar, and Jordan. M.A. Ramady. 30 October 2006. "Saudi Offset Program: A Golden Opportunity." *ArabNews*.

¹⁷ Speech by Frank Carlucci. "Workshop on the Offset Program: A Launchpad for Joint Ventures." P14. <http://www.us-saudi-business.org/p96ws2.htm>. Session held by U.S.-Saudi Business Council.

¹⁸ Ali Abdel Gadir Ali. September 2003. "Globalization and Inequality in the Arab Region." Kuwait: Arab Planning Institute.

types of transactions (FDI and defense offsets) are also routinely used to demonstrate the positive investment climate of regional states, and more importantly, the efforts made by leaders to manage their respective states' natural resource endowments and modernize and diversify their economies.

Because figures of FDI in the Middle East are so low, the dollars from defense offsets possibly account for a significant portion of regional FDI. If we extrapolate from defense offset figures provided by the U.S. Bureau of Industry & Security (BIS) for the Middle East as of 2005 (the last years figures were made available), and assume that offsets increase in a linear fashion, then the value for total U.S. defense offset investment in the region as of 2010 is \$7.3 billion.¹⁹ If we use the BEA data to calculate a 2010 cumulative FDI figure for the same states that BIS included in its Middle East category, we get a figure of \$35.6 billion in U.S.-origin FDI.²⁰ This suggests that as much as 20% of U.S. investment in the region is accounted for by defense offset agreements. Furthermore, because we know that the money used to finance defense offsets comes from the procuring governments themselves (not the defense firms) the term 'Foreign Direct Investment' is ultimately a misnomer, since the resources come from the procuring state's central budget. Understanding defense offsets within the context of global economic phenomena such as FDI, the financialization of economic activity, and the globalization of production, shows them to be part of a much larger and more complex

¹⁹ This is an overly simplistic calculation, but is based on a figure of \$5.6 billion in offsets from 1993-2006 (about \$430 million/year). \$430 million/year for 2007-2010 = \$1.7 billion. These two figures together (5.6+1.7) = \$7.3 billion in offsets as of 2010.

²⁰ The only states that BIS included were Israel, Kuwait, Turkey, Saudi Arabia, and the UAE. So these are the only states that I include for a measure of U.S. FDI in the region.

system of global resource flows.²¹ It also demonstrates just how complex a task it is for researchers to divine a comprehensive understanding of how patronage operates, given the multitudinous channels through which it can be generated and distributed.

Defense Offsets & Declining U.S. Geostrategic Power

The declining geostrategic power of the United States is also contributing to the globalization of defense production and therefore also the intensification of defense offset activity. Scholars have long noted the erosion of state power vis a vis market actors, but this has special implications for the state that is both the largest producer of weapons and the single most influential political actor in the international system. While the U.S. Government has a strategic interest in maintaining defense industrial capacity by restricting the ability of these firms to outsource production, the concerns of the firms' executive leadership are quarterly earnings and short-term performance, not nebulous measures of the U.S. manufacturing base. The fact that U.S. defense firms are increasingly forming strategic partnerships with European and non-European defense producers suggests that the U.S. Government is less able to constrain the behavior of defense firms or sufficiently subsidize their operations – leading them to seek partnerships outside their host country.²²

²¹ Although there is not sufficient space to explore this further, I expect that the arms-petrodollar cycle would be the best macroeconomic framework for understanding the genesis and evolution of defense offsets in the Middle East.

²² See Mark A. Lorell, Julia Lowell, Richard M. Moore, Victoria Greenfield, and Katia Vlachos. 2002. "Going Global? U.S. Government Policy and the Defense Aerospace Industry." Santa Monica, California: RAND. (report prepared for the United States Air Force).

As U.S. influence wanes, so too does the credibility of the security guarantee that has traditionally given U.S. arms producers an edge in exports. This means that many foreign leaders are increasingly eager to diversify their weapons suppliers. In the past, Gulf monarchs have hedged their bets by purchasing redundant systems from suppliers in Western Europe, Russia and China. But owing to the globalization of production, diversification can now be achieved in other ways. These include securing supplies from producer consortiums, whose member firms can apply pressure on multiple ‘host’ governments to approve export contracts. Diversification can also be realized through securing spots in the supply chains of individual firms or producer consortia or through forming joint ventures, often enough in the context of offset agreements.

Thus, ensuring access to strategic weapons no longer hinges solely on relations with a single patron state (ie, the US) – but can be secured through good relations with secondary states where components of those weapons are also produced, since these states are under pressure to secure the sale on behalf of their own domestic military industrial complexes. Consider a modern fighter jet – which can consist of parts manufactured by a dozen large contractors from the US, UK, France, Italy, and elsewhere, and each of which have numerous overseas production facilities and subsidiaries involved in joint ventures in countries like South Korea, Brazil, India, Poland, Turkey, Greece, Israel, South Africa, etc. A RAND study commissioned by the US Air Force in 2002 found that traditional bilateral collaborative agreements were no longer viable because “collaboration with one country’s firm increasingly means

collaboration with many countries' firms."²³ The speed with which new technologies are added to arsenals of multiple states has dramatically increased in recent years, partly because of this globalization of production. Add to this the illegal proliferation of technology and the practice of 'reverse engineering' – both frequently preceded by legal forms of collaboration that lack sufficient monitoring or oversight – and the ability to secure supply becomes less dependent on bilateral political relations.

Offsets in the Middle East and the Region's Unique Economic Environment

The Middle East is uniquely well suited as a site for defense industrial expansion for a number of reasons, including relatively low-levels of industrialization, high-levels of interstate conflict, and limited levels of government transparency and corporate accountability. Limited industrialization has meant that state-subsidized investment in defense production more easily crowds out private investment in the production of civilian goods, which must compete with state-funded projects for access to the necessary infrastructure and skill base. The active policy of de-industrialization pursued in the Gulf by the region's European and American patrons, which were more interested in securing energy supply than in overseeing the diversification and modernization of Gulf economies, is partially responsible for this condition. Likewise, the focus on military-driven industrialization in Jordan and Egypt also created the conditions for contemporary defense industrial expansion. Not only has regime stability been premised on the loyalty of the military, which demanded a large share of public revenues be spent on defense procurement and related construction, but American and European interests also

²³ Mark A. Lorell, Julia Lowell, Richard M. Moore, Victoria Greenfield, and Katia Vlachos. 2002. "Going Global? U.S. Government Policy and the Defense Aerospace Industry." Santa Monica, California: RAND. (report prepared for the United States Air Force), pxxii.

demanded a predictable political environment and a disciplined system of supply and logistics – first during WWII, and subsequently on behalf of global oil markets and other regional conflicts to which the U.S. and European countries have been parties.

The increasing tendency for public financing to flow into military-related production is visible in several regional cases. In Jordan, the KADDB has established the region's first special economic zone dedicated solely to military production – complete with significant subsidies from the state. In Egypt, the military is a major, although often undisclosed, partner in large public-private sector partnerships in construction, healthcare, wastewater management, and renewable energy projects. The Gulf States appear poised to bypass widespread industrialization in favor of becoming a niche location for high-technology/small-scale defense manufacturing. This observation is supported by the UAE's focus on providing financing and research facilities to develop next generation weapons systems (as it did for *Raytheon's* Patriot missile system)²⁴ and simultaneous efforts to become a global hub for the unmanned aerial vehicle (UAV) industry. Both of these efforts receive state funding and other forms of official support. The prevailing modes of official economic policy, which focus on the provision of special economic zones, export-driven production, and attracting FDI, have been extended to defense production in the Middle East, which makes it doubly more difficult for investment in civilian production to remain competitive.

²⁴ The 2008 sale of Patriot missiles to the UAE for \$3.8 billion was Raytheon's first sale of the system since 1999, when it was sold to Greece. Since then, the missile production line had been solely tasked with building spare parts and conducting maintenance on existing systems. The UAE financed a portion of the development costs to update the system. Ivan Gale. 21 July 2010. "Raytheon Looks to Enter UAE Defence Market." The National (UAE).

As illustrated in Chapter 4, foreign defense firms have found that setting up shop in places like Jordan yields better access to regional markets and expanded sales opportunities. Although similar efforts in Egypt (such as *BAE's* attempts to market the Egyptian Infantry Fighting Vehicle) have been less successful, evidence of potential contracts with the new governments in Iraq and Libya suggest that a base of operations in Cairo may well have been a wise investment. The absence of mechanisms to ensure legal accountability and financial transparency have also been attractive inducements for defense firms to open up branches in the Gulf – as many have done.²⁵ *BAE, Boeing, Raytheon, and Thales*, four of the world's largest defense firms, all have divisions in Saudi Arabia, and *Lockheed Martin* has a regional office in the UAE. *Raytheon's* Saudi division is one-third owned by the U.S.-based parent company with the remaining 2/3 shares owned by Prince Khaled Bin Abdullah Bin Abdulrahman Al Saud (brother-in-law of the late King Fahd) and Prince Khalid's longtime friend, the Syrian-born billionaire arms broker Wafic Said.²⁶ Said denies allegations that he amassed his fortune through commissions paid by Saudi Arabia's arms suppliers – insisting his earnings came through

²⁵ All the largest (first tier) defense contractors have some sort of permanent presence in the region, but increasingly smaller firms do as well. This is a sampling of the smaller defense firms with regional branches: Group 4 Securicor (Saudi Arabia, UAE); ARES Corporation (UAE); Erinys (UAE); Rolls Royce (UAE); Washington Group International (Saudi Arabia, Egypt, Iraq); Johnson Controls (Saudi Arabia, UAE, Bahrain). Hughes Aircraft also had a division in Saudi Arabia until recently.

²⁶ Said owns 30% of shares through his firm *First Saudi Investment Company*; Prince Khaled owns 35% of shares through *Mawarid Holding*. Khaled is married to Princess Jawhara, the favorite sister of Prince Sultan, the former Defense Minister. Said and Prince Khalid met in London when Said was operating a Kebab restaurant; Said later went on to act as a consultant in many large Saudi arms contracts, including the corruption-ridden Al Yamamah contracts, which resulted in several large construction contracts granted to firms he owned in Saudi Arabia. Biography: Wafic Said. David Leigh and Rob Evans. 7 June 2007. *The Guardian (UK)*.

the allocation of construction and other contracts to his network of firms based in Saudi Arabia as a result of various arms deals (that is...through offsets).²⁷

The Middle East is unique because its economic conditions conform to the requirements of the historical period of capitalism in which this expansion of defense production is occurring – that is, the relatively low levels of regional industrialization and high levels of conflict and instability facilitate the intensification of defense production. The prevailing discourse of neoliberal economics does not threaten the spread of defense offsets, which are portrayed as either rational responses to global competition in the arms industry, or (at worst) unfortunate negative externalities that are intrinsic to trade in the defense sector. Rarely, if ever, are offsets seen as mechanisms for the distribution of political patronage or as a sign of the increasing militarization of industrial output.

Although the goal of this project has been to draw out the political and economic implications of defense offsets in a limited set of Arab countries, it is also worth noting that many of the dynamics present in these cases are not unique. For example, the Egyptian Government subsidizes energy inputs for military-owned factories, but the U.S. government engages in identical behavior. *Northrop Grumman*, which specializes in shipbuilding and therefore utilizes a large amount of steel, has a contract with the U.S. government that protects the firm from rising steel prices – a privilege that commercial shipbuilders in the U.S. do not enjoy.

²⁷ Said relayed to another Syrian expat living in London that, in the expat's words, he was "involved in arranging only the nonmilitary, commercial side of the [Al Yamamah] deal – the construction of schools and hospitals and that sort of thing." See "The Saudi Invasion of American Banks." *New York Magazine*. 1 February 1993. P28. The Syrian expat is Ghassan Sakharia/Zakaria, whom the *New York Magazine* refers to as "editor of a gossipy Arab-language magazine that is published in London."

Defense Offsets Beyond the Arab World

This next section will briefly examine some other country cases to draw out patterns and provide a broader context for understanding the domestic political implications of procuring country offset policies. Although most countries have some sort of offset policy regarding defense procurement, there are a few notable cases where these contracts have garnered significant attention from national governments as well as media outlets and defense watchdog organizations. As I hope I have demonstrated in previous chapters, the design of offset policy is intended to benefit domestic groups that are politically and economically influential. In Egypt and Jordan this has been the military; in the Gulf States, this has primarily been commercial business elites. As one would expect, this relationship appears to hold true outside the Middle East as well. In Japan for instance, the government has adopted a policy that requires offset investment for purchases of *civilian* goods (like rail cars), but the offset goes to support *defense* applications.²⁸ In this case, the major beneficiaries are the large diversified conglomerates that dominate the domestic economy, including the so-called “big six” (*Mitsui, Misubishi, Sumimoto, Fuyo, Sanwa, and DKB*) that produce equipment with dual-use applications.²⁹

²⁸ Although demanding offsets for civilian procurement is technically illegal under WTO regulations (with exceptions for some of the least developed countries) clearly many states have found ways around this prohibition. I was not able to find any documentation on how or why the Japanese Government was able to do this, but the process is probably similar to what takes place under the U.S. “Buy American” provision, which mandates that federal government spending must go to U.S. companies.

²⁹ “Defence Offsets: Addressing the risks of corruption & raising transparency.” Transparency International (UK), p9. For details on the overlap between civilian and defense production in Japanese conglomerates see Albert Axelbank. 2011. “Chapter 2: The New Zaibatsu.” Black Star Over Japan: Rising Forces of Militarism. Routledge, P13-22.

Turkey and Israel are two very instructive cases. Both built their modern defense industries using (mostly) U.S. offsets, and both benefited from offsets while simultaneously financing the majority of their procurement with U.S. military aid. Both have developed formidable indigenous defense sectors whose exports now compete directly with U.S. manufacturers.³⁰ Since the mid-1980s, when Turkey launched an ambitious program to expand its military-industrial base through partnerships with foreign firms, external investments in domestic arms production have averaged about \$300 million per year,³¹ and offset pledges reached \$6.1 billion as of 2007.³² One of Turkey's earliest such projects was the \$4.5 billion Peace Onyx program of 1983, which financed the transfer of technology and manufacturing equipment for the F-16 from *Lockheed Martin* and *General Dynamics* and resulted in the formation of *Turkish Aerospace Industries*, in which U.S. firms were significant shareholders.³³ A subsequent local offset venture set up by *Sikorsky* (a subsidiary of *United Technologies*) to manufacture tail rotor drive shafts for helicopters eventually became the sole source of

³⁰ Jim Krane. June 20, 2002. "U.S. Aid to Israel Subsidizes a Potent Weapons Exporter." Associated Press. http://www.ifamericansknew.org/us_ints/p-krane.html. Accessed on July 17, 2009. Also see U.S. General Accounting Office. June 1994. "Military Exports: Concerns Over Offsets Generated with U.S. Foreign Military Financing Program Funds." This report includes anonymous accounts of U.S. contractors and suppliers that ceased production of certain items after Israeli firms began producing them under offset agreements, p10-11.

³¹ Janes Defence Weekly. 28 February 2001.

³² Lale Sariibrahimoglu. 28 May 2007. "New offset policy to boost defense exports." Today's Zaman (Turkey).

³³ Hammond 1990. Lockheed Martin and General Electric became shareholders (42% and 7%, respectively). United Defense (now part of BAE) also established a joint venture with Turkey's NUROL Holdings to build armored vehicles. The venture was named FNSS Savumna Sistemleri. In 2011 FNSS was awarded a \$559 million contract to provide armored vehicles for the Malaysian Army. Other major co-production programs in Turkey include attack helicopters; main battle tanks; airborne early warning aircraft (AWACs); UAVs; frigates; and armored vehicle upgrade programs. Burak Ege Bekdil. 8 May 2000. "Turkey to Reshuffle Defense Procurement/Civilian Agency's Role to be Downgraded." *Defense News*, p4.

the part, and *Sikorsky*'s U.S.-based production lines for that part were closed.³⁴ This has not meant losses for *Sikorsky*, however, since Turkey has bought most subsequent tranches of attack helicopters from the company as well, including a \$4 billion contract signed in 2011.

In Israel, U.S. procurement policy has allowed for 25% of military assistance funds to be spent with domestic Israeli firms since 1991.³⁵ The large dollar amount of annual military assistance to Israel guarantees continued high levels of military spending – and thus made it very lucrative for U.S. companies to establish subsidiaries in Israel. In this manner private firms based in the U.S. can draw revenues both from exports of completed products and from the subcontracts granted to their joint venture operators and subsidiaries within Israel.³⁶ Local firms in Israel also benefited from sustained levels of military spending and the technologies and manufacturing expertise these collaborations brought with them, but also from contract stipulations (unique to the Israeli case) that granted Israeli firms reciprocal rights to sell to the U.S. government.³⁷ As in the cases of

³⁴ William Hawkins 31 March 2007. (Senior Fellow for National Security Studies at the U.S. Business and Industry Council). “Defense Offsets are Spreading Protectionism Across Commercial Sectors.” http://www.americaneconomicalert.org/view_art.asp?Prod_ID=2729. For detailed (although outdated) information on coproduction agreements with Turkey see Tamar Gabelnick, William D. Hartung, and Jennifer Washburn. October 1999. “Arming Repression: U.S. Arms Sales to Turkey During the Clinton Administration.” Washington DC: Joint report of the World Policy Institute and the Federation of American Scientists.

³⁵ U.S. General Accounting Office. June 1994. “Military Exports: Concerns Over Offsets Generated with U.S. Foreign Military Financing Program Funds.”

³⁶ As Jonathan Nitzan and Shimshon Bichler point out, “being in Israel helped them [U.S. military contractors] safeguard their own individual share of U.S. military assistance to that country, and occasionally win additional perks through joint ventures with local firms.” The Global Political Economy of Israel. Sterling, VA: Pluto Press, P280.

³⁷ Nitzan and Bichler, p281.

Egypt and Jordan, retired Israeli military officers are frequently the owners of the local subsidiaries and subcontractors that reap the biggest benefits from collaborative agreements with U.S. firms.³⁸

Turkish and Israeli defense officials and military leaders have also demonstrated a willingness to sacrifice the efficiency and capabilities of their equipment in order to ensure higher degrees of domestic production – a dynamic that was also clearly visible in the Egyptian case. Critics in Turkey contend that domestic producers are responsible for recurring procurement delays, and Ministry of Defense officials insist that “In our contract negotiations with foreign defense companies, the SSM always seeks to maximize local industry input, offsets, and technology transfer.”³⁹ Similarly, Israeli defense officials refused to budge on their demand that local firms be provided with the necessary technology to maintain and repair the computer systems installed in *Lockheed Martin’s* Joint Strike Fighter (F-35).⁴⁰ Israeli leaders threatened to buy *Boeing’s* upgraded (and significantly cheaper) F-15 Eagle if they were not granted access to the F-35’s internal computer mainframe – despite the fact that the F-15 was considered more vulnerable to Iranian missile systems than the F-35.

³⁸ Nitzan and Bichler cite several examples. See especially pages 281-283.

³⁹ Defense News. 10-12 December 2001.

⁴⁰ Although the U.S. would be supplying Israel with replacement computers that could be kept in local warehouses and switched-out with damaged units (which would then be returned to the U.S. for repair), Israeli officials insisted that “major operational constraints” meant their local manufacturers needed access to the computers’ internal mainframe. Yaakov Katz. 7 May 2009. “U.S. Denies Israel access to F-35 computer.” *The Jerusalem Post*.

Both states have also incurred substantial offset obligations of their own. In a particularly convoluted example, Turkey paid an Egyptian military firm to produce components for F-16s; the components were then shipped to Turkey where they were incorporated into the jets, some of which were then sold back to Egypt. Both countries financed their purchase of the jets using U.S. military assistance funds.⁴¹ The Turkish firm *Yonca Onuk* recently signed a collaborative production agreement with Egypt's (military-owned) *Alexandria Shipyard*. Israel's state-owned manufacturer *Israel Military Industries* was recently placed under a 10-year ban in India over alleged corruption connected to a deal to set up five ordnance factories to be operated by the Indian army.⁴² Both Turkey and Israel are also partners in the JSF program – the archetype model of the globalization of military production.

Countries with large export-oriented industries that specialize in production of industrial inputs (but not complete systems) focus their energies on individual procurement contracts signed with industry heavyweights like Canada's *Airbus* and *Boeing*. China exemplifies this strategy. Although a large number of Chinese firms produce a wide range of aircraft components, no Chinese company produces an entirely indigenous civilian jet. In an effort to advance along the path of aircraft production the Chinese Government deftly plays the largest firms against one another. *Boeing* currently buys

⁴¹ U.S. General Accounting Office. June 1994. "Military Exports: Concerns Over Offsets Generated with U.S. Foreign Military Financing Program Funds." 80 of the planes were financed by a \$2.5 billion fund set up by the U.S., Saudi Arabia, and Kuwait in return for Turkey's cooperation in the first Gulf War. Tamar Gabelnick, William D. Hartung, and Jennifer Washburn. October 1999. "Arming Repression: U.S. Arms Sales to Turkey During the Clinton Administration." Washington DC: Joint report of the World Policy Institute and the Federation of American Scientists.

