

## ABSTRACT

Title of Dissertation: PERFORMANCE BUDGETING AND THE  
USE OF PERFORMANCE INFORMATION  
AT THE LINE MINISTRY LEVEL: THE  
CASE OF CHILE

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Many governments around the world have introduced performance budgeting reforms. Despite numerous research papers, lack of clarity remains on whether performance budgeting leads to increased use of performance information for decision-making. This dissertation first analyzes that relation through a meta-analysis of studies of performance budgeting in more than 80 different countries. The findings support two claims found in recent literature: performance budgeting tends to have a greater impact on line ministries than on the executive cabinet and the legislature; and it is not only relevant for resource allocation, but also for management during budget execution. Another finding is that most of the studies do not present any research framework. Consequently, the meta-analysis ends by building a research framework.

Motivated by those findings, this dissertation provides an in-depth examination of the case of Chile, which has a longstanding performance budgeting system. The case study is based on a structured comparison of eight units of analysis: four line ministries (selected based on size) and two programs within each line ministry (selected based on availability of performance information). The analysis is based on the research framework proposed in the meta-analysis and uses the process-tracing methodology. The study has three objectives: (1) testing a research framework, (2) having a better understanding of line ministries, and (3) discussing the findings in the context of Latin America.

The results confirm the claim that line ministries are the most likely to use performance information, and that performance information is more prominent during budget execution. The results provide important considerations about performance budgeting at the line ministry level. First, centralized information systems may have a limited impact. Instead, decision-making relies on institutional- and program-level monitoring systems internal to each organization. Second, there are intrinsic characteristics that determine how difficult it is to implement performance budgeting. Two examples are the size of line ministries and the types of goods and services that they provide. Finally, the support from those in managerial positions is a critical success factor. The dissertation ends with policy recommendations for Chile, implications for other countries, and a proposed research framework for future studies.

PERFORMANCE BUDGETING AND THE USE OF PERFORMANCE  
INFORMATION AT THE LINE MINISTRY LEVEL

by

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## Dedication

To my wife Tatiana and my son Leonardo.

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## Table of Contents

Dedication .....	ii
Acknowledgements .....	iii
Table of Contents .....	iv
List of Tables .....	viii
List of Figures .....	xi
List of Abbreviations .....	xiii
Introduction .....	1
Chapter 1: Introduction to Public Budgeting and to Early Budgetary Reforms .....	3
1.1. Line-item Categorization and Incrementalism .....	6
1.2. Planning, Programming and Zero-based Budgeting Systems .....	9
Chapter 2: Contemporary Performance Budgeting .....	14
2.1. The Definition of Performance Budgeting .....	15
2.2. The Role of Performance Information .....	18
2.3. Consideration of the Entire Budget Cycle .....	21
2.4. The Tools of Performance Budgeting .....	25
Chapter 3: Institutional Context and Budgeting Reforms in Latin America and the Caribbean .....	30
3.1. Macroeconomic and Institutional Context .....	30
3.2. Overview of Budgeting Reforms in Latin America and the Caribbean .....	38
Chapter 4: Has Performance Budgeting Been Successful? .....	43
4.1. Meta-Analysis: Performance Budgeting and the Use of Performance Information .....	44
4.1.1. Stage I: Scoping .....	46
4.1.2. Stage II: Literature Search .....	47
4.1.3. Stage III: Data Coding .....	50
4.1.4. Stage IV: Results .....	51
4.1.5. Stage V: Conclusions .....	61
Chapter 5: Research Questions and Research Methods .....	63
5.1. Research Objectives and Hypotheses .....	64
5.2. Research Strategy and Specification of Variables .....	69
5.2.1. External Environment .....	70
5.2.2. Political Environment .....	72
5.2.3. Characteristics of the System .....	74
5.2.4. Characteristics of the Organizations .....	77
5.3. Case Study Selection .....	83
5.3.1. Selection of Line Ministries Based on Size .....	85