⁴² IMI and six other foreign firms were barred from bidding for Indian defense on suspicion of involvement in the corruption scandal centered on the former director general of the state-run Ordnance Factory Board Sudipta Ghosh. 9 March 2012. "Indian ban hits Israel's defense industry." UPI.

parts from seven local manufacturers – making the firm the largest customer of China’s aviation industry. In return, China has bought more planes from *Boeing* than from any other manufacturer. But, *Airbus* built an entire assembly facility in Tianjin in 2009 – a move that involves substantially more technology transfer.⁴³ This collaboration, together with increased U.S. arms sales to Taiwan, has resulted in a jump in Chinese orders for *Airbus* planes. But sustained collaboration between Canada’s *Bombardier* and the state-backed *Commercial Aircraft Corp. of China* (COMAC), which are working to build the first jet constructed totally in China, as well as a large co-production run between another Chinese state-owned manufacturer and Brazil’s *Embraer*, may lead to yet another shift in Chinese procurement strategy.⁴⁴

In countries with the least accountable governments and large defense budgets, a significant portion of offset funds take a more direct route into the pockets of politicians and their cronies. South Africa is an excellent case in point. In 1999, the Ministry of Defense signed a \$8 billion contract to procure jets and warships that came with offset commitments more than *twice* the value of the purchases. One of the largest contractors, the German firm *Ferrostaal*, was found to have made almost \$50 million in “questionable payments” to individual South Africans, and of the nearly \$4 *billion* in offset credits

⁴³ The agreement with Airbus was signed with the Chinese government in 2007, and includes a commitment to manufacture 5% of the airframe locally. Shareholders include Harbin Aircraft Industry Group Corporation Ltd, Hafei Aviation Industry Company Ltd, and AviChina Industry & Technology Company. “Airbus starts \$350 million Harbin plant construction.” 1 July 2009. *China Daily*.

⁴⁴ Peder Andersen. February 2008. “China’s Growing Market for Large Civil Aircraft.” Washington DC: U.S. International Trade Commission,” p8.

eventually awarded to *Ferrostaal*, only \$80 million was actually invested – much of it in enterprises that existed only on paper.⁴⁵

A brief investigation of India – where defense offsets have garnered significant domestic attention might also be worthwhile here. It is similar to the Gulf States in some respects, it instituted formal offset requirements around the same time as the Gulf States (1992), and spends just a little less per year on defense than Saudi Arabia. (The term formal is emphasized here because India did execute some counter-purchase agreements with suppliers in the past, as in 1987 when *Aerospatiale* was required to purchase raw materials equal to half the cost of the aircraft they sold to India).⁴⁶ But India is different in some other key respects: official figures report about 5,000 Indian firms currently supply about 25% of the components required by the Defense Public Sector Units⁴⁷ – a figure much higher than that of the Gulf States.⁴⁸ India is also one of the only cases where both government officials and industry analysts are up-front about the method whereby the costs of offsets are included in the original contract price (although we also saw this in the statement of one UAE official, cited in Chapter 1).⁴⁹

⁴⁵ Mike Bourne et. al. September 2004. “The impact of arms transfers on poverty and development.” Centre for International Cooperation and Security. Also see Ivor Powell. 8 March 2012. “Arms deal offsets inquiry ruled out.” *Cape Times* (South Africa).

⁴⁶ Mike Bourne et. al. September 2004. “The impact of arms transfers on poverty and development.” Centre for International Cooperation and Security.

⁴⁷ “Investing in India’s Future: Keys to Success for India’s Defence Offset Policy.” Booz&Co.

⁴⁸ One example is BAE’s Hawk Trainer, which is primarily built in India. The outsourcing of this manufacturing operation caused quite a headache for BAE, which had to lay-off about 3,000 workers in the UK when the production line was moved. John O’Doherty. “Local pressure on defence groups’ global sales.” 12 October 2011. *Financial Times* (UK).

⁴⁹ These cases include that of the Secretary for Civilian Aviation Ajay Prasad, who revealed that the state-owned airline had paid about \$50 million more for the same Airbus aircraft that was also acquired by a

New Delhi has also been slower to accept some of the new ‘innovations’ in offsets, such as provisions allowing firms to bank and trade offset credits. It is also similar in some respects to Egypt. After the conclusion of major hostilities with Pakistan in the late 1940s, India’s military producers converted their facilities to produce some of the same consumer goods currently provided by Egypt’s military, including construction equipment, consumer electronics, and kitchen appliances.⁵⁰ As with the cases examined in this study, estimates of offset values are all over the map. The Confederation of Indian Industry (a business association) cited about \$1.5 billion in offsets between 2006 and 2008,⁵¹ similar to the figures released by the Ministry of Defense for the period 2007 to 2009.⁵² However, in 2009 the Indian Defense Minister said there were offsets worth \$9.7 billion “in the pipeline,”⁵³ and that an additional \$10 billion worth of business opportunities would be generated for domestic firms over the next five years;⁵⁴ while an independent report on India’s offset policy published in 2009 indicated that only three deals were made during that period.⁵⁵ The variation in estimates is similar to what we see

private Indian carrier due to the presence of offset requirements. “Offsets Take Off.” 25 November 2009. The Business Standard (India).

⁵⁰ “Investing in India’s Future: Keys to Success for India’s Defence Offset Policy.” Booz&Co.

⁵¹ “Defence offsets policy makes encouraging impact: CII Survey.” 5 January 2010. As reported in the newspaper, *The Indian*.

⁵² “Offsets Take Off.” 25 November 2009. The Business Standard (India).

⁵³ “Defence Offset Proposals worth Rs 49,000 cr in pipeline.” 18 February 2010. The Business Standard (India).

⁵⁴ Rianovosti. 19 December 2009. “India’s defense offsets policy to bring \$10 billion in 5 years.”

⁵⁵ “Investing in India’s Future: Keys to Success for India’s Defence Offset Policy.” Booz&Co.

in many other cases – and reflects both the complexity of offsets and the intentional obfuscation that often surrounds them.

One of the most notable features of New Delhi's offset policy is the recent shift in requirements relating to the character of domestic entities allowed to partner with foreign defense firms in the course of fulfilling the latter's offset obligations. Initially, the only suitable domestic partners were state-owned defense firms, and the minimum investment threshold was arbitrary and widely considered to be onerous by industry standards (and regarded as too large an amount to be absorbed by the state-owned firms). The standard threshold has now been reduced to 30% of the contract value, although in some cases this requirement is raised, as with the recent \$10 billion fighter jet procurement (for which the 30% offset threshold was bumped to 50%).⁵⁶ Foreign firms are now encouraged to form partnerships with domestic private sector companies to bid on defense contracts. These partnerships are facilitated by the government's Defense Offset Facilitation Agency, which aims to fulfill the government's stated goal of increasing the domestic share of defense production from current levels of about 25% to 70%.⁵⁷ Similar incentives have also been granted to domestic firms engaged in defense production – including the extension of the same tax incentives given to export-oriented firms.

Likewise, Indian business associations have lobbied for beneficial policies through the same organizational channels we see in other cases. The Confederation of Indian

⁵⁶ N. Shivapriya. 19 November 2009. "Tech cos may seek govt help to win 'offset' deals." *The Economic Times* (India).

⁵⁷ "Investing in India's Future: Keys to Success for India's Defence Offset Policy." Booz&Co.

Industries (the largest such business association in India) has been particularly proactive in reaching out to Indian defense officials and providing venues for networking with its membership – which is dominated by the country’s powerful internet technology (IT) industry. Several years of large defense expenditures by the Indian Government has raised awareness among the possible beneficiaries of offsets, resulting in a policy shift that promises to direct more offset-generated resources to this influential sector. In 2005 the Indian Government required that offsets go into military manufacturing (hardware), but subsequent policy changes “liberalized” the investment requirements – steering more of the funds into applications relating to homeland security, healthcare, and infrastructure, which leaves a great deal more room for participation by Indian IT companies. This shift was partly facilitated by the claim that India’s military manufacturing base was too small to absorb the amounts of investment generated by its large defense procurement budget – a claim that primarily came from foreign defense firms and Western consultancy firms advising the Indian Government.⁵⁸ The strength of India’s IT industry also means that this sector is strongly positioned to lobby for offset benefits. A study of India’s offset program conducted by *Booz&Co.* estimated that this industry could increase revenues by about \$700 million over a ten-year period by taking advantage of the country’s offset policies.⁵⁹

It is worth noting that such a shift has definite advantages not only for Indian IT companies, but also for foreign technology firms. A significant chunk of India’s IT sector is comprised of multinational companies headquartered in the U.S. and Europe that

⁵⁸ Ajai Shukla. 14 December 2010. “Moment of Truth for Defence Offsets” *Business Standard* (India).

⁵⁹ “Investing in India’s Future: Keys to Success for India’s Defence Offset Policy.” *Booz&Co.*

outsourced major chunks of their supply chains decades ago. As far back as 1995, companies like *Texas Instruments*, *IBM*, *Motorola*, and *Hewlett-Packard* accounted for one-third of the companies operating in Bangalore (the so-called ‘Silicon Valley East’), and a lot of the software developed in India is incorporated into the products of these large transnational companies.⁶⁰ Recent decades have seen an intensification of merger & acquisition activity between military contractors and technology firms – so what is good for the Indian IT sector is probably also good (or at least not bad) for the globe’s largest defense firms.

Loose Ends: Shifting Trends in Gulf Defense Offsets and the Egyptian and Jordanian Armies Amidst the Arab Uprisings

This final section will address some of the political and economic changes that have taken place since I began research for this project nearly five years ago. This includes a noticeable shift in Gulf defense offset policy in favor of military-related investment – especially in the UAE. Such a *volte-face* initially seems to complicate my thesis, since Gulf militaries are not supposed to be politically influential, and therefore should not lobby for increased investment in arms production via direct offsets. However, the increasing participation of Royal Family members in positions of military leadership, the increasing sophistication of regional arms procurement strategies and the officials that implement them, and the ability of non-Royal families with legacies of military service to gain influence within regional governments, have all combined to encourage a focus on direct offsets. Although I will spend a few pages addressing this recent change here, I

⁶⁰ Dilip D’Souza. 1996. “Silicon Valley East.” *The New Internationalist*. 286: p25. Cited in William I. Robinson. 2003. *Transnational Conflicts: Central America, Social Change, and Globalization*. New York: Verso Books, p31.

would point interested readers to a more thorough investigation laid out in a separate paper.⁶¹

The second major shift that I will address in these final pages relates to the role of offset-driven arms production in Egypt and Jordan in the context of the recent Arab uprisings. In both cases, the military served as an important guarantor of the incumbent regimes – that of the Hashemite Dynasty in Jordan and the now-deposed Hosni Mubarak in Egypt. While both regimes have also recently confronted significant domestic opposition from groups that have traditionally formed the basis of their support networks, only in Egypt did the military abandon its role as the regime’s praetorian guard. This section will examine how external investment and collaboration with foreign defense firms differed in the two cases, and why the efforts of King Abdullah II to channel resources to the Jordanian Armed Forces through the KADDB may have been more effective in ensuring the military’s continued loyalty.

Defense Offsets and the Growth of Arms Production in the Arab Gulf

Since about 2007, there have been indications that the Gulf States are increasingly interested in utilizing offset obligations to promote domestic defense production. This is pursued using many of the same methods employed by other states – requiring foreign defense firms to co-produce portions of their weapons systems in-country or establish maintenance, repair and overhaul (MRO) facilities, and by requiring firms to launch new joint ventures or subcontract with existing domestic conglomerates. But unlike many

⁶¹ “Emergent Trends in the Middle East Arms Race: Foreign Investment and Indigenous Defense Production in the Arab Gulf.” The Kuwait Program: Institut d’Etudes Politiques (Sciences Po - Paris). Available here: <http://kuwaitprogram.sciences-po.fr/research-program/publications.html>

other procuring countries, the Gulf States are also investing large sums in new high-tech laboratories and testing facilities, which has also encouraged firms to re-locate some components of their research and development (R&D) activities to the Gulf. This regional trend toward utilizing offsets to enhance domestic military production has been observed by numerous outlets, including trade publications and defense industry analysts. As a 2010 briefing published by the *Janes* group of defense publications put it,

Offset activities across both states [Saudi Arabia and the UAE] will include a wider focus on...the transfer of technology and the facilitation of defense export activity by means of establishing Tier One supply chain sources through joint venture relationships with established Tier One OEMs [original equipment manufacturers].⁶²

This shift is also visible across the spectrum from official rhetoric to concrete policy changes designed to encourage foreign arms manufacturers to relocate some components of their operations. At the 2007 annual Abu Dhabi International Offset Conference (ADIOC) – a sort of offset-specific trade fair that brings together defense executives, offset brokers, industry analysts, and government officials – representatives from Kuwait and Saudi Arabia issued formal statements expressing a preference for direct offsets in future contracts. Although their request was criticized for being “eccentric” and short on details, it was perceived by conference attendees as signaling a major shift in regional offset policy.⁶³ Private sector policy advisors working with the UAE’s official offset bureaucracy noted a similar change in approach, stating that the UAE would no longer

⁶² See “Briefing: Offset politics of Saudi Arabia/UAE on course for major overhaul.” 22 April 2010. See also various issues of the *Countertrade & Offset Newsletter* and Ivan Gale. 1 July 2008. “Oil fuels fledgling defence industry.” *The National* (UAE). Although Gale refers to oil in the article’s title, this piece is actually about the UAE’s offset-related activities.

⁶³ CTO Newsletter. 12 March 2007. 25(5).

“shy away” from defense-related offset projects as it had in the past, but would instead use defense industrial development to help meet the federation’s economic goals.⁶⁴

Formal policy changes in Saudi Arabia have been quite dramatic. Saudi law now requires that 50% of offset obligations must be in the “direct” category,⁶⁵ and local suppliers are no longer shut out of the state’s defense procurement process. During a February 2010 meeting of the Riyadh Chamber of Commerce, Colonel Attiyah Al-Maliki announced that local firms would now be allowed to bid to supply some 15,000 basic items used in defense construction – including piping, plastic composites, jet engine covers and batteries.⁶⁶ Unnamed Saudi officials told the *Reuters* news agency that the move was initiated to encourage foreign suppliers to partner with Saudi firms, allowing them to qualify as indigenous producers, with the ultimate aim of establishing a domestic military industry.⁶⁷ Colonel Maliki characterized the new policy as “just the beginning,” adding that, “nothing should prevent Saudi Arabia from making its own fighter jets.”⁶⁸ The government also sponsored a trade fair in February 2010 (the Armed Forces Exhibition of Materials & Spare Parts), which officials characterized as part of a larger effort to

⁶⁴ Keri Wagstaff-Smith. 22 April 2010. “Briefing: Offset policies of Saudi Arabia/UAE on course for major overhaul.” *Jane’s*.

⁶⁵ formerly there was no minimum requirement for direct offsets.

⁶⁶ Souhail Karam. 7 February 2010. “Saudi Arabia opens military supply to local firms.” *Reuters*.

⁶⁷ Souhail Karam. 7 February 2010. “Saudi Arabia opens military supply to local firms.” *Reuters*.

⁶⁸ Souhail Karam. 7 February 2010. “Saudi Arabia opens military supply to local firms.” *Reuters*.

showcase the range of products available from domestic producers and familiarize local firms with the material requirements of the nation's armed forces.⁶⁹

The Saudi defense ministry also recently created the Central Committee for Local Industrialization, comprised of representatives from the Saudi business community and Saudi defense officials. The committee is chaired by Prince Khalid bin Sultan – Assistant Minister of Defense and the son of the late Defense Minister Prince Sultan – who told the Saudi-based *Arab News* in 2011 that private sector companies should eventually be capable of producing 70 percent of the Kingdom's military equipment using technology transferred from abroad.⁷⁰ Abdul Rahman Al-Zamil, former Deputy Minister of Commerce and member of the Consultative Council, was also given a spot on the new committee.⁷¹ Zamil called the new procurement policy “a breakthrough for local firms.”⁷² Not only has the *Zamil Group* been a domestic partner in many of the Kingdom's previous non-military offset projects,⁷³ but it also stands to gain significantly from expanded domestic military production, as it is one of the largest industrial

⁶⁹ Officials who spoke at the event include Lt. General Abdul-Rahman Bin Fahd Al-Faisal (Commander of the Royal Saudi Air Forces); Prince Khaled Bin Sultan Bin Abdul Aziz (Assistant Minister of Defense); Dr. Ebrahim Al-Assaf (Minister of Finance); and Dr. Khaled Al Suleiman (Undersecretary of the Ministry of Commerce and Industry).

⁷⁰ P.K. Abdul Ghafour. 19 January 2011. “Kingdom to manufacture 70% of military hardware locally.” *Arab News*.

⁷¹ Reuters News Agency. 7 February 2010. “Saudi Arabia opens military supply to local firms.”

⁷² Souhail Karam. 7 February 2010. “Saudi Arabia opens military supply to local firms.” *Reuters*.

⁷³ Zamil Group holds direct shares in Middle East Battery Company (US Peace Shield); the Saudi-Indo Petrochemical Company (partial financing provided by the Saudi Offset Limited Partnership, a fund created by Raytheon and Thales to invest in offset projects); and the Arabian Amines Company (UK Al Yamamah). Zamil Group is also the largest single shareholder in the Sahara Development Company and SIPCHEM, which have been the domestic partners for a large number of petrochemical ventures initiated primarily by BAE in fulfillment of its Al Yamamah offset obligations.

conglomerates in the Kingdom. The *Zamil Group's* 400-square meter booth space at the above-mentioned exhibition may be a good indicator of its potential share in this new market.⁷⁴

The UAE and Kuwait have instituted similar policy changes, including those designed to increase interaction between foreign defense executives, domestic entrepreneurs, and military officials and bureaucrats involved in offset policy-making. Both countries have relaxed foreign ownership restrictions in order to facilitate the creation of projects with military applications;⁷⁵ previous ownership restrictions made foreign defense firms apprehensive about collaborative projects. The UAE's Offset Program Bureau recently announced plans to create the "Offset Committee," a new institution designed to give military leaders more input in the offset policy-making process.⁷⁶ Likewise, Kuwait's National Offset Committee (NOC) has made repeated presentations to departments within the Ministry of Defense regarding offset policies and potential avenues for MOD participation,⁷⁷ although bureaucratic turf wars between Kuwaiti defense officials and those from the Ministry of Finance – as well as persistent allegations of corruption within the offset program – have complicated offset-driven defense production in the near term.

The Factors Underlying Renewed Interest in Military Production

⁷⁴ This 400 square meter figure comes from a press release available on the company's website: www.zamiloffshore.com. 13 February 2010. "Riyadh Air Force Exhibition."

⁷⁵ Keri Wagstaff-Smith. 22 April 2010. "Briefing: Offset policies of Saudi Arabia/UAE on course for major overhaul." *Jane's*.

⁷⁶ EPICOS industry newsletter. 10 February 2011; 3(6). Comments of Matar Ali Al Romaihi, Director of the Offset Unit at the OPB interviewed for newsletter.

⁷⁷ NOC Newsletter. June 2008, p6.

This shift in favor of direct offsets is the result of a number of factors, including the growing prestige of regional militaries and the concomitant rise in interest in military careers among Royal Family members and other influential elites. Military prestige has been enhanced through a number of avenues, including the increasing number of exchanges that bring Gulf military officers to train at U.S. and European military colleges and defense research institutes, and the large investments made in regional research centers. Although many of these are designed to prevent local brain drain by providing better facilities and research resources for top-scoring students, they have also attracted foreign defense firms, which have poured money and personnel into defense-technology research programs housed in these new centers, along with the associated scholarships and internship programs that steer university students studying engineering and computer science into careers with regional defense subsidiaries.

The Gulf States have seen some success in leveraging these advanced educational and research facilities in order to encourage foreign firms to set up research and manufacturing operations within their borders – and have even used offset obligations to finance and outfit these facilities. Some components of the region’s most costly technology infrastructure – such as the UAE’s Tier 4 data center (one of only four in the world) and the world’s sixth largest supercomputer, housed at the King Abdullah University for Science & Technology (KAUST) – have been built under offset deals.⁷⁸

⁷⁸ The UAE’s Tier 4 data center is operated by Injazat Data Systems, which was built by EDS Defense & Security (a US company that was subsequently acquired by HP) as an offset; many of Injazat’s clients are offset-generated ventures, both public and privately-owned. Many of the technologies and laboratories available at KAUST were transferred or built by foreign defense companies as part of long-term collaboration deals, which are increasingly replacing traditional offset deals, where each individual sale has a corresponding offset contract. Chris Thompson labeled the complex of facilities linking the 1984 defense offsets to Saudi Arabia’s nascent research institutions a “Silicon Oasis.” “Planned International Technology

The presence of these assets facilitates subsequent technology transfers and follow-on sales of advanced weapons because they provide the necessary physical infrastructure and human capital (technicians, maintenance specialists, researchers, etc.) to absorb new technologies and provide support for new systems. Many of the institutions where this infrastructure is housed also include large academic and vocational departments dedicated to defense-related research and training.⁷⁹ Al Faisal University, which began offering courses in 2008, received an \$11 million donation from *Boeing*, *BAE*, *Thales* and *United Technologies*, and some of these firms also offer scholarships to Saudi students majoring in defense and security-related areas.⁸⁰

Boeing also coordinates with other educational and research entities in Saudi Arabia, including King Saud University; King Abdulaziz University; and the King Abdulaziz City for Science and Technology (KACST), where the firm is establishing a Decision Support Center (DSC) to offer modeling, simulation and analysis services for defense and aerospace firms in the region. *Boeing* is also collaborating with the aforementioned King Abdullah University of Science & Technology (KAUST), where the firm is financing projects to develop next generation composite materials for use in aircraft and the designing of new thin-film solar cell technology.⁸¹ French defense firms have also been active in establishing partnerships with the region's largest research institutions; *Dassault*

Transfer: The Economic Offset Example in Saudi Arabia.” *Digest of Middle East Studies (DOMES)*. 1 September 1994. 3(1), p1. See also Asma Alsharif. 20 October 2008. “Saudi Supercomputer lures researchers.” *Reuters*.

⁷⁹ This include CERT in the UAE; Dar Al Faisal University and Knowledge Economic City, both in Saudi Arabia.

⁸⁰ These include the Boeing Saudi Arabia Fellowship Program.

⁸¹ Newsletter. *Boeing Frontiers*. (Boeing corporate publication) July 2011.

signed an agreement in 2011 to partner with KACST on digital design and engineering programs in the center's Advanced Technology Institute – an expansion of *Dassault's* existing collaboration with KACST's National Satellite Technology Program,⁸² and the Italian firm *Elettronica s.p.A.* recently signed a collaborative agreement with the Prince Sultan Advanced Technologies Research Institute (PSATRI), which is part of King Saudi University, focusing on technology transfer and the conduct of basic and applied research in defense.⁸³

Both *Boeing* and *BAE* coordinate with the UAE's Higher Colleges of Technology, regularly bringing executives to campus to talk to students about pursuing careers in the defense and aerospace industry,⁸⁴ showcasing new product innovations to students in relevant disciplines,⁸⁵ and offering internships.⁸⁶ *Northrop Grumman* co-sponsors an annual competition to design unmanned aerial vehicles called the 'Unmanned Systems Rodeo', along with the UAE's Higher Colleges of Technology and a firm owned by the retired Emirati air force general Abu Ainnain (mentioned in Chapter 3).⁸⁷ *Northrop Grumman* pays for the winning student team to present their UAV design at the

⁸² "Saudi Arabia: KACST, Dassault Systemes in deal at the Paris Air Show. 25 June 2011. *The Saudi Gazette*.

⁸³ King Saud University press releases list collaborative agreements with several international firms, including BAE Systems, Boeing, Swedish SAAB, Augusta Bell, Raytheon, and Agilent Technologies. "PSATRI signs agreement with Italian electronic defense equipment manufacturer Elettronica SpA." 9 May 2012. King Saud University News Portal. <http://enews.ksu.edu.sa/2012/05/09/psatri-elettronica-spa/>

⁸⁴ Website of Boeing Middle East (boeing-me.com); corporate citizenship page.

⁸⁵ "BAE Systems Showcases Innovation and Future Technology to Students in the UAE." 10 April 2011. Press release.

⁸⁶ These include the CERT Boeing Academic Excellence Awards, which provides for a one-month internship at Boeing's facilities in the U.S.

⁸⁷ This firm is INEGMA, the Institute for Near East and Gulf Military Analysis. INEGMA provides risk analysis and other products to the UAE government.

Association for Unmanned Vehicle Systems International Convention held annually in Washington, DC.⁸⁸ Similar trends are visible in Kuwait, although these are much more limited in scale. Here, offsets related to the sale of Apache helicopters involved the transfer of aircraft and marine vessel simulators (from *Boeing* and *Lockheed Martin*, respectively) to the Australian College of Kuwait for use by students training to maintain and operate military equipment.⁸⁹

The presence of these high-tech research facilities not only enhances the prestige of domestic military institutions and their leadership, but also aids in the recruitment of foreign engineers and technicians. Peter Hoffman, *Boeing's* Director of Global Research and Development, summarized this phenomenon in the Saudi context when he described the newly installed electron microscopes and magnetic resonating machines at KAUST as “a draw for bringing in great minds from around the world...and successfully attracting world-renowned scientists who are experts in key areas of interest to the kingdom.”⁹⁰ The proliferation of extravagantly-staged arms fairs⁹¹ has also led to increased interactions between representatives of private industry, military officers, civilian procurement officials, and researchers engaged in defense applications. The Gulf States play host to many of the largest such gatherings, including the annual Gulf Defense & Aerospace

⁸⁸ “HCT launches inaugural Unmanned Systems Rodeo competition at IDEX.” 22 February 2011. HCT press release.

⁸⁹ This offset was valued at “hundreds of millions of dollars,” according to Kuwaiti government spokesmen. See Michael Knights. 18 December 2003. “Future Development of GCC Air Forces; Part 2.” Air Combat Information Group (ACIG).

⁹⁰ Newsletter. *Boeing Frontiers*. (Boeing corporate publication) July 2011.

⁹¹ Participation in arms fairs has greatly increased in recent years. DSEi, one of the large fairs held annually in the UK, drew 1,350 vendors in 2007 – almost 1/3 of them first-time participants. John Hilary. “Making a killing out of war.” 12 September 2007. *Comment is free*, weblog of *The Guardian* (UK)

Exhibition held since 2011 in Kuwait; the International Defense Exhibition (IDEX) held annually in Abu Dhabi since 2001; and the Doha International Maritime Defense Exhibition held in Qatar since 2008.

This emphasis on building advanced facilities, networking with international firms, and attracting foreign talent is indicative of the fact that many offset-generated arms production ventures continue to rely heavily on the technical and management expertise of foreign personnel and subcontractors – which contradicts the image of a genuinely *indigenous* defense industry. A good example is *Al Taif Technical Services*, launched by the UAE's *Mubadala* in 2007 to provide maintenance, repair and overhaul of military vehicles and other weapons systems for the UAE Armed Forces. Although the UAE Armed Forces promptly named *Al Taif* the prime contractor in charge of servicing the army's 17,000 ground vehicles, *Al Taif* just as quickly turned over almost all the associated activities to *DynCorp*, a U.S.-based private security contractor. A *DynCorp* press release stated that the company would provide “all services for the contract” including,

personnel, equipment, tools, materials, supervision, and services necessary for GMD (the UAE Land Forces' General Maintenance Directorate) operations. This contract covers all types of military and commercial vehicles, including fighting platforms, tankers, transporters, buses, trucks, earth moving equipment, and all terrain 4X4 vehicles.⁹²

On paper, the establishment of *Al Taif* may seem to reflect a real advance in indigenous defense capabilities in the UAE, but under these contract terms it is hard to imagine exactly what operations will be left for *Al Taif* to perform. Similarly, the CEOs of many

⁹² 21 December 2006. “Dyncorp International Awarded Maintenance Contract with UAE Land Forces.” Company Press Release.

of *Mubadala's* defense-related subsidiaries are foreign nationals who came from previous defense careers in the U.S., Europe, and East Asia.⁹³

The quest for indigenous arms production in the Gulf is also driven by the increasing demand for small-scale, capital-intensive defense equipment whose production is more compatible with the structure of the Gulf's industrial base – like electronic warfare systems, defense related ICT (internet & communications technology), and unmanned aerial vehicles (UAVs). Because the Gulf States are able to leverage large financial resources in order to construct advanced facilities and provide for large R&D budgets, they are magnets for skilled defense management experts and aerospace technicians from abroad, where cuts in the defense budgets of the advanced industrial states have caused defense firms to shrink their research departments and delay development of new weapons systems. The large market for internal surveillance and policing equipment in neighboring Arab states has helped create a uniquely auspicious environment for reviving indigenous defense production in the Gulf, as has the demonstration effect of other countries' pursuit of direct offsets. The increasing scrutiny of defense offsets sparked by boondoggles like the Al Yamamah offset in Saudi Arabia have generated a large number of in-depth analyses by NGOs and industry consultants. No doubt Gulf technocrats have read these reports, which demonstrate that the majority of rich, Western states demand direct offsets (not indirect ones), and that Turkey and Israel built their defense industries on the foundation of offset deals. Since these states are presumably well-placed to

⁹³ The CEO of Strata, Mubadala's manufacturing facility, is Ross Bradley, a former managing director of the Eurofighter program and founder of Farnborough Aerospace Consortium. The CEO of Abu Dhabi Aircraft Technologies (ADAT), another Mubadala subsidiary, is Jeremy Chan, who spent most of his career working for defense firms like Honeywell and ST Engineering. The CEO of Sanad Aero Solutions, another Mubadala subsidiary, is Troy Lambeth, a graduate of West Point and former VP in General Electric's Capital Aviation Service division. All three subsidiaries have recently signed large MRO contracts with foreign firms including United Technologies, Boeing and Airbus.

negotiate the best terms for offset deals – and have highly-developed and sophisticated procurement regimes in place – it stands to reason that their policies would be emulated by other states.

Due in large part to the exchanges and networking fora described above, military officers and civilian defense bureaucrats in the Gulf are increasingly better aware of both the strategic needs of their states and the technological specifications of the defense equipment they purchase. As the gap widens between the sophistication of these defense elite and the capabilities of their national defense industrial bases, they are likely to seek out channels through which the state can subsidize indigenous production and enhance the overall prestige of the nation's military institutions. By the same token, the domestic industrialists and traders whose conglomerates would benefit from the formation of a western-style military-industrial complex are likely to lend their political support to efforts by these military elites to expand official investment in military production. The same merchant conglomerates that made their fortunes by capitalizing on previous state spending sprees in infrastructure, tourism facilities, import-export networks, and oil industry support services, are now positioning themselves to serve as suppliers and subcontractors in the global defense industry supply chain because their respective governments are concentrating more public resources on indigenous defense production. Although the Gulf States import the vast majority of their military equipment⁹⁴ this has not prevented the formation of a small contingent of powerful conglomerates with defense-related operations (often in Iraq), and many more are well-placed to exploit new

⁹⁴ N. Hasbani cites a figure of 99% in terms of the amount of military equipment that is imported by the GCC States as of 2006. "The Geopolitics of Weapons Procurement in the Gulf States." *Defense & Security Analysis*. 22(1): p75.

defense-related opportunities, should they emerge. Decades of large defense expenditures and numerous wars in the Middle East have not only enriched western arms manufacturers, but have also created numerous opportunities for wealthy domestic investors to establish defense-related operations. For example, the Kuwaiti logistics firm *Agility*, controlled by the Sultan Al-Essa Family,⁹⁵ was ranked #34 in the Stockholm International Peace Research Institute's 2009 report of the 100 largest defense companies, with annual revenues of around \$6 billion (it was #30 in 2008).⁹⁶ Although most of the firm's activities were in providing food and other services to U.S. military personnel in Iraq, in 2006, *Agility* acquired the American firm *Taos Inc.*, which had been the primary contractor responsible for transporting weapons into Iraq on behalf of the U.S. military.⁹⁷ The acquisition, which enabled *Agility* to bid on classified U.S. military contracts – not just logistics and vending – dramatically expanded the firm's defense-related service portfolio. Companies like *Agility* would presumably benefit from an expansion of the region's military-industrial infrastructure, which would require the same sophisticated supply chains and logistics services as their foreign counterparts.⁹⁸

⁹⁵ Former U.S. Secretary of Defense John Negroponte is a major shareholder in *Agility DGS Logistics* – a wholly-owned subsidiary of *Agility*.

⁹⁶ SIPRI defines 'arms producing companies' as those firms with "operational activities in the field of military goods and services."

⁹⁷ *Taos Inc.* was originally founded in 1989 by retired foreign intelligence chief David Hogan, who ran the company out of the Putnam Industrial Park in Madison, Alabama, about a mile from the U.S. Army Missile Command base at the Redstone Arsenal in Huntsville. Many of the weapons transported (primarily during Hogan's ownership of the company) later went missing, and some were eventually seized from militants captured by coalition forces in Iraq. Despite *Taos'* contracts with companies like *Aerocom* (designated as an arms smuggler by the UN) and a ruling by an Italian court that eventually uncovered *Taos'* complicity in losing track of shipments of Italian-made *Berettas* that militants later used to kill civilians in Iraq, the U.S. military continued to grant the company contracts into 2007. See "Blood at the Crossroads: Making the Case for a Global Arms Trade Treaty." 2008. *Amnesty International*. Also see Pratap Chatterjee. 24 September 2008. "How post-invasion Iraq came to be awash in 'missing' guns." *Inter Press Service*.

⁹⁸ Kuwait does not have many examples of domestic firms engaged in defense-related production. But one example is *MidEast LTA*, a company that provides logistics services for 'operational aerostat systems'

Similarly, the UAE's *Hydra Trading*, owned by Royal Family member Sheikh Tahnoon, got its start as a distributor to the UAE Armed Forces, and recently launched a joint venture with an offset-generated company, possibly in an effort to retain business in what is predicted to be a burgeoning domestic defense sector.⁹⁹ Retired UAE Air Force General Khaled Abdullah Abu-Ainnain has also launched six joint ventures with French and Italian defense firms through his investment company *Baynuna(h) Aviation Technology* (part of *Baynunah/ Beinuna Group*),¹⁰⁰ all under the auspices of the UAE's offset program, and all of which include the development of military equipment and/or services. Firms like these are part of what we might term a latent or 'unrealized' domestic military industrial complex – one that has formed over decades in response to peripheral opportunities resulting from enormous state military expenditure and the presence of persistent conflict in the Gulf and in neighboring Arab States, but is primarily engaged in logistics and service provision in support of foreign firms. This sector could experience a dramatic expansion under the current trajectory of offset-generated investment in indigenous defense production.

(unmanned surveillance blimps), that is the result of an offset with the U.S. firm TCOM. See *MidEast LTA's* website: http://www.tcomlp.com/overview_LTA.html. The offset was reported in the industry trade publication *Countertrade & Offset Newsletter*. 26 January 2004. 12(2).

⁹⁹ Sheikh Tahnoon is a member of the Royal Family and the governor of the Eastern region of Al-Ain. The offset-generated firm with which *Hydra* formed a joint venture is *Al Taif Technical Services*.

¹⁰⁰ These include Baynunah Missile Technologies (with MBDA and BAE); Centuria Capital (with Groupe Financiere Centuria of France); DASBAT Aviation (Dassault); ELTBAT Electronic Systems (Elettronica SPA of Italy); SAGEMBAT Defense (Dassault, SNECMA and SAFRAN, all of France); and SNECBAT Engine Technologies (SNECMA and SAFRAN). Abu Ainnain is also the Chairman of *New Enterprises East Investment*, a venture capital firm, and is on the board of *4C Controls, Inc.* a defense firm registered in the U.S. but whose board of directors is primarily drawn from former executives in the French defense industry. *4C Controls Inc.* recently launched a joint venture with Abu Ainnain's firm Baynunah Aviation and Hydra Trading (owned by Sheikh Tahnoon of the UAE Royal Family) to build a satellite observation center using technologies supplied by the same French and Italian firms that serve as partners for Abu Ainnain's numerous other joint ventures.

A Sampling of Current Arms Production in the Gulf

The current trend toward direct offsets is not actually the Gulf region's first experience

with efforts to cultivate a domestic military industrial capacity – but it is by far the most extensive. As examined in Chapter 3, the U.S.-Saudi Peace Shield deal of 1984 resulted in the creation of six industrial firms that were meant to produce very basic parts or support services for some of the Kingdom’s arsenal of weapons (but subsequently languished due to a lack of investment), and in 1979 the GCC members briefly considered establishing a regional defense industrial center in the UAE to replace the Egypt-based Arab Organization for Industrialization.¹⁰¹ This dream of a regional military industrial center has been reinvigorated with new collaborative agreements generated by offset obligations – and the UAE is indeed the most advanced Gulf State in terms of military production.

Some of the largest defense-related firms in the UAE include (1) *Abu Dhabi Ship Building*, a company set up under an offset obligation incurred by the U.S. defense firm *Northrop Grumman* (other shareholders include the government-owned *Mubadala* investment fund and private Emirati investors);¹⁰² (2) the *Advanced Military Maintenance, Repair and Overhaul Centre* (AMMROC), an offset company set up by *Sikorsky* (other shareholders include the government-owned *Abu Dhabi Aircraft Technologies*, and *Lockheed Martin*, which just recently bought an equity stake in the

¹⁰¹ When the Gulf members withdrew from the Arab Organization for Industrialization in response to Egypt’s peace treaty with Israel, the minutes of the GCC meetings show some interest in shifting their financing to the UAE. Although this agenda item appears repeatedly, there was never any formal agreement. International Institute for Strategic Studies, *The Gulf Military Balance*. Cited in Nader Entessar. Fall 1984. “External Involvement in the Persian Gulf Conflict.” *Conflict Quarterly*, p47.

¹⁰² The largest share held by a private citizen is the 5.72% owned by Hussein Jassem Nasser Mohammad Al Nouwais, who also owns substantial shares in other offset-generated businesses, including 8% of the Al-Waha leasing conglomerate, the result of a BAE offset obligation; 100% of Danway Fusion Glass, a project developed by a consortium of German companies with offset obligations; and 100% of the Gulf Solar Power Company, an offset from GEC-Marconi.

company); and (3) the *Burkan Munitions Plant*, which was constructed under an offset agreement with the German firm *Rheinmetall Munitions* (other shareholders include the government-owned investment fund *Tawazun* and the private conglomerate *Al Jaber Group*, which is also a major partner in several other offset-related enterprises).¹⁰³

The UAE's defense-related sovereign wealth funds – outlined in Chapter 3 – have also increasingly focused their investments on defense applications. In addition to establishing joint ventures with foreign firms like *GE* and *Advanced Micro Devices*, the *Mubadala* fund has purchased substantial shares in European aircraft companies *SR Technics* (Switzerland) and *Piaggio Aero Industries* (Italy). *Mubadala* also recently launched a joint venture with the Kuwaiti defense logistics firm *Agility* (referenced above),¹⁰⁴ and owns a significant interest in the U.S.-based private equity firm *Carlyle Group*, made famous by its own acquisitions of small U.S. defense contractors in the 1990s.¹⁰⁵ *Mubadala's* wholly-owned subsidiary *Mubadala Aerospace* has partnerships with the Italian defense giant *Finmeccanica SpA* and *Airbus*, is in talks to launch a partnership with *Boeing*, and recently constructed a \$200 million facility to perform aircraft engine servicing.¹⁰⁶

¹⁰³ These other firms include *DAMTEC*, a joint venture with the South African defense firm *Denel*; *Safewater Chemicals*, a partnership with Specialist Mechanical Engineers, another South African defense contractor; and *Trakker ME*, a partnership with a Pakistani company specializing in GPS and other tracking technologies.

¹⁰⁴ The venture, *Agility Abu Dhabi*, is owned by *Mubadala*, *Agility of Kuwait*, and *Bateen Investment Company*, part of the *Al Ain Investment Group* owned by Dhafer Al Ahbabi.

¹⁰⁵ Mubadala Development Company (Zawya Profile). In 2007, Mubadala purchased a 7.5% stake in Carlyle Group, and invested another \$500 million in the firm in 2010. Shane McGinley. 16 December 2010. "Mubadala invests further \$500 million in US-based Carlyle Group." *ArabianBusiness*.

¹⁰⁶ Bloomberg News. 29 March 2011. "Mubadala in talks with Boeing on parts contract."

The *Tawazun* fund – wholly-owned by the UAE’s Offset Program Bureau (the successor to the UAE Offset Group, the Emirates’ official offset bureaucracy) – focuses solely on developing ventures with military applications. Thus far, *Tawazun* has launched several such companies, including *Abu Dhabi Autonomous Systems Investment* (ADASI), which invests in UAV technologies, and *Emirates Precision Industries*, a research and engineering firm. In some instances, *Tawazun* has used its funds to acquire existing companies, as was the case with its purchase of the German gun-maker *Merkel*.¹⁰⁷ This acquisition eventually led to the establishment of a pistol manufacturing facility in the UAE – which now provides the sidearm not only to the UAE security forces but also to the Bahrain National Guard and the Jordanian military, and the pistol is currently being reviewed for adoption by the Algerian military.¹⁰⁸ *Tawazun* has also used its resources to launch strategic partnerships with domestic entities that have defense-related operations. In 2011, *Tawazun* purchased a 26% stake in *International Golden Group* (IGG), a domestic retailer that distributes equipment used by the UAE armed forces, as well as a munitions manufacturing facility previously owned by Ali Al Dhaheeri’s *Adcom Group*. IGG’s CEO Fadil Al Kaabi cited *Tawazun*’s share acquisition as part of an “effort to support the long-term development of industrial capabilities in the UAE.”¹⁰⁹

Saudi Arabia’s strategy to increase defense production has focused more on building indigenous maintenance and support capabilities at a handful of very large ventures

¹⁰⁷ This type of activity, that is, the acquisition of existing assets rather than the creation of new ones, has long been a criticism levied against the managers of such funds – especially in countries where job opportunities, infrastructure and outlets for productive investment are limited.

¹⁰⁸ Ivan Gale. 2008 “Oil Fuels Fledgling Defence Industry.” *The National* (UAE).

¹⁰⁹ Hseeb Haider. 26 February 2011. “Tawazun picks 26% stake in International Golden Group.” *Khaleej Times*.

established under the Peace Shield deal in the mid-1980s, often housed in the kingdom's universities (as described above). Saudi Arabia's latest large-scale defense acquisition – 72 Eurofighter Typhoons worth an estimated \$40 billion – included a contract stipulation that 48 of the aircraft must be assembled inside Saudi Arabia (by the Peace Shield-era firm *Alsalam*), making it perhaps the most extensive transfer of defense technology in the region to date, outside Israel.¹¹⁰ The agreement also included language regarding the formation of a “regional defense industrial center” in Saudi Arabia.¹¹¹ Interestingly, generating new offset business for existing companies may be doubly efficient in terms of expanding domestic defense production in cases where multiple foreign competitors may be contracting with the same domestic entity. For example, the prime contractor on the *Typhoon* deal – *BAE* – recently announced plans to construct an entirely separate facility in the Eastern Province to house *Alsalam*'s Typhoon assembly lines¹¹² – presumably because *BAE*'s primary competitor *Boeing* took a 60% controlling share of *Alsalam* in 2006, and conducts maintenance operations on its own aircraft in the Saudi firm's existing facilities.

Like *Alsalam*, other Peace Shield-era companies are also reaping the benefits of new (or anticipated) offset agreements. The *Advanced Electronics Company* has been chosen to

¹¹⁰ Current talks may include another round of purchases, bringing the total Typhoon fleet to 200 aircraft by around 2015. “Saudis countdown to Typhoon service entry.” 13 May 2010. *Arabian Aerospace*.