5.3.2. Selection of Programs Within Line Ministries Based on the Availability of Performance Information .....	88
5.4. Methods for Data Collection.....	91
5.5. Methods for Data Analysis .....	95
Chapter 6: The External and Political Environment .....	102
6.1. The Return to Democracy and the Cornerstone of the Reforms (1990-1993).....	103
6.2. The Creation of the Performance Budgeting System (1994-1997) .....	106
6.3. Learning While Doing & Fine-Tuning the System (1998-2009).....	113
6.4. New Ideas that (Mostly) did not Survive (2010-2016).....	117
6.5. Summary .....	120
Chapter 7: Characteristics of the System .....	125
7.1. Characteristics of the Budgetary Cycle.....	126
7.1.1. Budget Formulation .....	126
7.1.2. Budget Approval.....	130
7.1.3. Budget Execution and Evaluation.....	133
7.2. Characteristics of the Performance Budgeting System.....	134
7.2.1. Strategic Definitions and Performance Indicators .....	134
7.2.2. Management Improvement Program (PMG) and Collective Performance Agreement (CDC).....	141
7.2.3. Ex-Post Evaluation System.....	149
7.2.4. Ex-Ante Evaluation System.....	155
7.2.5. Integral Management Report (BGI).....	159
7.2.6. Public Sector Senior Executive Service System (ADP) .....	160
7.2.7. Discontinued Reforms .....	162
7.3. Summary .....	165
Chapter 8: Characteristics of the Line Ministries .....	169
8.1. Ministry of Health - Subsecretariat of Health Care Networks.....	171
8.1.1. Organizational Structure .....	172
8.1.2. Budgetary Structure .....	180
8.1.3. Performance Indicators and Evaluations .....	182
8.1.4. Information Systems .....	186
8.2. Ministry of Public Works - Directorate of Waterworks .....	188
8.2.1. Organizational Structure .....	189
8.2.2. Budgetary Structure .....	195
8.2.3. Performance Indicators and Evaluations .....	197
8.2.4. Information Systems .....	203
8.3. Ministry of Social Development – Subsecretariat of Social Services .....	203
8.3.1. Organizational Structure .....	204
8.3.2. Budgetary Structure .....	209
8.3.3. Performance Indicators and Evaluations .....	211
8.3.4. Information Systems .....	215
8.4. Ministry of Energy – Subsecretariat of Energy .....	216
8.4.1. Organizational Structure .....	217
8.4.2. Budgetary Structure .....	223
8.4.3. Performance Indicators and Evaluations .....	225



8.4.4. Information Systems .....	231
8.5. Summary .....	232
Chapter 9: The Use of Performance Information in Budget Formulation and Approval	
.....	240
9.1. Budget Formulation Within Government Agencies .....	243
9.2. Budget Negotiations with DIPRES.....	249
9.3. Budget Approval in Congress .....	253
9.4. Analytical Summary .....	256
9.4.1. Why are Decision-Making Processes So Similar in all Government Agencies?	
.....	260
9.4.2. Why are Performance Indicators from Government Agency Systems More Relevant than that from DIPRES System? .....	262
9.4.3. Why does Performance Information Has a Limited Role in Budget Negotiations with DIPRES? .....	264
Chapter 10: The Use of Performance Information for Budget Execution and Accountability.....	268
10.1. Performance Monitoring at the Institutional Level.....	270
10.1.1. Subsecretariat of Health Care Networks .....	270
10.1.2. Directorate of Waterworks.....	274
10.1.3. Subsecretariat of Social Services .....	277
10.1.4. Subsecretariat of Energy .....	278
10.2. Performance Monitoring at the Program Level .....	281
10.3. Other Decisions During Budget Execution.....	286
10.4. Budget Transparency and Accountability.....	289
10.5. Analytical Summary .....	294
10.5.1. Why is the Use of Performance Information More Prominent for Budget Execution than for Budget Formulation and Approval?.....	297
10.5.2. What are the Main Success Factors and Obstacles for Establishing a Performance-Based Monitoring System for Budget Execution?.....	300
10.5.3. Why are there Differences in the Level of Prominence that PMG Indicators have in Each Government Agency?.....	304
Chapter 11: Discussion, Implications and Recommendations.....	307
11.1. Main Discussion: The Use of Performance Information for Decision-Making	307
11.1.1. Characteristics of the Organizations .....	314
11.1.2. Characteristics of the System.....	321
11.1.3. Political and External Environment .....	328
11.2. Analysis of the Research Objectives.....	333
11.2.1. Research Objective 1: Propose a Research Framework for the Analysis of Performance Budgeting at Line Ministries .....	334
11.2.2. Research Objective 2: Understand Differences Between the Way Line Ministries Use Performance Information.....	342
11.2.3. Research Objective 3: Have a Better Understanding of Performance Budgeting at Line Ministries in the Context of LAC Countries .....	343
11.3. Analysis of the Hypotheses.....	346

11.3.2. The Relative Impact of Certain Political Actors .....	346
11.3.3. The Impact of the Availability of Performance Information .....	348
11.3.4. The Impact of the Size of the Organization .....	351
11.4. General Implications & Policy Recommendations.....	352
Appendix: Complete List of Studies Included in the Meta-Analysis .....	363
Bibliography .....	369
List of Interviews .....	383

## List of Tables

Table 1: Dimensions of Performance Measurement in the Budget Process .....	23
Table 2: Potential Mechanisms to Motivate Performance .....	28
Table 3: Description of Civil Service Development Levels and Countries in Each Level .....	34
Table 4: Powers of the Legislative Branch to Make Changes in the Executive Proposal.....	37
Table 5: Qualitative Scale of the Use of Performance Information.....	50
Table 6: Summary Statistics of Accepted Studies .....	52
Table 7: Factors Affecting the Use of Performance Information Under Performance Budgeting Systems Mentioned in Selected Studies.....	57
Table 8: Frequency of Categorized and Factors Affecting the Use of Performance Information Under Performance Budgeting Systems .....	60
Table 9: Description of Variables in the External Environment.....	71
Table 10: Description of Variables in the Political Environment.....	73
Table 11: Description of Variables of the Characteristics of the System .....	75
Table 12: Description of Variables of the Characteristics of the Organization .....	78
Table 13: Scale to Grade the Use of Performance Information.....	82
Table 14: Chile's Revenue Volatility as Compared to Other Latin American and Caribbean Countries.....	111
Table 15: Timeline of Chile's Performance Budgeting Reforms .....	120
Table 16: Chile's Executive Budgetary Authority as Compared to Other Latin American and Caribbean Countries .....	128
Table 17: Constitutional Restrictions on the Role of Congress in Chile .....	131
Table 18: Chile's Budget Cycle .....	132

Table 19: Contents of Strategic Definitions (Form A1) .....	136
Table 20: Basic Framework Program of the PMG for the Year 2005 .....	143
Table 21: Main Differences Between Chile's Ex-Post Evaluation Lines.....	150
Table 22: Chile's Monitoring and Evaluation as Compared to Other Latin American and Caribbean Countries.....	151
Table 23: Result Categories for the Ex-Ante Evaluation of Investment Projects.....	156
Table 24: Chile's Strategic Planning as Compared to Other Latin American and Caribbean Countries.....	164
Table 25: Selected Articles from the Organic Constitutional Law of the General Foundations of Public Administration of the Year 1986.....	169
Table 26: Strategic Definitions of the Subsecretariat of Health Care Networks for the Years 2015-2018 .....	173
Table 27: Chile's Civil Service as Compared to Other Latin American and Caribbean Countries .....	177
Table 28: Subsecretariat of Health Care Networks Approved Budget, Year 2016 (thousands of Pesos) .....	181
Table 29: Subsecretariat of Health Care Networks Performance Indicators, Year 2016 .....	183
Table 30: Strategic Definitions of the Directorate of Waterworks for the Years 2015- 2018.....	190
Table 31: Directorate of Waterworks Approved Budget, Year 2016 (thousands of Pesos) .....	196
Table 32: Directorate of Waterworks Performance Indicators, Year 2016 .....	198
Table 33: Strategic Definitions of the Subsecretariat of Social Services for the Years 2015-2018 .....	205
Table 34: Subsecretariat of Social Services Approved Budget, Year 2016 (thousands of Pesos).....	210
Table 35: Subsecretariat of Social Services Performance Indicators, Year 2016.....	212

Table 36: Strategic Definitions of the Subsecretariat of Energy for the Years 2015-2018.....	218
Table 37: Subsecretariat of Energy Approved Budget, Year 2016 (thousands of Pesos) .....	224
Table 38: Subsecretariat of Energy Performance Indicators, Year 2016.....	226
Table 39: Key Characteristics of Selected Chilean Line Ministries .....	232
Table 40: Selected Budgetary Annotations from the Budget of the Subsecretariat of Energy, Year 2016 .....	254
Table 41: Institutional-level Performance Monitoring at the Subsecretariat of Energy .....	279
Table 42: Use of Performance Information by Each Government Agency.....	311
Table 43: Summary of Findings on Variables About the Characteristics of the Organization.....	315
Table 44: Summary of Findings on Variables About the Characteristics of the System .....	322
Table 45: Summary of Findings on Variables About the Political and External Environment.....	329
Table 46: Research Framework to Analyze the Use of Performance Information in Performance Budgeting Systems .....	339