¹¹¹ P.K. Abdul Ghafour. 19 January 2011. “Kingdom to manufacture 70% of military hardware locally.” *Arab News*

¹¹² Ironically, the largest shareholder in *Alsalam* is Boeing Integrated Defense Systems, via its Saudi subsidiary, the Boeing Industrial Technology Group.

partner with *Alsalam* to produce electronic components for the new *Typhoons*,¹¹³ while the *Middle East Propulsion Company* (MEPC) has seen its corporate profile heightened with significant share acquisitions by two foreign defense firms. Executives from these firms – the U.S.-based *Wamar International* and Germany’s *MTU Aeroengines* – both cited *MEPC*’s projected work on the Kingdom’s burgeoning fleet of fighter aircraft as a major driver in their investment decisions.¹¹⁴ The kingdom’s recent contract with *Boeing* likewise included an agreement signed by *Boeing*’s Chairman to “jointly grow the aerospace sector in the Kingdom of Saudi Arabia.”¹¹⁵ The French have similarly followed suit, with *Thales*, *Dassault* and *Snecma*, all announcing the formation of partnerships with Saudi firms formed under the U.S. Peace Shield offset program, including *AEC*, *Alsalam*, and *MEPC*, respectively.¹¹⁶

In the UAE, defense firms are also placing new contracts with existing companies created by previous offset agreements. Among these are *Raytheon*, which recently signed a contract with *Abu Dhabi Ship Building* (itself the product of a previous offset investment from *Northrop Grumman*) to construct a regional maintenance center to service the

¹¹³ Robert Bailey. 14 May 2010. “Local arms manufacturing in the Middle East and North Africa region is set to grow.” Middle East Association. (the Middle East Association is a trade group that promotes trade between the UK and the Middle East, The British Offset office and UK Trade and Investment – both government-operated entities – are two of its primary sponsors).

¹¹⁴ “Paris – MTU takes a stake in Saudi engine company.” 17 June 2009. ArabianAerospace. These two companies now own a combined 28.6% of MEPC shares – a larger proportion than United Technologies, which represents the original consortium of US defense contractors that established MEPC in 1992.

¹¹⁵ CTO Newsletter. 11 February 2008. 26(3).

¹¹⁶ CTO Newsletter. 14 August 2006. 24(15). Also see this Thales press release: <http://www.jobs.thalesgroup.com/en/cid71/Saudi-Arabia.html>

Raytheon-built missiles in use by the UAE and its Gulf neighbors.¹¹⁷ The center would satisfy the offset obligations *Raytheon* incurred for its latest sale of Rolling Airframe Missiles (RAMs) to the Emirates. Similarly, *Tawazun Precision Industries* has manufactured components for *Airbus*;¹¹⁸ *Abu Dhabi Ship Building* has coproduced corvette naval vessels with the French state-owned manufacturer *Constructions Mecaniques De Normandie*;¹¹⁹ and Abu Ainnain's *Baynunah (Beinuna) Group* (examined in Chapter 3), formed a partnership with the French firm *Thales*.¹²⁰ According to the press release, *Baynunah* will begin by providing logistics support services for the Mirage 2000-9 aircraft, but will eventually develop and produce those systems locally, "to help meet *Thales*'s offset obligations within the framework of any major future contracts."¹²¹

This recent shift toward direct offsets and indigenous arms production in the Gulf has potentially dramatic implications. The rise of a regional military industrial capacity will impact not only the domestic political-economic dynamics of the Gulf States, whose

¹¹⁷ There is currently no regional facility able to perform this maintenance, which needs to be conducted every seven years; on average these missiles have a 30-year lifespan, so each one would require 4 re-certifications before being retired. Ivan Gale. 8 March 2009. "Abu Dhabi in defence hub talks." *The National* (UAE).

¹¹⁸ These components include Long Range Titanium Spars for the A330 and metallic detail parts for the Single Aisle (SA) and Long Range (LR) programs. EPICOS industry newsletter. 10 February 2011; 3(6). Comments of Matar Ali Al Romaithi, Director of the Offset Unit at the OPB interviewed for newsletter. Tawazun's CEO, Saif Al Hajeri, called the Airbus agreement, "a historic moment" signaling the entry of "national products into large international markets for civilian and military aircrafts." CTO 16 November 2009. 27(22).

¹¹⁹ CTO Newsletter. 10 November 2008. 26(21).

¹²⁰ The venture was named *Thalbat*: Thales+ 'b-a-t' the acronym for Baynuna Aviation Technologies.

¹²¹ "Thales & Baynuna Aviation Technology into JV." 16 November 2009. *Al Defaiya* (Arabian Defense & Aerospace Business).

leaders may find themselves facing new constraints from an increasingly influential coalition of military elites and domestic defense producers eager to further their own economic and political interests. It will also have an impact on issues like regional security and human rights. This next section will briefly address some of these possible concerns before finally moving on for some final thoughts on the balance of military interests and regime patronage in Egypt and Jordan.

Defense Offsets, Indigenous Production, & The Potential Impact on Inter-State Conflict & Regional Arms Races

A dramatic intensification of defense production anywhere in the Arab World is likely to raise security concerns in neighboring countries like Iran and Israel as well as within certain sub-state populations, such as Bahrain's Shia community or the region's stateless Kurdish populations. The introduction of a new arms-producing state has implications for the human rights of national citizens and those in neighboring states, since their respective governments will have access to a new (presumably less scrupulous) supplier. There are several examples of regionally-produced weapons being sold to regimes engaged in violent repression of domestic opposition.

In the years immediately preceding the uprising against Qaddafi, the UAE exported 120 of its NIMR tactical vehicles (produced in collaboration with Jordan's KADDB) to Libya, and KADDB exported a number of its Desert Iris tactical vehicles to both Libya and Bahrain in the early 2000s.¹²² Ratel infantry vehicles produced by KADDB in

¹²² In Libya, some of the Desert Iris vehicles were captured by the rebel forces and used in skirmishes with pro-Qaddafi fighters.

collaboration with *Paramount Group* of South Africa also showed up in Yemen during the recent uprisings – despite the fact that no formal sales to Yemen ever took place (which indicates a violation of international law regarding arms transfers).¹²³ *Abu Dhabi Shipbuilding* exported at least seven naval vessels to Bahrain since 2006, and the official sidearm of the Bahraini police is the above-mentioned *Caracal* semi-automatic pistol manufactured in the UAE. Most of the largest weapons suppliers issued embargoes for arms exports to Libya, Bahrain, and Yemen during the height of their respective uprisings – which would certainly benefit producers like Jordan and the UAE, whose large inventories of armored vehicles offer more accessible supply alternatives and whose lax regulatory environments could facilitate the movement of weapons under embargo conditions.¹²⁴

These collaborative projects also contribute to the ability of the military and security services to monitor and repress dissent within their own borders. In 2008 the French defense giant *Thales* (which has a large joint venture with the Egyptian military)¹²⁵ was awarded a contract to build and launch a communications satellite for the Egyptian

¹²³ A spokesman for South Africa's Democratic Alliance Party David Maynier stated, "The Paramount Group, in co-operation with the King Abdullah Design and Development Bureau (KADDB), produced a converted version of the Ratel infantry vehicle in Jordan; and the infantry vehicle depicted in the photos appears to be the converted version of the Ratel infantry vehicle produced by the Paramount Group and KADDB in Jordan." Wyndham Hartley. "SA Ratels turn up in Yemen Conflict." *BusinessDay* (South Africa).

¹²⁴ The UAE is a major transit hub for all sorts of illicit goods, including sensitive defense technologies. In 2011, nearly one-quarter of the businesses found guilty of violating U.S. export law sent their illicit shipments through the UAE. U.S. Department of Commerce, Bureau of Industry & Security. Annual Report to the Congress for Fiscal Year 2011. Appendix C: Summaries and Tables of Closed Export Enforcement Cases and Criminal Cases, p27-32.

¹²⁵ Arab International Optronics is a joint operation with the military's National Service Projects Organization, which produces night vision equipment and other defense goods.

operator *Nilesat*, in which the military's AOI is the second largest shareholder.¹²⁶ During the recent uprisings *Nilesat* blocked the *Al Jazeera* news station from using this satellite to broadcast images from the uprising.¹²⁷ This raises the question of what forms of leverage these international firms have over their domestic business partners – and how they should use this influence in addressing concerns over human rights.

Just as the 2003 rehabilitation of the Libyan regime provided new opportunities for arms exports, so has post-Saddam Iraq. Both Libya and Iraq were under weapons sanctions for decades, which means their lists of requirements for upgrades and new equipment are lengthy. As outlined in Chapter 4, this has been a major boon for Jordan, which has exported weapons to the new Iraqi government and the Coalition Provisional Authority.¹²⁸ The KADDB even signed on as a 'platinum' sponsor (the highest-level sponsorship) for the inaugural session of an enormous trade show now held annually in Iraqi Kurdistan. A KADDB spokesman said all participants in the show would "benefit greatly by meeting and networking with many Iraqi officials and the private sector from around Iraq."¹²⁹

¹²⁶ http://www.thalesinformations.com/Press_Releases/space_PressRelease_Nilesat_020608/?pid=1650. This was also the first new satellite commissioned by Nilesat since Thales took over the shares in Arab International Optronics from BAE Land Systems in 2001. This suggests that Thales collaboration with the Egyptian military through Arab International Optronics helped the firm get the contract for construction and launching of the new satellite. Previous satellites (Nilesat 101, 102, and 103) had been built by Matra Marconi Space (now Astrium) or had been leased from existing operators.

¹²⁷ <http://advanced-television.com/index.php/2011/02/03/nilesat-problems-affect-jordan-media-city/>

¹²⁸ See the section titled "Regional Instability and Collaborative Arms Production in Jordan."

¹²⁹ Press Release. Iraqi American Chamber of Commerce and Industry. "Kurdistan DBX Trade Show and Conference." 28 August 2005. KADDB also send representatives to the International Rebuild Iraq Exhibitions held in Baghdad.

The growth in offset-driven defense production is occurring alongside the expansion of private firms offering security services, commonly referred to as private military security contractors (PMSCs). Many PMSCs have regional divisions in the Gulf as well as Egypt and Jordan. In the UAE, some of these firms include *G4S*, *Securitas*, *Blue Sky Group*, *Britam*, *International Armored Group*, *SicuroGroup*, *Good Harbor*, *Kroll*, *Olive Group*, *SkyLink Arabia*, *Unity Resources Group*, and *Control Risks*. The first Chinese company to be listed on the Abu Dhabi stock exchange is a PMSC called *China Security* (CSST), which provides defense and security equipment, including surveillance materials. In Kuwait such firms include *Securiforce*, *Combat Support Associates*, *Crescent Security Group*, and *Global Strategies Group* (which also has an office in Saudi Arabia).¹³⁰ So many of these firms entered the UAE in recent years that in 2006 the Ministry of Interior established the Private Security Business Department, which oversees the licensing of PMSCs. Because at least 51% of shares in these operations must be held by UAE nationals, this provides a significant business opportunity for domestic elites to gain a foothold in the defense and security sector.¹³¹

The Military's Economic Interests in a Revolutionary Context

The recent uprisings that have swept aside (or firmly shaken) the rule of authoritarian leaders in the region necessitate a brief, but focused, examination of the Egyptian case. Although offset agreements conferred very real and tangible benefits to the Egyptian

¹³⁰ Virginie Collombier. September 2011. "Private Security...Not a Business Like Any Other." Arab Reform Initiative, p3-4. Also see "Private Security Contractors at War: Ending the Culture of Impunity." 2008. Report by Human Rights First.

¹³¹ In contrast to the requirements for shareholdings, only 5% of the firms' administrative and managerial posts must be held by UAE nationals. Federal Law Number 37 of 2006.

Military, the armed forces proved unwilling to act as the praetorian guard for President Hosni Mubarak, who was forced to resign in February 2011. In Jordan, the relationship between King Abdullah II and the East Bank (Transjordanian) population that dominates the state bureaucracy has likewise grown increasingly strained. In May 2010, the National Committee of Retired Servicemen issued a much-publicized ‘open letter’ to the King, citing concerns over corruption, economic mismanagement, and growing income inequality (alongside the perennial issue of the relative power and influence wielded by citizens of Palestinian origin). Subsequent signs of discontent include sit-ins outside government offices to protest pay discrimination against retirees and the formation of a new political party, the Jordanian National Conference.¹³² Despite their relatively muted criticism thus far, memories of the 1974 “Zarqa Affair” – in which members of an elite tank division initiated a half-hearted mutiny against King Hussein – are likely to prompt similar efforts to placate discontent within the military. The short-lived mutiny is especially poignant, since it occurred amidst a rising tide of Arab nationalism and economic turmoil that resembles current regional conditions. King Hussein’s first order of business following the 1974 rebellion was to institute a pay raise for the military – and periodic perquisites for the JAF have been a mainstay of monarchical policy ever since.

Could this distinction be due in part to the Hashemite Monarch’s more effective use of offsets to deliver prestigious production contracts and more sustainable patronage to his

¹³² Although this party was founded by the National Committee of Retired Servicemen, it also includes other elements of the public sector workforce – notably teachers and judges. The party’s military founders have been keen to highlight the diversity of the organization’s membership. However, their grievances are carefully couched in the language of concerns over Palestinian demographics within Jordan not explicit opposition to the authority of the Hashemite monarchy. “Popular Protest in North Africa and the Middle East (IX): Dallying with Reform in a Divided Jordan.” 12 March 2012. International Crisis Group: Report No. 118.

support base in the Armed Forces? We know that Jordan has maintained most of its housing, education, and pension subsidies to the Armed Forces while slashing such safety nets for other populations.¹³³ Even the figurehead of the National Committee of Retired Servicemen has been restrained in his public statements, as when he spoke of a “moral contract between the Jordanian people and the Hashemites” which recognized the king’s right to rule in exchange for the provision of security and freedom.¹³⁴ Likewise, we know that important military families (such as the Majali) were effectively incorporated into the patronage infrastructure via KADDB, and the monarchy is *explicitly* linked with KADDB. It is not the “Jordanian Design & Development Bureau” – and the only image included in the organization’s logo is the royal diadem. However, contemporary scholarship on Egypt also suggests that the military retains access to important privileges and benefits – like commissaries, subsidized housing, free healthcare, subsidized university education for their children, pensions, etc. Furthermore, the existence of mega-projects such as the £3 billion EGP Mubarak Complex for the Defense Industries appeared to demonstrate President Mubarak’s commitment to enhancing (or at least maintaining) many institutional privileges.¹³⁵ So why did Mubarak fail to maintain the military’s support? And is King Abdullah likely to suffer the same fate?

¹³³ A.M. Baylouny finds that, in the aftermath of structural adjustment, “the main group that continues to benefit from the state is the military,” whose subsidies, pensions and employment programs actually increased – as did the military’s overall budget – while budgetary allocations for social services delivered to non-military populations decreased. A.M. Baylouny. “Privatizing Welfare in the Middle East” p57-8.

¹³⁴ Tim Sullivan. 3 July 2011. “Jordan navigates warily in turmoil of Arab Spring.” *Associated Press*.

¹³⁵ 24 August 2010. “Minister: Egypt’s annual military production reaches £2.7 billion EGP.” *Al Masry Al Youm* (English edition). “Dr. Ali Sabri: Military Production growth was 5% despite the country’s circumstances.” 23 October 2011. *Al Ahram*. <http://www.ahram.org.eg/Investigations/News/108501.aspx>.

Defense offsets (and likewise other forms of patronage) should be seen as contributing to the political and economic influence of their recipients, which *can* translate into loyalty to the extant regime, depending on the degree to which the provision of such benefits relies on the continued rule of a particular regime or executive leader. The military may not require the direct intervention of the regime on their behalf in order to secure the continued flow of benefits, as seems to be the case in Egypt. The Egyptian Military's relationships with foreign patrons and foreign firms, including those from the U.S. and Europe (and increasingly China), are not directly mediated through the office of the Egyptian President. Decades of commercial and diplomatic exchange have fostered significant relationships between Egyptian military officers and the many actors involved in cooperative military production, including the U.S. Office of Military Cooperation, the Defense Security Cooperation Agency, the Army Tank-automotive and Armaments Command/TACOM, the Technical Assistance Field Teams, private sector Field Service Representatives, the foreign Commercial Attaches that liaise with defense executives and military officers, as well as organizations like the American Chamber of Commerce in Egypt and other semi-official bi-lateral business associations. These exchanges have created extensive linkages between foreign defense firms and Egyptian military officers, as have military exchange/training programs and intelligence cooperation. The military has also been highly successful in portraying itself as the institutional lynchpin in domestic and regional stability (especially in safeguarding the treaty with Israel), which has further added to the degree of independence the armed forces enjoy vis a vis Egypt's other state institutions.

By contrast, the Jordanian military's foray into manufacturing, and the linkages that are fostered through KADDB, is in its infancy. Unlike President Mubarak, King Abdullah is consistently depicted as the catalyst for each of KADDB's ventures; he is often present at ribbon-cuttings and other ceremonies and is frequently quoted in corporate literature produced on behalf of KADDB's various enterprises. Additionally, the military's non-defense related economic operations (such as Mawared – the army's property development arm) are increasingly brought under the umbrella of KADDB, which further reinforces the association between the King and the army. Lastly, we do not see the same degree of 'outsourcing' activity that characterizes the Egyptian Military's use of state-financed facilities (such as operating military hospitals as for-profit private clinics).¹³⁶ This is, of course, a double-edged sword. Although KADDB initially received near-ubiquitous praise both within and outside Jordan, some of the Armed Forces' disastrous real estate projects have sapped public enthusiasm for military entrepreneurship. One notable example is a mixed-used development adjacent to KADDB's corporate headquarters known as the Amman Living Wall, which one prominent Jordanian blogger referred to as a "manmade cavity" that represents the army's "finest real estate misadventure" to date. If the global economic downturn and strained state finances erode KADDB's previous lustre, the organization may become more of a liability than an asset.

¹³⁶ This too, may be changing. A UAE-based industrial glass company recently utilized KADDB testing facilities to gain a special industry certification required for glass used in defense and security applications. Perhaps the KADDB is diversifying its activities in order to generate income outside the parameters of its traditional collaborative manufacturing projects. "Lumiglass Industries LLC Receives UKAS Certification for Armour Glass Line." 2 June 2012. Press Release. <http://www.aeconline.ae/lumiglass-industries-llc-receives-ukas-certification-for-armour-glass-line-37065/news.html>

In Egypt and Jordan, the flow of offset benefits and other patronage depends on the military's institutional leverage vis a vis the executive branch – after all, if it were a weak institution, it would not merit the provision of such privileges in the first place. However, it also stands to reason that the military's loyalty to the incumbent regime must be factored into the executive's calculus. Why subsidize a disloyal institution? (Or allow it to exert its own claims on state resources at the expense of other important constituencies)? The question seems obvious, but is complicated by the fact that this particular institution is heavily armed. Even if the military's loyalty to Mubarak was visibly eroding, rescinding the army's access to long-standing privileges is another matter entirely. Such relationships are inherently sticky and resistant to change.

This points to two possibilities in the Egyptian case. Either the privileges provided to the military were not as extensive as they appeared, or President Mubarak was not as essential to the delivery of those privileges as *he* appeared. As Michael Wahid Hanna observed in the *Cairo Review of International Affairs*, Egypt under Mubarak

witnessed the emergence of competing centers of authority, such as the Ministry of the Interior and the crony-capitalist elite associated with the president's son...[f]urther, the armed forces were insulated from the practice of day-to-day repression. This allowed the Egyptian military to untether its own future from the fate of the president and his inner circle of civilian advisors.¹³⁷

This next section will look at some evidence of the Egyptian Military's economic holdings in the late 1990s and early 2000s to see whether their economic privileges were actually eroding during the latter period of Mubarak's rule, and evaluate whether the military was successful in partnering *directly* with foreign firms to access alternative

¹³⁷ Michael Wahid Hanna. "Egypt's Search for Truth." *Cairo Review of International Affairs*. <http://www.aucegypt.edu/gapp/cairoreview/pages/articleDetails.aspx?aid=90>

sources of finance and technology, allowing them to circumvent Mubarak and eventually render his direct intervention on their behalf unnecessary.

There is certainly evidence to suggest that the military can act independently in order to pursue institutional benefits associated with offset agreements. Major co-production agreements with the Egyptian Military were actually expanded amidst the uprising, both during the period of uncertainty over Mubarak's intention to resign and subsequently under the leadership of the Supreme Council of the Armed Forces (SCAF). In 2008, the Pentagon announced that the American firm *Swiftships* (a subsidiary of *Halter Marine*) had signed a \$13 million contract to sell four 28-metre patrol craft to Egypt, but in February 2011 – *the very same month that Mubarak stepped down* – the contract was modified to allow for an Egyptian shipyard to “assemble” two of the patrol craft and “co-produce” the other two – at an increased cost of \$20 million.¹³⁸ Five months later in July, as violence against demonstrators intensified and hundreds of thousands of protestors returned to Tahrir Square, the U.S. announced the 11th installment of the \$1.3 billion M1A1 tank co-production program. If Mubarak was considered the centerpiece of any bilateral relationship with a major patron, surely it was the one between Egypt and the U.S. Yet his ouster did little (if anything) to derail the continuation of this major contract. In September 2011, amidst continued demonstrations (including the storming of the Israeli Embassy in response to the shooting deaths of several Army officers near the

¹³⁸ According to the Pentagon announcement, the contract includes “two co-assembly kits and two co-production kits to support the construction of the four 28-meter CPCs [coastal patrol crafts]. These kits, consisting of all material necessary for construction, will be shipped to Alexandria, Egypt, for construction by an Egyptian workforce, with oversight by Swiftships. US Department of Defense; issued 10 February 2011.

Egyptian-Israeli border) and as the SCAF's hold on power appeared increasingly tenuous, Egypt signed a co-production agreement with the Turkish company *Yonca-Onuk JV* to manufacture six Onuk MRTP-20 fast-intervention crafts "with technology transfer" at the military-owned *Alexandria Shipyard*.¹³⁹ Prior to this agreement, collaborative arms production between Egypt and Turkey had been extremely rare.¹⁴⁰ In the ten-month period from Mubarak's resignation to the Fall of 2011 the Egyptian Military managed to sign more contracts with substantial collaborative components than during any other 10-month period in the previous two decades. Furthermore, the U.S. relinquished its only real source of leverage over Egypt's Military the following Spring (March 2012) when the State Department unilaterally announced that Congressional inquiries into U.S. military aid to Egypt would be suspended and the funds would be dispersed as planned.

This observation suggests two potential dynamics: that the previous government was placing at least some minimal restrictions on the ability of the military to engage in joint production (and the removal of Mubarak and his allies has strengthened the military's negotiating leverage), or, now that Mubarak is gone, Egypt's foreign allies are eager to placate the military in hopes of exercising influence in the post-revolutionary government. Either way – the military has been able to increase the inward flow of benefits via co-production projects, technology transfer agreements, and the like, because of (or in spite of) Mubarak's exit.

¹³⁹ Ipek Yezdani. 19 September 2011. "Egypt eyes to buy Turkish unmanned aerial vehicles." *Hurriyet Daily News* (Turkey).

¹⁴⁰ The only cases of collaborative arms production of which I am aware are the Peace Onyx program of the late 1980s/early 1990s, in which Turkey produced F-16s jointly with U.S. firms and then sold the planes to Egypt (which produced some minor components for use in the jets); and possibly a late 1980s agreement that saw the Turkish firm MKEK build a facility in Egypt to produce 105mm tank rounds. Omer Karasapan. January-February 1987. "Turkey's Armaments Industries." *Middle East Report*, p29.

It may also have been the case that the persistent intensification of liberalization and privatization, combined with falling levels of state investment, was in fact chipping away at some of the economic interests of the military – which led the officer corps to abandon their support of President Mubarak (and by extension the possibility of Gamal Mubarak inheriting the presidency). This observation meshes well with some of the actions taken by the military since the uprisings began in January 2011, including the prosecution of Gamal Mubarak’s cronies – whose business ventures and neoliberal policy platforms were perceived to be encroaching on the military’s economic operations.¹⁴¹ Gamal’s high-profile business associates were the first to be detained, banned from international travel and subjected to asset seizures following President Mubarak’s resignation.¹⁴² But the military’s economic managers had also been slowly diversifying their economic portfolio for a number of years leading up to the revolution – suggesting that the officer corps had predicted an eventual assault on their public sector economic operations, and had taken precautions to limit its impact on their financial independence. (An independence, it should be noted, that allowed the SCAF to ‘loan’ the Egyptian Central Bank \$1 billion in December and dole out monthly bonuses to mid-ranking army

¹⁴¹ Hanna states, “The early moves to prosecute the associates of Gamal Mubarak, such as Ahmed Ezz, the steel magnate and former leading figure in the ruling National Democratic Party (NDP), are unsurprising in light of the military’s traditional antipathy for the neoliberal elite cultivated by the former president’s son...” “Egypt’s Search for Truth.” *Cairo Review of International Affairs*. <http://www.aucegypt.edu/gapp/cairoreview/pages/articleDetails.aspx?aid=90>. A June 2012 IPS article states, “[p]rosecutors have targeted the coterie of Gamal Mubarak, the former president’s son and presumed successor, while passing over officials and businessmen with strong links to the ruling military council.” Cam McGrath. 26 June 2012. “Mubarak Cronies Find Comfort in Exile.” *Inter-Press Service*.

¹⁴² High-profile associates of Gamal Mubarak that have been put on trial include steel magnate and former ruling-party chairman Ahmed Ezz, who currently sits in jail, and Hussein Salem, who was recently acquitted on charges relating to the bribe and illicit grants of state-owned land. Numerous other associates fled the country.

personnel throughout the period of upheaval).¹⁴³ A quick look at the Egyptian Military's holdings in the maritime transport sector might give us a better idea of whether or not the military really was losing out in the later years of Mubarak's reign – and how they sought to mitigate their exposure.¹⁴⁴

Egypt's Maritime Transport Sector as a Microcosm for the Military's Economic Position

Historically, the military has often validated its role in the economy and shielded its operations from privatization by highlighting the strategic nature of certain sectors, including maritime transport. In the late 1990s, Public-Sector Enterprise Minister 'Atif 'Ubayd restricted privatization of shares in maritime companies to 10% after the Israeli ambassador revealed that Israeli companies were interested in purchasing one of Egypt's state-owned (and army-run) stevedoring companies. Amid perceptions that Israeli owners would deliberately block the acquisition of new technologies in order to keep Egypt underdeveloped, the military was able to pose as guarantor of vital national assets. Ultimately, the government decided to postpone privatization of maritime transport altogether.¹⁴⁵

But renewed pressure from World Trade Organization members with major shipping interests led the Egyptian Government to adopt a master plan (2001-2017) to extend the

¹⁴³ Jack Shenker. 28 December 2011. "Egyptian army officer's diary of military life in a revolution." *The Guardian* (UK). These bonuses were about 2,400 Egyptian pounds, or \$400.

¹⁴⁴ This material also appeared in an article I co-authored with Joshua Stacher of Kent University. See "Egypt's Generals and Transnational Capital." Spring 2012. *Middle East Report*, 262.

¹⁴⁵ Marsha Pripstein Posusney, "Egyptian Privatization: New Challenges for the Left," *Middle East Report* 210 (Spring 1999), p. 39.

liberalization of maritime activities. This plan included the introduction of the “landlord model,” whereby private-sector firms fulfill many port functions, but remain under the supervision of “independent,” profit-oriented (but still state-owned) entities.¹⁴⁶ The adoption of this model resulted in what a 2008 USAID report termed an “investment stampede”¹⁴⁷ that ultimately brought in four of the world’s largest maritime shipping conglomerates, including the Danish *Moeller-Maersk*, the French *CMA CGM*, and *Cosco Pacific* and *Hutchison Port Holdings*, both of Hong Kong.¹⁴⁸ Although such overseas firms now hold majority shares in new Egyptian maritime companies, and their operations immediately cut into the market shares of the three large military-controlled container & cargo companies, the military has been able to secure significant minority stakes in the new operations as well as top executive posts for high-ranking officers. This is primarily achieved through the state-owned *Holding Company for Maritime and Land Transport* (HCMLT), the various port authorities, the Ministry of Maritime Transport, and other parastatals involved in maritime shipping, such as the Arab Federation of Chambers of Shipping, all of which are heavily staffed by naval and other military officers.¹⁴⁹

¹⁴⁶ “Maritime Transport and Related Logistics Services in Egypt,” ICTSD Program on Trade in Services and Sustainable Development (December 2007), pp. ix, 8.

¹⁴⁷ USAID/Technical Assistance for Policy Reform. July 2008. “Port Sector Regulation: Establishing a Port Regulator in Egypt.” p6-7.

¹⁴⁸ The shipping conglomerates invested in Egypt, ranked by market share, include: the Danish A.P. Moeller-Maersk Group (1st largest); the French CMA CGM (3rd largest); and Hong Kong’s COSCO Pacific (4th largest); and Hutchison Port Holdings (also of Hong Kong), the world’s largest operator of container terminals.

¹⁴⁹ The Arab Federation of Chambers of Shipping is chaired by Admiral Hatim al-Qadi. See subsequent footnotes for other entities chaired by military officers.

These joint ventures represent tens of billions of dollars in investment from foreign firms, state banks and international lenders; even the military's minority shares in these companies represent substantial assets. The new port operators include *Damietta International Port Company*, in which private French, Kuwaiti and Chinese firms own a combined 70% alongside an unknown holding by the *United Arab Shipping Company* (a roughly 50-50 joint venture between the military-dominated *HCMLT* and the Kuwaiti government) and a 5% holding by the *Damietta Port Authority*, whose chairman is also a military officer.¹⁵⁰ Likewise, the Suez Canal Authority—headed by Adm. Ahmad ‘Ali al-Fadil—owns 12 percent of the shares in the *Suez Canal Container Terminal Company*, which began operations in 2004, and whose other shareholders include *Maersk* and *Cosco Pacific*.

The *Alexandria International Container Terminal/AICT* is a prime example of the military's ability to mitigate the financial impact of privatization by maintaining shares and lucrative executive positions in new joint venture companies. When *Hutchinson Port Holdings* established AICT in 2007, its military-owned competitor, *Alexandria Container and Cargo Handling Company/ACCHC*¹⁵¹ saw its share of traffic fall from 92 percent to 70 percent in just one year.¹⁵² This was a major blow – since the *ACCHC* had long been considered the “cash cow” that would make up for shortfalls in other operations owned

¹⁵⁰ “Major Lines Join Damietta Project,” *Lloyds List* (via NewsEdge Corporation), December 7, 2007.

¹⁵¹ ACCHC is owned by the *HCMLT* and the *Alexandria Port Authority*. The Holding Company for Maritime & Land Transport Chairman is Captain Atef Hassan; the Chairman of the Alexandria Ports Authority is Admiral Mohamed Youssef.

¹⁵² Egyptian Maritime Transport Industry. 14 July 2009. Capital Research.

by the *Holding Company for Maritime and Land Transport*.¹⁵³ However, the military managed to secure a measure of ownership (5 percent) in the new joint venture with *Hutchinson* through the *Alexandria Port Authority*. The port authority's chairman, Admiral Muhammad Yusuf, praised the introduction of foreign shipping interests, stating that the government's policy to "attract foreign direct investment by partnering with multinational companies" will benefit the transport sector through the transfer of "management expertise and best practices," as well as the introduction of new technology and more container traffic.¹⁵⁴ The new joint venture was actually inaugurated under General 'Abd al-Salam Mahgoub, a former chief intelligence officer who became a vocal advocate of coordination between the state and private sectors after being appointed governor of Alexandria in the late 1990s.¹⁵⁵

Similarly, the *Suez Canal Container Terminal Company/SCCT* – majority owned by the Dutch company *APM Terminals* and *COSCO Pacific* of Hong Kong – has taken significant business away from the *Port Said Container & Cargo Company*,¹⁵⁶ whose board of directors is primarily composed of Egyptian Naval officers.¹⁵⁷ However, both the

¹⁵³ Minutes from meeting between USAID contractor International Business & Technical Consultants, Inc. and Egyptian authorities from the Holding Company. "Investment Banking Services for Egypt-MPE/PEO." pdf.usaid.gov/pdf_docs/PNACJ009.pdf

¹⁵⁴ "Contract for a New Company to Upgrade Container Terminal Quays at the Ports of Alexandria and El Dekhelia," March 13, 2005.

¹⁵⁵ Samer Soliman, *The Autumn of Dictatorship* (Stanford, CA: Stanford University Press, 2011), pp. 88-89.

¹⁵⁶ USAID/Technical Assistance for Policy Reform. July 2008. "Port Sector Regulation: Establishing a Port Regulator in Egypt." p6-7. When APM first invested (in 1997) shares in the company were 50/50 between APM and the Suez Canal Authority. The latter has clearly lost some benefits as its shares declined.

¹⁵⁷ http://www.pscchc.com/board_members.aspx

Suez Canal Authority and the state-owned *National Bank of Egypt* secured minority stakes in SCCT. Likewise, the state-owned *Damietta Cargo & Handling Company* is expected to face fierce competition from an investor consortium that was recently awarded a BOT contract to build a new container terminal that would directly compete with *Damietta Cargo*.¹⁵⁸ In this case as well, all the relevant state-controlled port authorities (the Alexandria Port Authority, the Suez Canal Authority, and the Port Said Authority) have some stake in this new venture.

Furthermore, the Egyptian Government still covers the losses incurred by military-owned operations, allowing the latter to keep its foreign currency earnings despite major losses.¹⁵⁹ This is because the holding companies themselves (in this case, the Holding Company for Maritime and Land Transport/HCMLT) cover the losses of their constituent operators, and the Holding Companies are under the authority of the Ministry of Investment¹⁶⁰ – a fact not lost on investment analysts in the region, who highlight the “full support of the HCLMT” as a factor affecting possible investment decisions in the HCLMT’s subsidiaries.¹⁶¹ Even the “joint ventures” and “publicly-traded” companies

¹⁵⁸ the investor consortium includes firms from Kuwait, China and the US. USAID/Technical Assistance for Policy Reform. July 2008. “Port Sector Regulation: Establishing a Port Regulator in Egypt.” p6-7.

¹⁵⁹ profits of HCMLT and its subsidiaries are estimated at around \$83 million in 2008. March 2009. “Impacts of the Global Financial Crisis on Egyptian Workers.” Center for Trade Union and Workers Services (CTUWS), P4.

¹⁶⁰ December 2005. “Impact of Liberalization of Trade in Services: banking, Telecommunications and Maritime Transport in Egypt, Morocco, Tunisia and Turkey.” Bilkent University (Turkey): Centre for International Economics and Cairo University: Faculty of Economics & Political Science, p301. Study partially funded by the European Commission.

¹⁶¹ Egyptian Maritime Transport Industry. 14 July 2009. Capital Research.

that appear to reflect the liberalization of military-owned companies are often partnerships with *other* military-owned companies.¹⁶²

The various port authorities also have shares in individual maritime infrastructure projects and complementary sectors (such as shipping insurance) alongside foreign investors. One such project is a dredger assembly deal with the Dutch company *Damen Group*; another is *Suez Canal Insurance*, which is now majority-owned by *Green Oasis Investments*, a joint Chinese-Egyptian investment fund. The military stands to benefit handsomely from this influx of investment, equipment and technology, not only because it controls shares in both the joint venture companies and their state-owned competitors, but also because it exerts substantial control over complementary industries. For instance, the military (via the AOI's *General Egyptian Company for Railway Wagons and Coaches*) provides much of the hardware and labor for Egypt's rail construction, which is being expanded in order to link new maritime port terminals with inland rail networks, which in turn will increase the volume of business for the joint venture port operators. The revenue the military generates from the maritime sector may also explain the degree of violence meted out to strikers and other protesters around Egypt's ports, which are often incorporated into "special economic zones" where regulation is minimal and tax incentives are high.

The collaboration we see between Egypt's Armed Forces and foreign conglomerates in the maritime sector provides the military with the best of both worlds. They maintain

¹⁶² For example, the Holding Company for Maritime and Land Transport/HCMLT, boasts five "private, joint stock companies," however these are primarily owned by consortia of other HCMLT subsidiaries and government agencies.

absolute control over their pre-existing maritime companies and secure shares in new, more lucrative ventures that also get the stamp of approval from international financial institutions focused on privatizing state-owned enterprises. Despite the introduction of new competition, the military's old maritime companies will still attract business from shipping interests that place a premium on the military's near-monopoly control over customs and other complementary services, which have not been the site of similar foreign investment.¹⁶³ Indeed, shipping agency operations are especially well-suited to military management because they entail intermediation with state agencies – notably customs/immigration agencies, port authorities, tax authorities, inspection/safety agencies, etc. – and shipping companies recognize that employing a liaison with authority over these matters can greatly expedite the process and cut costs.¹⁶⁴ Judging by an examination of this single sector – which represents a great deal of commercial activity in Egypt, and therefore also a sizeable chunk of the military's revenue stream – the military's economic planners have been able to successfully hedge against the rising tide of privatization. The fact that businessmen and investment firms known to be associated with Gamal Mubarak do not appear on the shareholder rosters of these operations also suggests some degree of independence from the regime. This could indicate that the economic leverage of both groups (the military and the new generation of crony

¹⁶³ These include Assiut Shipping Agency, Aswan Shipping Agency; Damanhour Shipping Agency; and El Menia Shipping Agency. The Canal Shipping Agencies Company – which is 95% owned by the Government (through HCMLT and Port Said Engineering Works) – owns 100% of these shipping agency operations, which are listed as “private” and “corporate” entities.

¹⁶⁴ Agency services include things like berthing arrangements with port authorities; repair resources and marine equipment information; arrival, departure and cargo information; liaising with customs/immigration, revenue/tax authorities, health and agriculture departments, and state transportation agencies; licensing arrangements; shipment documentation (dock receipts, bills of lading, export declarations, manifests, permits, etc.); cargo handling reporting; inspection services arrangements; and dry docking arrangements.

capitalists) was mutually exclusive – and the military saw the end of Mubarak’s reign as an opportunity to clear the field of competitors.

Future Research Agenda

This project has argued that defense offsets represent an emergent form of patronage that reveals the unique strategies adopted by ruling elites in the Arab World to secure the support of powerful domestic constituencies. Because regime authority in many states is predicated on the allocation of economic privileges, ruling elites are compelled to generate resources that can be distributed to important domestic constituencies.¹⁶⁵ But they must do so under changing conditions – including global norms regarding the desirability of economic liberalization and the containment of official corruption, as well as shifts in the magnitude of certain forms of economic exchange, notably the arms trade. Although the uprisings in the Arab World have produced a litany of new theoretical and empirical puzzles – such as the role of social media, revolutionary tipping points, and demographic pressures – the structural conditions that formed the basis for demonstrators’ grievances are not new. Principle among these was the use of public assets to subsidize the groups that provided support to the regime – including the military and crony business elites. And despite the removal of some regional leaders and serious challenges posed to the legitimacy of others, many of the domestic power brokers whose support enabled these regimes to cling to power for decades have likewise been able to prevent the erosion of their own influence and political leverage. Their persistence rests – at least in part – on the robust system of institutionalized privileges they accumulated in

¹⁶⁵ Henry, Clement. M and Richard Springborg. 2001. Globalization and the Politics of Development in the Middle East. Cambridge University Press, p11.

exchange for their political loyalty. This allegiance enabled them to accumulate the necessary resources (both tangible and intangible) to secure a position atop the domestic power hierarchy, retaining their individual or institutional leverage over political and economic decision-making. This resilience suggests the need for more systematic investigations of patronage systems in the region, especially studies that move beyond examinations of oil revenues and foreign aid, which have traditionally been the scholarly focus in investigations of state largesse. This paper has examined an obscure but increasingly influential component of this system of patronage and their role in sustaining institutions of clientelism in the Arab World.

The single largest limitation to this project has been the reliability of the data – which has come from multiple sources, none of which are comprehensive. Analysis is plagued by intentional obfuscation on the part of numerous parties, the complexity of the offset agreements themselves, and the ability of the governments examined here to swiftly implement dramatic shifts in their offset policies (as we saw in the Gulf States above). The ever-changing body of empirical information on which the analysis is based also presents major drawbacks. New offset agreements are signed frequently, so identifying emerging patterns in ‘real time’ is difficult. Nonetheless, I believe that examining the content of individual defense offset contracts and identifying their intended recipients gives us an important insight into how patronage-based politics really function – and how structural features of the global economy (such as the growth in the arms trade and the intensity of financial innovation) percolate down to influence domestic patronage transactions.

In terms of future research, this project can be fruitfully expanded in a number of directions. One potential project might examine the relationships between actors involved in the provision of offset-generated projects using network analysis in order to explore how transnational elite networks are embedded in the global arms trade. Several large and high profile economic ventures in the United Arab Emirates were launched under the auspices of Abu Dhabi's defense offset program. Several of the joint ventures that resulted from these offset agreements are now managed by former executives from Western defense firms or by retired U.S. and European military personnel, and frequently defense firms that originally incurred obligations to invest in the Emirati economy are the recipients of subsequent investment from private-sector conglomerates and state-owned investment vehicles based in the UAE. Research by scholars such as Thomas Chaney (2010) and J.B. Glattfelder and S. Battiston (2009) demonstrates the utility of network analysis for locating and measuring concentrations of power in structures previously thought to rest on an impossibly complex system of overlapping ties. Using network analysis to evaluate the nature and intensity of these ties will yield a graphic demonstration of the influence that the arms trade can have in the domestic political economies of procuring countries (and vice versa).

Another project might use material from these case studies to examine the ways foreign governments use offset-generated projects and investments to create a façade of economic and political reform. Documenting how offset projects are used to channel states funds into the private ventures of crony elites would show how ostensibly "good"

things like FDI and public-private sector partnerships can in fact reinforce the hegemony of incumbent elites while also shedding light on how inadequate attention to the situational variability of concepts such as ‘public’ and ‘private’ contribute to this flawed understanding. Deployed in the service of vested interests, this false demarcation has obscured the line between public funds and the privy purse and facilitated the transfer of collective resources to powerful individuals and institutions with close ties to ruling elites.

Likewise, this conceptual obfuscation allows arms manufacturers in Europe and the U.S. to cite huge offset-related costs in order to claim subsidies from their own governments, despite the fact that they ultimately recover the full cost of offset provisions – and an additional premium as well. Defense offsets are an excellent device for examining how the boundary between such concepts is deployed strategically, as both the rhetoric and the tangible processes reflect deliberate efforts to define the relevant categories according to the demands of powerful interest groups. This concentration of resources has had a dramatic impact on the Middle East, and cannot be completely disassociated from similar trends in the U.S., including the decline of the public sector, the erosion in provision of public infrastructure, weakened trade unions, the widening income gap and the enormous subsidies provided to a small number of highly-influential economic actors. By combining empirical and conceptual approaches, these two projects could complement one another and contribute to broad discussions concerning the importance of reforming the economic regulations governing the global arms trade.

Other avenues could include a comprehensive comparative analysis of defense offsets in other countries – notably Turkey and Israel, whose military industrial bases owe much of their expansion to offset agreements. Another option would be a systematic examination of the evolution of incentives in the global arms trade, tracking parallel developments in bribery incidents and offset arrangements within the context of the globalization of arms production. This project would address interesting questions regarding global flows of financial resources taking place within the worldwide arms market – ranging from FDI (which we know is woven in with offset-generated investment) to formal offset agreements to cases of traditional bribery. Defense offsets and the broader evolution of the global arms trade is a substantive issue area that incorporates many aspects of governance initiatives being pursued in the developing world and the post-industrial welfare states of the U.S. and Western Europe, including those dealing with public corruption, corporate responsibility, the sustainability of defense budgets, the efficacy of global legal and regulatory regimes, political patronage, financial innovation, and transparency and accountability in the implementation of economic liberalization and privatization programs. The cast of characters involved in the offset business reads like a ‘Who’s Who’ of bribery scandals: former intermediaries that operated on the fringes of the law have now found legal employment as offset brokers, and many multinational banks, private equity firms, accounting service firms and law firms implicated in corruption and bribery scandals have formed dedicated offset desks to assist defense firms in fulfilling their contractual obligations. All of these possible research projects would help put defense offsets in broader perspective, highlighting their origins, their evolutionary trajectory, how they fit into larger structures, and how researchers can

utilize discrete (sometimes obscure) transactions to inform our understanding of much larger and more consequential political and economic relationships.

Appendix A: Defense Offsets in Egypt, 1980-Present

Offset Project	Partners	Notes
M1A1 Tank Coproduction	General Dynamics (US) Egyptian Tank Plant/Factory 200 (Ministry of Military Production)	The military produces several items used in the tanks, including road wheels, caterpillar track- links, beams and drive wheels, and 120-mm tank gun. ¹
M60 Upgrade	General Dynamics (US) Army Workshop 101	
M88A2	United Defense (US) BAE Land Systems (UK)	
M113 Modifications (Egyptian Infantry Fighting Vehicle)	BAE Land Systems (UK)	Modification involved additional armor, improved engine, and new turret
F-16 Peace Onyx Program	Lockheed Martin (US) Turkish Aerospace Industries/TAI Arab Organization for Industrialization/AOI	
HAWK Missile Rebuild		
105mm tank rounds coproduction	Possibly joint US-Turkish program (with MKEK of Turkey) Heliopolis Company for Chemical Industries/Factory 81	Earliest coproduction program on record, began in 1979
JF-17 aircraft coproduction	Pakistan Aeronautical Complex/PAC Chengdu Aircraft Industries Corporation/CAC (China) Arab Organization for Industrialization/AOI	Agreement still pending
K-8/JL-8 aircraft coproduction	Nanchang Aircraft Manufacturing Corporation (China) Pakistan Aeronautical Complex	

¹ The following items are considered sensitive, and so are manufactured in the U.S. and shipped to Egypt for final assembly: the tank armor (depleted uranium), laser range-finder, armaments, gas turbine engine, transmission, fire control systems, and some other electronics. The military also uses the tank facility to build civilian products, including construction vehicles.

Appendix A: Defense Offsets in Egypt, 1980-Present

Offset Project	Partners	Notes
RL812 multiple rocket launcher licensed production	Chinese People's Liberation Army Helwan Machinery and Equipment/Factory 999	Also built in Iran and Turkey; designed in early 1960s
PRL-81 man-portable single rocket launcher licensed production	China North Industries Corporation/Norinco Helwan Machinery and Equipment/Factory 999	Also built in Iran, Iraq and Turkey; ² designed in late 1950s
T-62 Tank Upgrade	Ukrspetseksport (Ukraine) Abu Zaabal Tank Factory (MMP) Kader Factory for Developed Industries (AOI)	Ukrspetseksport awarded contract to reform tank upgrade in exchange for technology transfer to these two Egyptian factories
Arab International Optronics	Thales (France) ³ National Service Projects Organization	Co-produces items like night vision goggles, periscopes, machine guns
Alphajet aircraft coproduction	Dassault, SNECMA, Thomson-CSF (France) AOI Aircraft Factory	
ALTucano aircraft coproduction	Embraer (Brazil)	
Mirage 2000 aircraft coproduction	Dassault (France) AOI Aircraft Factory	
British Lynx helicopter coproduction		
Aerospatiale Gazelle coproduction	Aerospatiale (France) AOI Aircraft Factory	
Mi-8 and Mi-17 helicopter coproduction	(Russia) Arab British Helicopter Company (AOI)	
Swingfire antitank missile licensed production	Fairey Engineering and British Aircraft Corp. (UK)	
Hughes TOW antitank missile licensed production	Hughes Aircraft Co. (US)	
Matra Magic R-550 air-to-air missile local upgrade	(France)	
AT-3 Sagger Missile local upgrade	(Russia)	

² Iranian-built rocket launchers were used against US troops in Iraq in 2007

³ originally this was a joint venture with United Scientific Holdings of the UK, which was acquired by Alvis Plc (also UK), then was sold to BAE Land Systems. BAE subsequently sold the optronics division to Thales.

Appendix A: Defense Offsets in Egypt, 1980-Present

Offset Project	Partners	Notes
FROG-7 battlefield range ballistic missile licensed production	(Russia)	9K52 Luna-M (Soviet designation)
122mm howitzer licensed production	(Russia)	
155 GH 52 auxiliary power unit	Patria Vammias (Finland)	
130mm M-46 towed field gun	Motovilikha Plants/MOTZ (Russia)	
Jeep TJ and Jeep J8	Chrysler (US) Arab American Vehicles Factory	New militarized version of Jeep Wrangler ⁴
Mercedes-Benz G-Series	Diamler-Benz (Germany) Kader Factory for Developed Industries (AOI)	The armored version (G320) is used as an armored utility vehicle and as a military ambulance
Ural 4320 Utility Truck	Ural Automotive (Russia)	
Oshkosh Medium Tactical Truck	Oshkosh (US) Egyptian Tank Plant/Factory 200 (Ministry of Military Production)	1070 Heavy Equipment Transporter (HET)
Various battlefield communications equipment under license	Westinghouse (US) Plessey (UK) Racal (UK) Benha Electronic Industries (Ministry of Military Production)	
Engine Overhauls	Rolls Royce (UK) SNECMA (France) Turbomeca (France) Dassault (France) General Electric (US) Honeywell (US) Pratt & Whitney (Canada) AOI Engine Factory	These engines are used in numerous aircraft flown by the Egyptian Army, including C-130s (US), K-8s (China), and MiGs (Russia)

⁴ The J8 is produced only by overseas factories (it does not meet US/European emissions standards); the J8 may serve as replacement for other military vehicles used by US Special Forces on overseas missions

Appendix A: Defense Offsets in Egypt, 1980-Present

Offset Project	Partners	Notes
Various small arms and ammunition	Maasara Engineering Industries/Factory 45 (MMP) Al Maadi Engineering Industries (MMP)	Beretta M 92 (Italy); Beretta M 1951 (Italy); AKM rifle (Russia); RPD (Russia); FN Minimi (Belgium); FN MAG (Belgium); MK-19 grenade launcher (US) ⁵ ; Maadi GL (US); ⁶ RPG-7; several Chinese and Russian mortars ⁷
HMMWV modifications	AOI	Modification includes addition of anti armor weaponry
Tiger Kader-120	IVECO (Italy)	This is variant of Iveco VM 90

⁵ Produced by company now known as General Dynamics

⁶ this is the M203 grenade launcher, originally produced by Colt

⁷ These include Helwan UK-2 (M-43 120mm Russian-built mortar); Helwan M-69 (M-37 82mm Russian-built mortar); Helwan 60 (63-1 60mm Chinese-built mortar)

Appendix B: Defense Offsets in Jordan, 1999-Present

Offset Project	Partners	Notes
Advanced Industries of Arabia	Bin Jabr Group (UAE) KADDB	NIMR (Tiger) ¹ Tactical Vehicles; 2001; 1,500 for JAF; also exported to UAE
Aerial Survey & Photography Company (ASP)	KADDB	2006
Applied Defence Systems	KADDB 34% Yazan Moufti ² 33% Amin Bader 33% (is this Amin Badr Al-Din)?	Defense electronics; IFF technology; potential JV with AMS (an Italian-UK JV) in 2002 to develop high-frequency over-the-horizon system using ADS's IFF system ³
Arab Ready Meals	Dewina Holdings Sdn Bhd (Malaysia) KADDB	
Center for Applied Industrial Research (CAIR)	Royal Scientific Society (UK) KADDB	2005
CLS Jordan	CLS Systems ⁴ (UK) 51.5% KADDB 48.5%	2002; Refurbishes automotive & electrical parts for sale locally; also worked on Temsah combat vehicle; CLS (UK)
Electronic Systems Group	KADDB Old Dominion University ⁵	2006;
Hemaia (Jordan Security for Money Transfer)	Hemaia Security (Saudi Arabia)	2007; Armored vehicle transport fleet; Saudi company is a joint venture with FBII (subsidiary of Honeywell)

¹ based on Russian Tiger Jeeps

² Chairman of *Jordan Radio Paging (MIRSAL)*

³ Jane's Defence Weekly. 18 October 2002. "Coastal Protection Venture tabled, Middle East/Africa." AMS (Alenia Marconi Systems) was JV between BAE and Finmeccanica, dissolved in 2005

⁴ division of CLS Group (UK)

⁵ King's Uncle has honorary degree from here; W. Andrew Terrill, former Reserve Lieutenant Colonel/Foreign Area Officer (ME) and former faculty at Old Dominion; specializes in Jordan, Iraq

Appendix B: Defense Offsets in Jordan, 1999-Present

Offset Project	Partners	Notes
Hurricane Engineering	European Technologies & Industries KADDB	2002; Production of Hurricane Fast Marine Patrol Boat ⁶
JORAMMO	Allied Defense Group (US) MERCAR SA (Belgium) DMV Holdings (US)	Ammunition
Jordan Advanced Machining Company (JAMCO/JordanAMCO)	KADDB 100%	precision manufacturing; 2007;
Jordan Advanced Remote Systems	Selex Galileo (Italy) Jordan Aerospace Industries (JAI) ⁷ KADDB	2009; Falco UAV (uses Selex technology); Silent Eye, backpack portable UAV; I-Wing, mini-UAV; Jordan Arrow, UAV aerial target system for training
Jordan Armaments & Weapons Systems (JAWS)	KADDB 100% Wildey Guns (US)	Viper Multi-caliber pistol; now solely manufactured in Jordan
Jordan Electronic Logistics Support	UK Investors KADDB	2004; R&D; lynx robot; unmanned patrol boats; Iгла-S sensor kit for STA missile; exports to Iraq
Jordan Electro-Optics Company	Aselsan (Turkey) KADDB	2010; night-vision & thermal imaging; tech transfer, production & marketing
Jordan Light Vehicle Manufacturing (JLVM) ⁸	Jankel (UK): 25.5% KADDB (Jordan): 74.5%	Manufacturing and customizing armored vehicles

⁶ “The King Abdullah Design & Development Bureau to establish joint venture with European firm in Aqaba Special Economic Zone.” 1 August 2002. *Jordan Times*.

⁷ Sama Aircraft Industries (subsidiary of JAI, Al-Samarae Family), 2004; Mounting of camera on locally-produced Sama Aircraft (CH2000); battlefield reconnaissance, training; in service with Iraqi Air Force; CH2000 based on Zenair Ltd. (Canada) design.

⁸ JLVM products in service in 28 countries. Kadbinvest.com

Appendix B: Defense Offsets in Jordan, 1999-Present

Offset Project	Partners	Notes
Jordan Manufacturing & Services Solutions/JMSS (formerly Jordan Special Vehicle Manufacturing/JSVM)	KADDB 100% Technology Partners: Jankel Group (UK) and SHP Motorsports (UK)	Desert Iris; used by JAF in Peacekeeping Operations; exported to Libya, Saudi Arabia and UAE; also MRO
Jordan RiverHawk Shipbuilding & Support, PSC	RiverHawk Worldwide (US)	Advanced multi-mission platform vessels (AMP); coastal patrol boats; full co-production; export to Iraq? ⁹
Jordan Russian Electronic Systems Company (JRESCO)	Jordanian Specialized Company for Electronic Services (KADDB) Rosoboronexport ¹⁰ (Russia)	Portable grenade launcher (RPG-32 “Hashim”); 2005; built factory for production
JoSecure (Jordan International Security Company)	KADDB 100% Securitas (Sweden)	Personal and critical site security; est. 2003; has agreement with Indian firm Umniah to provide security in exchange for software
KADDB Industrial Park	KADDB 100%	
KADDB Special Operations Training Center (KASOTC)	KADDB 100%	
Licensed Production of various small arms	Land Warfare Resources Corporation/LWRC (US) KADDB	Manufacture of 6.8mm PSD (personal security detail) weapons in KADDB factory; 2010
Mechanology Jordan	Mechanology (South Africa) 10% The Virlean Initiative 41% KADDB 49%	Manufacture & sale of military & commercial products; Temsah combat vehicle

⁹ One year after joint venture in Jordan was established, RiverHawk announced a sale to Iraq

¹⁰ Involves consortium of state-owned and private Russian defense companies: KBP Instrument Design Bureau; KBM (Kolomna Machine Building); Russian Technologies State Corporation (holding company); Bazalt

Appendix B: Defense Offsets in Jordan, 1999-Present

Offset Project	Partners	Notes
Middle East Defense Systems (MDS) ¹¹	KADDB Paramount Logistics Group (South Africa)	2006; Jordan Manufacturing & Services Solutions Company (KADDB), also partner on these projects; Ratel Mark III, Marauder, Matador, RG12 vehicle; Al-Qastal (free zone)
Military Aviation Repair & Maintenance Center	Daedalus Aviation (Netherlands) Stratagem Group (Netherlands) Department of Defense (US) KADDB Jordan Aeronautical Systems Company (JAC) ¹²	2011; DOD assistance for repair of F100-PW-220E engine; ¹³
Al Mutafawika (the Excellence Company for Security & Protection Services) ¹⁴	JoSecure 49% Securitas (Sweden) 51%	Est. 2009; lease armoured vehicles and provide armed protection to cash-in-transit vehicles; 800 employees?
National Resources Development Company (NRDC/Mawared)	KADDB 100%	Security services; military site development; real estate
National Halons Company Ltd.	KADDB	Collection & recycling of CFC refrigerants (financed by Multilateral Fund for Montreal Protocol); 2010

¹¹ Located in Aqaba special economic zone

¹² 100% owned by Jordanian Air Force, but operates as private commercial company; initially (in 2000) established as Marshall Jordan Ltd, a JV with Marshall Aerospace of Cambridge (UK); did MRO on all JAF planes, addition of Daedalus enables them to complete MRO on F-16s as well

¹³ USAF has maintenance officer exchange program, takes place at Shaheed Mufaq Salti Air Base in Azraq

¹⁴ Full name: Al Sharika Al Mutafawwiqa li-Khadamat Al Amin wa Al Himaya. Securitas agreed to acquire 51% of shares in Mutafawwiqa in June 2011 (at behest of Josecure). Mutafawwiq has annual sales of 2.2 million Jordanian Dinars.

Appendix B: Defense Offsets in Jordan, 1999-Present

Offset Project	Partners	Notes
NP Aerospace Jordan	NP Aerospace (UK) ¹⁵ 51% KADDB 49%	Helmets & Body Armor; ‘Dyneema’ ballistic plates; now transferred technology to Azerbaijan
Oboronprom Middle East	Oboronprom (Russia) 51% Orangeville Consultants (Jordan) 49%	2006; Production, MRO, and export of KA-226 helicopter; located at Queen Alia International Airport
Prince Faisal Information Technology Center	KADDB 20% Yarmouk University 40% Park Controls 40%	IT and Software Education; partnership with Cranfield University Defence Academy (UK)
Raytech Jordan	CLS Middle East 33.3% Raytech (Austria) 33.3% KADDB 33.3%	Electrical harnesses, systems design
Seabird Aviation Jordan	Seabird Aviation (Australia) 50.5% KADDB 49.5%	Light aircraft; UAVs (Seeker SB7L-360); KADDB took majority control in 2003; exported Seekers to Coalition Provisional Authority, Iraqi Air Force
Sofex Jordan (Special Operations Forces Exhibition & Conference)	KADDB 100%	Exhibit Space
Al-Tadweer for Commercial Works	KADDB Al Tadweer Waste Treatment (UAE)?	Remediation & Waste Management; Abu Baker family of Jordan (?)
Ultimate Building Machines Investment & Development (SWESCO Jordan)	SWESCO (Sweden) XS Design (Germany) KADDB 100%	Steel fabrication & mobile hangar construction; LISCO lightweight armoring composite; 2002 ¹⁶

¹⁵ Subsidiary of Morgan Crucible Co.

¹⁶ Located in Aqaba special economic zone

Appendix B: Defense Offsets in Jordan, 1999-Present

Offset Project	Partners	Notes
Terex of Jordan (formerly Trans World for Heavy & Construction Equipment)	KADDB (via Mawared)	2004; Al Burhan Group (Iraq)?
Terraqueous (Jordanian Company for Manufacturing Special Boots)	KADDB 100% (JV with WT Tactical) ¹⁷	2008; lots of tech partners; ¹⁸
United Jordanian for Technical Consultancy	KADDB 100%	Consulting services
United Jordanian Telecom Networks	KADDB 100%	Technical Services

¹⁷ with Wild Things Tactical (US); 2011; WT Tactical CEO and King Abdullah both attended Deerfield Academy together in Massachusetts, graduated in 1980

¹⁸ Frasson (Italy), USM Corporation (US), Josef Heinen (Germany), Vibram Boots (US), Mark Boots (Canada)

Appendix C: Defense Offsets in Kuwait, 1994-Present

Offset Project	Partners	Notes
Unknown	BAE (UK)	\$28 million (≈ 1998)
Unknown	China	One each of direct and indirect offset
Unknown	Denel (South Africa)	Offset services firm Rotch assisted in designing offset package, formed Consensus International
Unknown	General Dynamics (US)	\$300 million; contract for M1A2 tanks (≈ 1998)
Unknown	ITT Industries (US) Al Sarraf Group; (Colonel Ali Al Sarraf)	\$7.8 million (≈ 1998) SINCGARS radio communication system
Unknown	Rosvoorouzhnie (Russia)	
Unknown	Simmel Difesa (Italy)	
Afiyah Health Fund		
Airborne Geophysical Survey	Constructions Mécaniques de Normandie/CMN (France) ¹	\$144 million; one-time survey (probably mapping mineral resources)
Aluminum Smelter	Raytheon (US)	\$98 million; Patriot air defense missile; announced in 1996
American Academies & International Institute of Management	Thales (France) Chemring (UK) Mecar (Belgium)	
Ammunition Factory		Related to pending purchase of French Rafale fighter jets or Hercules transport vehicles from US (?)
Australian College of Kuwait aviation training platform	Boeing (US) AMAS Group of Companies (Sharhan)	Sale of 16 Boeing AH- 64D Apache Longbow helicopters
Australian College of Kuwait marine simulator	Lockheed Martin (US) AMAS Group of Companies (Sharhan)	Sale of 16 Boeing AH- 64D Apache Longbow helicopters
Australian College of Kuwait maritime training vessel (ACK I)	DCI Cofras (France) AMAS Group of Companies (Sharhan)	MOD procurement
British Council	GKN (UK)	1994 ²

¹ CMN builds the Baynunah corvette, and has a large co-production agreement with Abu Dhabi Ship Building

² part of \$292 million total offset provided by GKN (includes British Council project and industrial water-proofing facility)

Appendix C: Defense Offsets in Kuwait, 1994-Present

Offset Project	Partners	Notes
Deep Oil Processing Project (feasibility and market research)	Noor Financial ³ : 51% Gazprom (Russia): 29% Cilant ⁴ ro Holding (Cyprus): 20%	\$229 million; through Gazprom's subsidiary (Geofizika) and Rosonboronexport
EBOMAC ⁵	CMN International (France) Hasan Bahjat/Bahzad and Waleed Al Mahdi ⁶	\$144 million
Energy solutions and facility management	Asea, Brown Boveri/ABB Group (Switzerland)	Ministry of Energy & Water
Epicos Private Sector Project ⁷	Raytheon (US) National Real Estate Company/NREC ⁸ (Al-Essa Family)	For sale of TOW missiles; 4-year program began 2010; services include marketing and business consultancy, construct facility database for private sector companies; Focus Marketing Consultancy Ltd manages project database (affiliated with Otaibi family)
Essence Group ⁹	Raytheon (US) Possibly through Union of Investment Companies (UIC) Fouad Alghanim & Sons	Aircraft leasing, four Beechcraft 1900C turboprop planes transferred from Raytheon, offset service firm Blenheim developed deal; 2010

³ Noor is controlled by National Industries Group Holding

⁴ This company does not appear in any online business database, and only appears at all in reference to this deal with Gazprom. It is probably a shell company.

⁵ This is possibly the Electrical Boards Manufacturing Company, owned by Bahjat and Al Mahdi, but the contractor CMN only reported this offset as "EBOMAC" with no further details.

⁶ Al Mahdi also Chairman of National Chemical & Petroleum Industries/NCPI

⁷ Proposed projects include: vehicle armoring facility; traffic management centre; security risk management simulator; vocational training center for disabled persons; project management institute; marine life rehab facility; logistics service company; Locrete (building materials) project; laptop manufacturing company; Kuwait-Maastricht Business School

⁸ NREC is a partner in the Locrete project; see footnote above.

⁹ Essence is reportedly an air freight business. Fouad Alghanim & Sons has an established air freight business, so he may well be the domestic partner for this offset.

Appendix C: Defense Offsets in Kuwait, 1994-Present

Offset Project	Partners	Notes
Fire Fighting Academy	General Electric (US)	2010; \$30 million; could be associated with Apache helicopter sale ¹⁰
Global Bridge Initiative	Thales (UK) Northrop Grumman (US) Raytheon (US) Global Commercialization Group/GCG (US) ¹¹ National Technology Enterprises Company/NTEC ¹²	2010; could also be part of Apache sale ¹³
Green Fodder Factory	AV Technology International (Austria and US) ¹⁴	2000; \$54 million
Greenlife Energy WLL	Tanmiya World Asea, Brown Boveri/ABB (Switzerland)	Tanmiya World is a Public Private Partnership between ISSNAD Real Estate Development (possibly part of Bukhamseen Group) and Public Authority for Applied Education & Training
Gulf Industrial Technology Company	Raytheon, formerly Hughes (US): 49% Foud Alghanim & Sons Group: 51%	\$27.6 million; first company established under offset program
Heavy equipment calibration center	Matra BAE Dynamics (UK and France), now part of MBDA (France)	BAE obligation could be part of Apache deal ¹⁵

¹⁰ GE was prime contractor on Apache sale (it manufactures the engines); engine contract portion for GE worth \$30 million

¹¹ This is part of the University of Texas at Austin's IC2 Institute, which markets technologies developed in university laboratories; other partners include Kuwait Institute for Scientific Research (KISR) and Kuwait University; but program was developed by NTEC and GCG. Thales Group probably provided most of the up-front financing.

¹² part of Kuwait Investment Authority, the state's sovereign wealth fund

¹³ Northrop Grumman and Lockheed Martin formed a joint venture, Longbow International, to manufacture the weapons package for the Apache helicopters, so this could be an offset for Northrop's portion of this contract

¹⁴ JV between Steyr Daimler-Puch of Austria and AV Technology Ltd of US

¹⁵ BAE builds the HIDAS (Helicopter Integrated Defensive Aids System) electronic warfare platform, which was included in Kuwait order

Appendix C: Defense Offsets in Kuwait, 1994-Present

Offset Project	Partners	Notes
Home Health Services Project	AV Technology (US)	\$52 million
Human Patient Simulator/HPS ¹⁶	Shorts Missile Systems/Thales Air Defense (UK) Aerospatiale (France)	Thales share of offset was \$22 million; Aerospatiale's share was \$6.5 million
Industrial water-proofing facility (waterproof membrane project)	GKN (UK) Foud Alghanim & Sons Group (?)	\$292 million; ¹⁷ 254 Desert Warrior armoured vehicles; purchase made in 1993; equipment contract was for \$700 million
Information Technology Institute (expansion)	Atlas (subsidiary of ThyssenKrupp and EADS, of Germany and France)	
Institute for Private Education & Training/IPETQ	Tec.Quipment (UK) Al Wazzan Holdings Group: ¹⁸ 100%	\$9 million
International Co. for Logistics Project Firing Ranges	Oerlikon Contraves ¹⁹ (Italy) Panhard Levassor (France) ²⁰ DCI-Cofras (France) Kuwait Dynamics Limited/Action Group Holdings (Al-Sabah family)	\$19 million
Islamic Art Multimedia Company	Aerospatiale Matra (France) Eurocopter Group (France)	\$11.5 million
Kuwaiti Catalyst Company/KCC	ART (US): 18% AH Alsagar & Bros: 10% Musaed Bader Al Sayer Group: 7.5% Commercial Bank of Kuwait: 6.6% Star Real Estate: 4.2% Bayt Al Mal Investment Co.: 3.8% Japan Energy Corp.: 2.4%	Japanese prime contractor was Mitsui-Mitsubishi-Sasakura; project established in 1996; \$67 million

¹⁶ Used by Kuwait University medical faculty; first completed offset

¹⁷ This dollar amount includes GKN's offset for the British Council project also listed on this table

¹⁸ via Al Burhan Holdings

¹⁹ Oerlikon Contraves now part of Rheinmetall (Germany)

²⁰ SCM Panhard (France)

Appendix C: Defense Offsets in Kuwait, 1994-Present

Offset Project	Partners	Notes
Kuwait International Aircraft Leasing Company	Gulf Stream Aerospace, now part of General Dynamics (US) Fouad Alghanim & Sons Group of Companies	
Low-energy glass factory	Unknown	Unknown
MidEast LTA ²¹	TCOM (US)	\$12 million; 1995; another contract in 2002; TCOM provides unmanned surveillance blimps
National Offset Company Advisory Program/Project Faraasha	Raytheon (US)	In-house 14 month program to coordinate efforts between NOC, MOF and MOD (2009-2010); offset service firm Blenheim developed deal
National Testing & Certification Centre	Torishima (Japan) Foud Alghanim & Sons Group	2010; probably part of 2005 contract with Public Industry Authority for oil industry services
Occam Investment Fund	EADS (France) Rotch Consensus Business Group (UK) Noor Financial Investment Company (51% owned by National Industries Group Holding/Al Kharafi)	2008
Offset Fund (1) Kuwait Investment Opportunities Fund ²²	Norconsult (Norway) Matra (UK) Raytheon (US) Austroconsult (Austria) Flagship Training (UK) Rosoboronexport (Russia) Harris (US)	Managed by NBK Capital; launched April 2008; contractors contributed \$300 million, another \$125 million raised from domestic investors

²¹ LTA stands for “lighter than air.” Kuwaiti offset project reportedly provides logistics services for the blimps operating in Kuwait

²² Projects financed through this fund include the Industrial Company for Saving the Environment; Gulf Excellence Company; Al Salaam International Hospital.

Appendix C: Defense Offsets in Kuwait, 1994-Present

Offset Project	Partners	Notes
Offset Fund (2) KAMCO Education Fund	Eurocopter (France) Mecar (Belgium) MBDA (France) Siemens (Germany) Rohde & Schwarz (Germany) United Gulf Bank (Bahrain) Action Group Holdings (Al-Sabah family)	\$135 million; fund managed by Kipco Asset Management Company (also called Kuwait Education Fund)
Offset Fund (3) Al MARKAZ Energy Fund	Indra (Spain) Etienne Lacroix (France) OCEA (France)	\$4.25 million
Offset Fund (4) Kuwait Universal Strategic Fund for Food Security		
Pumice Project	CSF-Thomson, now part of Thales (France)	completed in 1996; \$15 million
Recycling of Construction Waste (Industrial Company for Saving the Environment, part of Fund 1, above)	Raytheon (US) Austronconsult (Australia) Flagship Training (UK) Rosonboronexport (Russia) Harris (US)	
Restaurant Franchise (Buffalo Wings & Rings)	South Korean Gen. Trad. Co. W.L.L. AV Technology (US)	\$52 million
Al Tair	Raytheon (US) Essence Group Kuwait Airways Wataniya Airways ALAFCO NAS Universal Services Center	Business advice and training program for Essence Group; training provided by Tasc Aviation (Airbus subsidiary) and Blenheim (2010) Held at Gulf University of Science & Technology/GUST
Technical Training Center for National Guard	AV Technology International (Austria and US) ²³	1996; \$170 million for the supply of 70 Pandur (6 × 6) vehicles
Total Facility Management Academy (Kalpataru, India)	Tanmiya World Coretex International (UK)	Procurement for Ministry of Electricity & Water
Traffic Control Cameras Maintenance Officer Training Program	Global Projects GT (?)	Ministry of Information procurement; part of Traffic Management Centre

²³ JV between Steyr Daimler-Puch of Austria and AV Technology Ltd of US

Appendix D: Defense Offsets in Saudi Arabia, 1984-Present

Offset Project	Partners	Notes
Advanced Electronics Company	Original Investors: BITG (US): 10% Arabic Computer Systems: 10% GIC: 10% National Commercial Bank/NCB: 10% NIC: 10%	Current Shareholders: Overhaul and Maintenance Company: 50% Al Bilad International Company (Alireza): 30% NCB: 10% Saudia Airlines: 10%
Aircraft Accessories & Components/AACC	Original Investors: BITG and BAE (US and UK): 50% Arabian Aircraft Services Co./ARABSCO/ARABASCO: 30% Saudia Airlines: 10% SAIC: 10%	Current shareholders: Overhaul & Maintenance Company: 86% Saudia: 14% Interim shareholder: Al Mozoon Group (Khaled Al Sadoum) ¹
Alsalam Aircraft Company	Boeing Industrial Technology Group/BITG (US): 50% ² Saudia Airlines: 25% Saudi Advanced Industries Co./SAIC: 10% Gulf Investment Corporation/GIC: 10% National Industrialization Co./NIC: 5%	1985; \$100 million Saudia
Arabian Amines Co./Saudi Ethylene and Polyethylene Company	Huntsman (UK): 50% Zamil Group: 50%	Zamil Group: Zamil Family
Arabian Diagnostic & Medical Co. Ltd/ADAMCO	FAL Holdings Arabia Co. Ltd (Athel/Azel Family)	FAL Holdings Arabia Co.: Athel/Azel Family
Arabian Metering Co.	Actaris/Itron (France) Market Trading Co. Schlumberger (Germany): 30%	Market Trading Company subsidiary of Taher Group

¹ “Saudi Arabia: Terrorism Hits Offset Program.” *Intelligence Online*. 23 July-26 August 2004. Issue 481. Sadoum is listed as a shareholder in a number of firms with shares in offset companies.

² BITG has divested from all the other Peace Shield I Offset projects

Appendix D: Defense Offsets in Saudi Arabia, 1984-Present

Offset Project	Partners	Notes
Arabian Shrimp Co.	Raytheon & Thales/Saudi Offset Limited Partnership (US and France): 7.3% Aqua Farms Ltd.: 29.33% Aquad for Commerce: 18.3% Arab Authority for Agricultural Investment & Development/AAAID: 45%	Aquad for Commerce owned by retired General Ibrahim Al Mishari
Al Bilad Catalysts Co.	Eurocat (France): 35% Al Bilad Est. Trade & Econ. (Alireza): 20% Nat'l Contracting Co. (Alireza): 20%	Alternative Shareholder Breakdown: ³ Eurocat: 30% Al Bilad Est. Trade & Econ.: 20% National Contracting Company: 20% FAL Group: 15% (Athel/Azel) Abdulaziz Saleh Bin Mansour Al Jarbou: 15%
CAD Middle East Pharmaceuticals Ltd.	British Offset Office Saudi Pharmaceutical Industries & Medical Appliances Corporation/SPIMACO: 25% Dishman Pharmaceuticals (India): 30% Takamul Holding Co.: 20% Arab Co. for Drug Industries & Medical Appliances/ACDIMA (Jordan): 25%	Alternative Shareholders: Dishman Pharmaceuticals & Chemicals: 30% Arab Co. for Drug Industries & Medical Appliances/ACDIMA (Jordan): 25% SPIMACO: 25%
Cyclar Project at Ibn Rushd (Arabian Fibers)	BAE (UK) UOP/BP (UK): 25% Saudi Arabian Basic Industries Corporation/SABIC Ibn Rushd/Arabian Fibers	
Al-Dahab	Thomson-C.S.F (France) Shairco: 100% (bought out French share)	Shairco: Al Shair Family

³ List from "Middle East Petrochemicals Original projects and Announced Expansions." 20 July 2010. Amanpour Consulting.

Appendix D: Defense Offsets in Saudi Arabia, 1984-Present

Offset Project	Partners	Notes
Dar Al Faisal University	BAE Systems (US) ⁴ Boeing (US) Thales (France) United Technologies (US) King Faisal Foundation (Royal Family private investment) King Faisal Specialist Hospital and Research Centre (Gov't-owned) 3 unnamed "Saudi conglomerates"	Collaboration with Stevens Institute of Technology (New Jersey)
Deef Pharmaceuticals Industries Co. ⁷	UK Offset SIC (Banaja Holdings) majority owner	Banaja Holdings: Banaja Family
International Systems Engineering/ISE ⁵	BITG & Hughes Aircraft (US): 50% United Systems Engineering: 50%	United Systems Engineering shareholders: Al Athel/Azel family; Saudi Royal Family; Al Bulaihid Family; Al Rashed Family; Al Ballaa Family (UAE)
International Network Engineering/INE	Lucent Technologies (US): 50% ISE: 50%	
General Organization for Technical Education & Vocational Training	BAE (UK) BAE: 50% Al Gosaibi: 50%	Now listed as 100% gov't-owned ⁶
GE El-Seif Healthcare Arabia	US Offset GE Gulf (UAE): 51% ⁷ El Seif Group Company Ltd.	El Seif Group Company Ltd.: El Seif Family

⁴ largest defense sector shareholder

⁵ Online business databases list a Saudi company called "Int'l Co. for Engineering Systems Ltd.," whose parent company is Overhaul Maintenance Co. (which is a shareholder in many of the Peace Shield firms). BAE is listed as one of ISE's biggest customers.

⁶ Probably due to Gosaibi bankruptcy. Now named Technical & Vocational Training Corp. (but Arabic name still includes 'General Organization'); <http://www.tvtc.gov.sa/English/AboutUs/Pages/OrganizationChart.aspx>

⁷ GE International Incorporation/GE Gulf owns 87% of Saudi American General Electric Company/SAMGE; other 13% owned by Abdulghaffar Gamgoum

Appendix D: Defense Offsets in Saudi Arabia, 1984-Present

Offset Project	Partners	Notes
Glaxo Saudi Arabia	Original Investors: BAE (UK) Glaxo Wellcome (UK): 30% SIC: 70%	Current Shareholders: SIC: 51% Glaxo Smith Kline (UK): 49%
Globe Petrochemical Industries Co. ⁸	UK (?)	
Gulf Petroproducts Company	Raytheon & Thales/Saudi Offset Limited Partnership (US and France): 50% CITL: 50%	Certus Investment & Trading, Ltd./CITL: overseas investment arm of Tamilnadu Petroproducts Limited; formed to invest in this project with SOLP
Helm Arabia	HELM AG (Germany) and Thales International Offsets (France): 25% Saudi International Petrochemical Company/ SIPCHEM: 75%	SIPCHEM shareholders: Zamil Group: 9.6% Ikarus Industrial Holdings (Al-Kharafi Family): 8.3% Olayan Financing: 5.3% Public Pension Agency: 7.7%
Interactive Saudi Arabia Ltd.	Raytheon & Thales/Saudi Offset Limited Partnership (US and France): 50% Hoshan Group 50%	Hoshan: Muhaidib & Hoshan Families
International Acetyl Co./IAC	Thales Offset (France) SIPCHEM: 76% Ikarus: 11% Helm Arabia: 10% Ministry of Endowments: 3%	
International Vinyl Acetate Co./IVAC	Thales Offset (France) SIPCHEM: 76% Ikarus Petroleum Industries Co.: 11% Helm Arabia: 10% Ministry of Endowments: 3%	Ikarus Petroleum Industries Co. (aka Ikarus Industrial Holdings): Al-Kharafi

⁸ Possibly affiliated with Global Chemical Company owned by Al Mansoori Petroleum Industries/AMPI (UAE)

Appendix D: Defense Offsets in Saudi Arabia, 1984-Present

Offset Project	Partners	Notes
KACST/KAUST tech transfer ⁶	Boeing (US) IBM (US) DOW Chemical (US) Rolls Royce (UK) Saudi Aramco Acxiom (US) General Electric (US) LyondellBasell (UK) Xenel (KSA) ACWA Power (KSA) SABIC (KSA) SIEMENS (Germany) Schlumberger (US) Shell (UK) Sumimoto Chemical (JA) Abdul Latif Jameel Co. Ltd (KSA) NALCO (US) Halliburton (US) GS Midroc/Al Amoudi Trading Co. ⁹ KANEKA (Japan) ¹⁰ Cristal Global (Shairco) JGC Corp. (Japan) ¹¹ Al Rushaid (Rushaid family)	Selex Galileo/Finmeccanica tech transfer in 2011; Cristal Global: owned by Shairco/Al-Shair Family; Al Amoudi Trading Co.: Al Amoudi Family
Middle East Battery Co.	Raytheon & General Motors (US): 51% Al Jomaih Holding Co.: 6.8% Abdulatif Alissa Holding Group: 6.8% AlMutlaq Group: 14.74% Zamil Group: 14.73% Balubaid SASCO: 7.94%	Current Investors: Johnson Controls Int'l (US): 49% ¹² “prominent Saudi investors:” 51%

⁹ BITG partner and Industrial Collaboration Partner for KAUST

¹⁰ also partner with AMHSCO (FAL Group)

¹¹ JGC awarded major deal with Aramco after it signed up for KAUST technology transfer. Alireza Family has JGC agency agreement for KSA.

¹² Other sources list this shareholder as Al Salem Johnson Controls, which is a 50/50 joint venture between Johnson Controls International and Saudi Binladin Group

Appendix D: Defense Offsets in Saudi Arabia, 1984-Present

Offset Project	Partners	Notes
Middle East Power Company/MEPCO	General Electric (US) Tamimi Group	Possibly part of latest Typhoon contract; GE Aviation builds pieces for the Typhoon
Middle East Propulsion Co. (US, UK companies invested later under Al Yamamah)	Original Investors: General Electric, Pratt & Whitney, Rolls Royce (US and UK): 50% GIC NIC SAIC Saudia Airlines	Current Shareholders: Saudia Airlines: 25% P&W (through United Technologies Int'l): 24.4% Wamar: 9.3% MTU: 19.3% Shomokh Al Hemam: 22%
National Prawn Co.	Raytheon (US) Al Subeaei Investment Co. Al Ballaa Investment Co. Al Rajhi Investment Co.	
Olayan Baxter Company Ltd.	US Offset Baxter Healthcare Corp. Olayan Financing	Olayan Financing: Olayan Family
Oman Int'l Shrimp Co.	Raytheon & Thales/Saudi Offset Limited Partnership (US and France) and Sea Farms Int'l (US): 50% Shanfari Group, Sindbad International Trading, Dhofar Int'l Development/DIDI 50%	Shanfari owned by former Omani Oil & Minerals Minister Saeed bin Ahmed al Shanfari
Plastbau Arabia	Raytheon & Thales/Saudi Offset Limited Partnership (US and France): 20% Advanced Projects & Building Systems Ltd./APBSL: 50% ¹³ Plastbau Holdings (Bahrain): 30%	
Rezayat Flover	BAE (UK) Rezayat Company 100%	
S.A. Talke/Aljabr Talke	UK Offset TALKE Logistics Services Al Jabr Group - Azmeel Saudi Industries Services Co./ SISCO: 33%	S and A stand for SISCO and AlJabr Saudi Industries Services Co./ SISCO: Alireza Family

¹³ Possibly Al Gosaibi Family

Appendix D: Defense Offsets in Saudi Arabia, 1984-Present

Offset Project	Partners	Notes
Saudi Communications Development Co.	Raytheon & Thales/Saudi Offset Limited Partnership (US and France): 50% Aquad for Commerce: 50%	Aquad for Commerce owned by retired General Ibrahim Al Mishari
Saudi Development & Training Company Limited	BAE (UK) BAE: 50% Al Gosaibi: 50%	Now listed as 100% owned by BAE ¹⁴
Saudi-Indo Petrochemical Company	Raytheon & Thales/Saudi Offset Limited Partnership (US and France): 30% Gulf Petroproducts: 30% Zamil Group: 40%	Zamil Group: Zamily Family
Saudi French Hydrocarbon Solvents Company/SAFRA ¹⁵	French Offset Gulf United Investment: 6% Shairco (Al Shair) Xenel (Alireza)	Alternative Shareholder Breakdown: ¹⁶ Xenel: 90% Others: 10% Founded 1985
Saudi Nat'l Lamps & Electricals	Raytheon & Thales/Saudi Offset Limited Partnership (US and France) IndoAsian Fusegear Co. Zoujaj (National Co. for Glass Industries)	Chairman of Saudi Nat'l Lamps & Elec: Yusuf Abaalkhail (also on Zoujaj Board)
Saudi Polyolefins Co.	BAE (UK) National Industrialization Co./Tasnee: 75% Bassell (BASF and Shell): 25%	NPIC, owned by Olayan, also listed as owner (NPIC acquired by NIC/Tasnee in 2005)
Saudi Specialty Chemicals	BAE (UK) Pentagon (?) Global ChemTech	Alternative Shareholders: SABIC: 86.5% NIC: 10%
Saudi Valves	BAE (UK) Saudi Pan Gulf: 50% Comid (UK): 50%	BAE buyout of existing company (AVK Saudi Valves Manufacturing)

¹⁴ Website is also dead, probably also due to Gosaibi bankruptcy? Martin (p240) lists YBA Kanoo as partner with BAE

¹⁵ Saudi official documents list different original shareholders for Saudi French Chemical Industries Co.: Atiq of France 35% and Sawa (Salwa?) of Qassim 65%

¹⁶List from "Middle East Petrochemicals Original projects and Announced Expansions." 20 July 2010. Amanpour Consulting.. *House of Saud* lists still other shareholders: Prince Mohammed bin Naif bin Abdul Aziz (15%); 'French Company' (?); and nine other investors. *The House of Saud in Commerce*, p135.

Appendix D: Defense Offsets in Saudi Arabia, 1984-Present

Offset Project	Partners	Notes
Synthomer Middle East (Formerly Dhahran Harco Chemical Industries Ltd)	BAE (UK) Harlow Chemical Co. (UK) 30% ¹⁷ Dhahran Chemical Industries Ltd.: 70%	Current shareholders: Al Rashed and Sons Company: 51% Synthomer: 49% ¹⁸
UNILUBE ³	BAE (UK) Enprotech ME Ltd.: 30% Al Jedaie Group: 22%	
Unichem-Phenolchemie Cumene Project ⁴	BAE (UK) UNICHEM (Universal Petrochemical Co. ltd.): 50% Herdilla: 30% Bukaka Group: 10% British Offset Office: 10%	
United Sugar Company	Original Investors: BAE (UK) Tate & Lyle (UK): 15% Savola Company: 51% Saudi Imports Co./SIC: 15%	Savola now owns 74.48% of United Sugar
Al-Waha Petrochemical Company	UK Offset Bassell (BASF and Shell): 25% Sahara Petrochemical: 75%	Sahara shareholders: Zamil Group, AlJabr, Khaled Bin Mahfouz, Hayel Saeed Anam Group, and others

¹⁷ taken over by Yule Catto & Co.

¹⁸ Synthomer is subsidiary of Yule Catto & Co. (owns 50% of Synthomer)

Appendix E: Defense Offsets in UAE, 1991-Present

Offset Project	Partners	Notes
Abu Dhabi Autonomous Systems Investments LLC ¹	Tawazun: 100% (fund capitalized by numerous foreign defense firms)	Developer of UAVs; Chairman Homaid Al Shemmari/Shammari
Abu Dhabi Risk & Treasury Solutions LLC	MBDA Missile Systems & Macquarie (UK and Australia) Abu Dhabi Commercial Bank/ADCB: 51%	Other 49% likely owned by ADCB Macquarie Corporate Finance (Australia)
Abu Dhabi Shipbuilding Company/ADSB	Northrop Grumman (US) Mubadala: 39.96% (fund capitalized by numerous foreign defense firms) Government of Abu Dhabi: 10% Hussein J. Nasser Al Nowais: 5.72%	New harbor for ADSB built with financing from GIC (General Industry Corp. of Sheikh Tahnoon)
Abu Dhabi Systems Integration LLC/ADSI	Finmeccanica (Italy) ADSB: 57% Selex Sistemi: 43%	Selex Sistemi subsidiary of Finmeccanica
Emirates SembCorp Water & Power Co. ²	Abu Dhabi Water & Electricity Authority: 60% SembCorp Gulf Holding Co.: (Singapore) 40%	
Caracal Light Ammunition ³	Tawazun (fund capitalized by numerous foreign defense firms): 75% UAE Armed Forces: 25%	Previous shareholder: Ali Al Dhaheri: 100% Caracal factory located in Zayed Military City

¹ formerly Abu Dhabi Unmanned Aerial Vehicle Investments

² formerly Union Water & Electricity Company

³ formerly Adcom Munitions Factory (acquired by Tawazun)

Appendix E: Defense Offsets in UAE, 1991-Present

Offset Project	Partners	Notes
Addar (Aldar) Real Estate Services LLC ⁴ (Additional project for Aldar, construction of Raha Beach, also completed under offset terms) ⁵	Mubadala (fund capitalized by numerous foreign defense firms): 19.18% (or 28%) ⁶ Abu Dhabi Investment Corporation/ADIC: 5.68% National Bank of Abu Dhabi 5.12% The National Investor/TNI:? National Corporation for Tourism and Hotels:? Abu Dhabi National Hotels:?	Abu Dhabi National Hotels owned by Al Hajeri Aldar Properties listed as <i>subsidiary</i> of TNI as of 2003
Advanced Integrated Systems/AIS	Decision Sciences Corporation (US) Khalfan Al Shamsi (CEO) ⁷	2008/9
Al Ain Shooting Club	Tawazun (fund capitalized by numerous foreign defense firms)	
Advanced Military Maintenance, Repair and Overhaul Centre/ AMMROC	Sikorsky (equity share) Lockheed (equity share) Abu Dhabi Aircraft Technologies/ADAT (majority)	Offset with Sikorsky (Lockheed bought in later) ADAT holdings through Mubadala
ASMAK/International Fish Farming Company/IFFC	Dassault (France) Hydra Properties: 47.43% Chimera Financial Investments: 16.61% Infinity Television Satellite Channel: 9.44%	All subsidiaries of Royal Group, 100% owned by Sheikh Tahnoon Bin Zayed Al Nahyan ⁸

⁴ Subsidiary of Aldar Properties PJSC as of 2006 (owns 99% of Addar)

⁵ Financing for the \$2.1 billion project was designed by the offset services firm Blenheim

⁶ Zawya reports Aldar is 27.7% Mubadala-owned

⁷ Shamsi is also involved in another offset project, International Fish Farming Holding Company/ASMAK. Also holds executive/director positions at Abu Dhabi National Hotels, Al Diar Hotels, and Eshraq Properties.

⁸ Despite Tahnoon's ownership of Royal Group, the company's official documents list 63 founders and 31,400 shareholders

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Offset Project	Partners	Notes
Baynunah Missile Technologies	MBDA and BAE (France and UK) Baynuna(h) Group: 51% MBDA: 49%	Baynuna(h) Group founded and owned by retired General Khaled Abdullah Abu-Ainnain
Berlitz Abu Dhabi	McDonnell Douglas, now Boeing (US) Other shareholders unknown ⁹	
BSI Bern Sapeth International LLC	Deutz AG (Germany) Emirates Commercial Centre for Shares & Bonds, LLC ¹⁰	
Burkan Munitions	Rheinmetall Munitions (Germany) Al Jaber Tawazun (fund capitalized by numerous foreign defense firms)	AED 268 million (initial capital) Al Jaber Group 100% owned by HE Obeid Khalifa Al Jaber Al Murri
Caracal International LLC/Caracal Group	Tawazun (fund capitalized by numerous foreign defense firms)	2006; Caracal ammunition factory located in Zayed Military City (where Bin Jaber also has manufacturing operations)
Caracal Shooting Club	Tawazun (fund capitalized by numerous foreign defense firms)	
Centuria Capital	Groupe Financiere Centuria (France): 49% Baynuna(h) Group: 51%	Baynuna(h) Group founded and owned by retired General Khaled Abdullah Abu-Ainnain
CERT Thales Institute/CTI	Thales (France) Other shareholders unknown	CERT (Center of Excellence for Applied Research & Training)
CITYZZ Visitor Center Emirascope	Rohde & Schwarz (Germany) Other shareholders unknown ¹¹	

⁹ Reem Shehab, Director of Berlitz Dubai states on organization's website that it is operated "under the patronage of" Sheikh Nahyan Bin Mubarak Al Nahyan, Minister of Higher Education and Scientific Research

¹⁰ possibly part of SHUAA Capital, which owns numerous brokerage firms; SHUAA is owned by al Ghurair, who acquired 50% of a company called ECC in 2002

¹¹ Alireza (Saudi Arabia) and Ibrahim Bin Ayed Al Kahtani (Mejdaf Group) both have agency agreements with Rohde & Schwartz. They are possibly domestic partners for this offset.

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Offset Project	Partners	Notes
Eships ¹²	Giat (France) ¹³ Mubadala (fund capitalized by numerous foreign defense firms): 50% ADIC: 50% (Invest AD)	Previous shareholders: In 2004 Eships was owned 1/3 each by: Oman & Emirates Investment Holding Company/OEIHC; ¹⁴ General Investments FZE (investment arm of Giat); and ADIC ¹⁵
Condor Medical Waste Management-Abu Dhabi	Giat (France) General Investments FZE (investment arm of Giat) ADIC Oman & Emirates Investment Holding Company/OEIHC United Technical Services/UTS	President & CEO Salwa Saleh Saeed Ali Shaibani UTS is 100% owned by Omar Ziad Al Askari and Abdullah Darwish Al Katbi
Danway Fusion Glass LLC	Diehl IWS and Rohde & Schwarz (both Germany) Emirates Holdings: 100%	Offset services firm Blenheim designed this project Emirates Holding is 100% owned by HE Hussein Jassim Al Nowais
DASBAT Aviation	Dassault (France) Baynuna(h) Group	Baynuna(h) Group founded and owned by retired General Khaled Abdullah Abu-Ainnain

¹² Previously Combined Cargo UAE

¹³ Giat brought in third party (Torvald Klaveness Group) to fulfill offset obligation

¹⁴ OEIHC itself is largely owned by ADIC, either directly or through ADIC holdings in other OEIHC shareholders

¹⁵ Before that, in 2002, Eships was owned ¼ each by ADIC, UAE Offsets Group, Torvald, and OEIHC

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Offset Project	Partners	Notes
Denel Al-Jaber Maintenance & Technology Company LLC/DAMTEC	Denel (South Africa): 49% Al Jaber Transport & General Contracting Establishment/AJE: 51%	AJE 100% owned by HE Obeid Khalifa Al Jaber Al Murri (via Al Jaber Group)
Dolphin Energy Limited	Mubadala (fund capitalized by numerous foreign defense firms): 51% Occidental Petroleum: 24.5% ¹⁶ Total: 24.5%	Processes natural gas from Qatar, transports via new pipeline to UAE
ELTBAT Electronic Systems Development ¹⁷	Elettronica SPA/ELT (Italy): 49% Baynuna(h) Aviation Technology/BAT: 51%	2009; Baynuna(h) Group founded and owned by retired General Khaled Abdullah Abu-Ainnain
Emiraje	EADS Defence & Security (consortium France, Germany, and Spain) C4 Advanced Solutions/ C4AS	C4AS is a wholly-owned subsidiary of Emirates Advanced Investments, owned by Ibrahim Al Hammadi
Etihad Shipbuilding	Fincantieri (Italy): 35% Al Fattan Ship Industry: 51% Melara Middle East: 14% ¹⁸	
Fibrex Company WLL ¹⁹	Rohde & Schwarz (Germany) Alfia Fund (fund capitalized by numerous foreign defense firms) Bina/BENA Group (?) ²⁰	Alternative list of shareholders: Saeed Bin Shaiban (UAE); Sufian Al Saleh (Leb); and Tatweer (UAE) Bina Group: Al Mazrouei

¹⁶ Occidental took over from Enron

¹⁷ Simulation/training in electronic warfare

¹⁸ Melara is a Finmeccanica Company (created regional subsidiary for this venture); This offset came at a time when the Italian Government was trying to merge the private sector Finmeccanica with the state-owned Fincantieri, because the latter had become unprofitable.

¹⁹ provides prefabricated building materials

²⁰ Bina Group is also the partner for another Alfia Fund investment, which itself is also with technology partner Rohde & Schwarz

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Offset Project	Partners	Notes
G2 International	GEAP International LLC Independent Enterprises & Companies Representation WLL	Shareholders unknown
GAMCO-Thales Systems/GTS (GAMCO is subsidiary of Abu Dhabi Aircraft Technologies/ ADAT)	EADS ²¹ (France) Mubadala (fund capitalized by numerous foreign defense firms): 100% ²²	GAMCO's first two contracts have been with France (L'Avion) and Tunisian Air Force
German & Emirates Company Limited/GECO ²³	Alfia (fund capitalized by numerous foreign defense firms): 33% Bina/BENA Group: 40% Coppins Holdings: 27%	Bina Group: Al Mazrouei Coppins part of Rubaya Holdings, owned by Al Muhairi or Al Rubaya family
Ghantoot Polo Club	Defense partner (unknown) International Capital Trading (ICT)	ICT owned by Sheikh Zayed ²⁴
Gold & Silver Refining Plant Projects	Elettronica SPA (Italy): 49% Global Force Capital: 51%	2009; Global Force Capital owned by Khalid Ahmad Al Mansour
Gulf Business Center	Dassault (France) United Technical Services/UTS	UTS is 100% owned by Omar Ziad Al Askari and Abdullah Darwish Al Katbi
Gulf Center for Remote Sensing/GCRS/Infoterra ²⁵	GEC-Marconi and Astrium (US and France) Abu Dhabi Industrial Development Co./ADIDCO ²⁶	

²¹ original partner was Aerospatiale

²² ADAT is Mubadala subsidiary

²³ provides precast aerated concrete

²⁴ "Partnerships for a Better Future" Brochure, U.A.E. Offsets Group.

²⁵ now called Astrium-Geo Information Services

²⁶ Infoterra website lists it as an "EADS company," and GCRS was once at CERT Technology Park (which has numerous European defense technology partnerships); perhaps ADIDCO was set up to invest in this single project, since it appears nowhere else. ADIDCO does have a "cgchouse" email address, which could stand for Combined Group Contracting from Kuwait, a large industrial conglomerate with significant interests in the defense sector. Astrium/EADS also supplies technology for the UAE's civilian and military satellite system (Yah Sat), so it may also be linked to this ongoing project.

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Offset Project	Partners	Notes
Gulf Diagnostic Center	Lockheed Martin (US) Ibn Khaldoun Drug Stores	Ibn Khaldoun Drug Stores are owned by Kaddoura Family
Gulf Energy Maritime/GEM	Thales (France) Emirates National Oil Company/ENOC: 25% International Petroleum Investment Corp.: 30% Oman Oil Company: 30% Thales Group: 5%	Alternative Shareholder List: ENOC 35%, IPIC 30%, OOC 30%, Thales 5% ²⁷
Gulf Logistics and Naval Support LLC	BAE (UK): 30% Abu Dhabi Ship Building/ADSB: 70%	2010; ADSB Chairman is HE Abdullah Nasser bin Huwaileel Al Mansouri
Gulf Solar Power Company	GEC-Marconi (US) Emirates Holdings: 100%	Emirates Holdings: 100% owned by HE Hussein Jassim Al Nowais Previous Shareholder: Al Nasser Holding
Gulf Turbines Services LLC	General Electric (US): 49% ADAT 51%	ADAT holdings are via Mubadala (fund capitalized by numerous foreign defense firms)
Gulf Union Equipment Rental Company LLC	Mohammed Abdulrahman Al Bahar Group/MAB: 49% Saeed Matar Saeed Hamr Ain Al Mehairbi: 51%	MAB (Kuwait)
Al Hikma Development Company	Mubadala (fund capitalized by numerous foreign defense firms)	2006; real estate services; manages UAE University
Horizon International Flight Academy	Mubadala (fund capitalized by numerous foreign defense firms): 100%	
Imperial College London Diabetes Centre	Mubadala (fund capitalized by numerous foreign defense firms): 100%	ICLDC Chairman Suhail Al Ansari

²⁷ Zawya.

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Offset Project	Partners	Notes
Injazat Data Systems	EDS Defense & Security (US), acquired by Hewlett Packard: 40% Mubadala (fund capitalized by numerous foreign defense firms): 60%	Chairman Jassem Mohammed Al Zaabi
International Golden Group/IGG	Tawazun (fund capitalized by numerous foreign defense firms): 26% Kaabi family: 74%	IGG has JV with Paramount (South Africa) to manufacture or distribute armored vehicles
Laser Re-nu	Boeing (US) Emirates Printing Forms Est.	Emirates Printing Forms Est. owned by Al Dhaheiri Family ²⁸
LeasePlan Corporation	LeasePlan Corp. (Netherlands): 49% Mubadala (fund capitalized by numerous foreign defense firms): 51%	Automobile company (vehicle leasing/fleet management)
Liwa Energy Limited (operates in Libya)	Mubadala (fund capitalized by numerous foreign defense firms): 100%	Liwa is a subsidiary of Mubadala Oil & Gas ²⁹
Mahaleel/National Medical Solutions	Alfia (fund capitalized by numerous foreign defense firms): 49% Bin Nawi Group: 51%	Chairman of Bin Nawi Group is Mohammed Mubarak Al Mazrouei ³⁰
MIRAK Agriculture/National Horticulture Center/ Franserres	Dassault and Thales (France) Al Hamed Enterprises	Probably owned by Sheikh Shaya Bin Hamed Al Hamed and Sheikh Hamed Bin Ahmed Al Hamed (through Falcon Group)
NAS United Healthcare Services LLC ³¹	Alfia (fund capitalized by numerous foreign defense firms) The National Investor/TNI: 46%	2001; TNI listed as subsidiary of Al Mansoori Specialized Engineering (owned by Mansoori Family)

²⁸ website lists E. Karian as owner of Laser Re-nu, but Zawya profiles list Al Dhaheiri as ultimate owner

²⁹ Other Mubadala oil & gas subsidiaries include Pearl Energy in Indonesia, Philippines, Vietnam, Thailand, Singapore, Bahrain, Kazakhstan & Malaysia

³⁰ also Chairman of Abu Dhabi Media

³¹ provides administrative services for insurers and employers (outsourcing); TNI financial statements suggest that Nextcare and NAS United Healthcare Services are two separate entities

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Offset Project	Partners	Notes
National Telesystems & Services	Thales (France) Bin Jabr Group Abu Dhabi Group	Bin Jabr Group owned by Saeed Bin Jabr Al Suwaidi Abu Dhabi Group owned by Royal Family members
Nextcare Global FZE LLC	The National Investor/TNI: 51% Alfia (fund capitalized by numerous foreign defense firms)	Reports indicated that Nextcare is to be liquidated after “certain legal issues” are resolved, but NAS United will remain solvent
Nimr	Advanced Industries of Arabia: 40% Tawazun (fund capitalized by numerous foreign defense firms): 60%	Advanced Industries of Arabia is JV between Jordan’s KADDB and Bin Jabr Group (owned by Suweidi)
Piaggio Aero Industries	Mubadala (fund capitalized by numerous foreign defense firms): 35%	Piaggio was an Italian company; Mubadala merely purchased shares; still manufactures in Italy
Productivity & Leadership Consortium	Westinghouse and Northrop Grumman (US) Center of Excellence for Applied Research and Training/CERT ³²	CERT also has private equity arm, called CERT Innovations and capital fund, CERT Capital ³³
Remaya Shooting Club	Tawazun (fund capitalized by numerous foreign defense firms): 100%	
Safewater Chemicals	Specialist Mechanical Engineers (South Africa) Al Jaber Group: 100%	Al Jaber Group owned by HE Obeid Khalifa Al Jaber Al Murri
SAGEMBAT Defense	Dassault (France) SNECMA-Safran Group (France) Baynuna(h) Group	Baynuna(h) Group founded and owned by retired General Khaled Abdullah Abu-Ainnain

³² CERT is the commercial arm of the UAE Higher Colleges of Technology

³³ ARTOC Group of Egypt, owned by Mohammed Shafik Gabr, is a major shareholder in CERT. Gabr ranked #50 on ArabianBusiness’ 2011 Rich List. Gabr was a staunch Mubarak loyalist, and in the early days of the 2011 uprising he described the protests as highly-coordinated, suggesting they were launched by an organized opposition with ties to Hamas, Hezbollah and Iran.

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Offset Project	Partners	Notes
Sanad Aero Solutions	Mubadala (fund capitalized by numerous foreign defense firms): 100%	Aircraft leasing company
Schmidlin LLC (Inovex)	ANC Holdings 100%	ANC 100% owned by Tayeb Abdul Rahim Baker ³⁴
SNECBAT Engine Technologies	SNECMA-Safran Group (France) Baynuna(h) Group	Baynuna(h) Group founded and owned by retired General Khaled Abdullah Abu-Ainnain
Solex Robotics Services	General Electric (US) Al Mansoori Specialized Engineering	Al Mansoori Specialized Engineering owned by Mansoori family
SR Technics	Mubadala (fund capitalized by numerous foreign defense firms): 70%-100% ³⁵	Originally Swiss defense firm; Mubadala reportedly owns between 70% and 100%; still operates in Zurich, no manufacturing in UAE
Strata	Mubadala (fund capitalized by numerous foreign defense firms): 100%	
Tabreed/National Central Cooling Company	Mubadala (fund capitalized by numerous foreign defense firms): 10.87% GOSI: 7.38% General Investments FZE: 5.92% HSBC Bank Plc: 4.45% Al Bitar (KSA): 3.79% ADIC: 3.48% Al Dhaheri 3.16%	General Investments FZE (investment arm of French defense firm Giat)
Tadreeb/National Training LLC	Alfia (fund capitalized by numerous foreign defense firms)	Chairman Saif Al Hajeri (Director in UAE Offsets agency)

³⁴ Baker is also chairman of Thomas Bennett Gulf Co. LLC; Al Nekhreh Contracting; and Dhofar Fisheries.

³⁵ additional shares in SR Technics are owned by Dubai Aerospace Enterprise/DAE, an investment vehicle established to buy up global aviation companies to establish a UAE-owned aviation conglomerate. DAE has \$31 billion in aircraft acquisitions as of 2008 (much of them through purchases of shares through intermediary private equity firms, including Carlyle Group). Robin Wigglesworth. "Sky's the limit for Gulf states with soaring aerospace ambitions." 14 July 2008. *Financial Times*.

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Offset Project	Partners	Notes
Al Taif Technical Services	Mubadala (fund capitalized by numerous foreign defense firms): 100%	2007; meant to perform maintenance/overhaul of military vehicles, weapons systems and electronics, but majority of work is done by US firm Dyncorp
Tanqia	Mubadala (fund capitalized by numerous foreign defense firms): 30% Elwan Group (aka Infrastructure Capital Group) Overseas Trading Company (Oman)	Overseas Trading Company owned by Fujairah Gov't
Tawazun Precision Industries ³⁶	Tawazun (fund capitalized by numerous foreign defense firms): 100%	
Thalbat Advanced Technologies LLC ³⁷	Thales (France): 49% Baynuna(h) Group: 51%	Baynuna(h) Group founded and owned by retired General Khaled Abdullah Abu-Ainnain
Thales Advanced System/TAS	Thales (France) C4 Advanced Solutions	C4 Advanced Solutions is subsidiary of Emirates Advanced Investments, EAI chairman is Hussein Ibrahim Al Hammadi (also on board of ADSB)
Trakker ME ³⁸	Alfia (fund capitalized by numerous foreign defense firms): 20% Al Jaber Group: 51% Trakker Group (Pakistan): 29%	Al Jaber Group owned by HE Obeid Khalifa Al Jaber Al Murri

³⁶ formerly Emirates Precision Industry

³⁷ Logistics and support services for electronic equipment on the Mirage 2000-9

³⁸ GPS-based tracking system, technology developed by South African defense firm DigiCore; perhaps this is an offset emanating from a South African supplier

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Offset Project	Partners	Notes
Trans Continental Industries Company LLC	Vectra Azad (UK): 49% Advanced Industries of Arabia: 51%	Advanced Industries of Arabia is JV between Jordan's KADDB and Bin Jabr Group (owned by Suweidi) \$15.5 million initial capital
UAE University Development and Management Project	Mubadala (fund capitalized by numerous foreign defense firms)	
UTS Burnstop LLC	Dassault (France) United Technical Services/UTS	UTS is 100% owned by Omar Ziad Al Askari and Abdullah Darwish Al Katbi
Waha Capital ³⁹ /expansion of Oasis Leasing by 25 new planes (consortium of contractors) (Additional projects for Waha were carried out under offset program, including Project Blue I and II, which added total of 31 new aircraft to leasing fleet) ⁴⁰	BAE (UK) Mubadala (fund capitalized by numerous foreign defense firms): 15.14% Hussein J. Al Nowais: 7.11% Abu Dhabi Investment Corporation/ADIC	Hussein J. Al Nowais owns Emirates Holdings also
Al Wathba Marionnet ⁴¹	Kranti (France) Al Wathba Agricultural Materials Establishment: 51% Kranti Developments: (India) 39% General Investments FZE: 10%	Previous shareholders: Kranti: 51% General Investments FZE: 39% (investment arm for French defense firm Giat) Mubadala: 10%
World Trade Center Abu Dhabi	Defense firm partner (unknown) Aldar Properties PJSC: 100%	UAE Offsets Group has franchise rights (Trinity Works, LLC) Mazroui is either Chairman or Board Member (Tabreed prospectus)

³⁹ previously Oasis International Leasing Co., became Al-Waha after additional expansion

⁴⁰ The total for these aircraft came to \$1.4 billion; Blue I involved six contractor obligations, while Blue II involved four contractor obligations. Financing was designed by offset services firm Blenheim.

⁴¹ Date palm tissue cloning

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Offset Project	Partners	Notes
Al Yah Satellite Communications Company	Thales, Astrium, EADS (France) Mubadala (fund capitalized by numerous foreign defense firms): 100%	

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