## List of Figures

Figure 1: Budget Cycle and Actors.....	3
Figure 2: Categorization of Performance Budgeting Based on How Performance Information is Used.....	19
Figure 3: Comparison of Crude Oil Prices and Ecuador’s Fiscal Revenues .....	32
Figure 4: Tax Revenues as a Share of GDP, Year 2014.....	33
Figure 5: Index of Performance Budgeting by Country, Year 2013.....	40
Figure 6: Flow Diagram of the Literature Search .....	48
Figure 7: Use of Performance Information Under Performance Budgeting Systems ..	53
Figure 8: Use of Performance Information Under Performance Budgeting Systems per Type of Budgetary Decision .....	54
Figure 9: Number of Studies with at Least One Observation per Type of Budgetary Decision .....	55
Figure 10: Areas that Impact the Use of Performance Information.....	69
Figure 11: Chile’s Line Ministries Ordered by the Size of Their Budgets, Clustered, Year 2016.....	87
Figure 12: Results Matrix Used in Chile’s Ex-Post Evaluation System.....	89
Figure 13: Selection of Line Ministries and Programs .....	90
Figure 14: Tests for Causal Inference Using Process-Tracing .....	98
Figure 15: Performance Indicators in Chile, Years 2001-2015 .....	140
Figure 16: PMG and CDC Variable Monetary Incentives, as a Percentage of Base Salary .....	145
Figure 17: Generic DIPRES Ex-Post Evaluation Process .....	153
Figure 18: The ADP Process.....	161
Figure 19: Organizational Chart of the Subsecretariat of Health Care Networks .....	176

Figure 20: Organizational Chart of the Directorate of Waterworks .....	192
Figure 21: Organizational Chart of the Subsecretariat of Social Services.....	207
Figure 22: Organizational Chart of the Subsecretariat of Energy.....	220
Figure 23: Main Decision-Making Instances During Budget Formulation and Approval for Chilean Government Agencies .....	258
Figure 24: Subject Areas and Attributes Included in COMGES .....	271
Figure 25: Institutional-level Performance Monitoring Systems at the Directorate of Waterworks .....	275
Figure 26: Chile’s 2015 Open Budget Survey Scores .....	291

## List of Abbreviations

ACH EE	<i>Agencia Chilena de Eficiencia Energética</i> Chilean Agency of Energy Efficiency
ADB	Asian Development Bank
ADP	<i>Sistema de Alta Dirección Pública</i> Public Sector Senior Executive Service System
AfDB	African Development Bank
ANEF	<i>Agrupación Nacional de Empleados Fiscales</i> National Association of Public Employees
APR	<i>Programa de Agua Potable Rural</i> Rural Drinking Water Program
BGI	<i>Balance de Gestión Integral</i> Integral Management Report
BIPS	<i>Banco Integrado de Programas Sociales</i> Integrated Repository of Social Programs
CDC	<i>Convenio de Desempeño Colectivo</i> Collective Performance Agreement.
CMI	<i>Cuadro de Mando Integral</i> Comprehensive Command Chart
COMGES	<i>Compromisos de Gestión</i> Managerial Commitments
CRR	<i>Conservación de las Riberas de los Ríos</i> Riverbank Conservation
DEIS	<i>Departamento de Estadísticas e Información de Salud</i> Department of Health Information and Statistics
DIPRES	<i>Dirección de Presupuesto</i> Central Budget Office
EFA	<i>Evaluación Focalizada de Ámbito</i> Evaluation with Focused Scope



EGI	<i>Evaluación del Gasto Institucional</i> Institutional Expenditure Evaluation
EI	<i>Evaluación de Impacto</i> Impact Evaluation
ENAP	<i>Empresa Nacional del Petróleo</i> National Petroleum Enterprise
EPG	<i>Evaluaciones de Programas Gubernamentales</i> Government Program Evaluations
EPN	<i>Evaluación de Programas Nuevos</i> Evaluation of New Programs
FMGP	<i>Fondo de Modernización de la Gestión Pública</i> Public Management Modernization Fund
GDP	Gross Domestic Product
GES	<i>Garantías Explícitas de Salud</i> Explicit Health Warranties
IAAPS	<i>Índice de Actividad de la Atención Primaria de Salud</i> Primary Health Care Index
IDB	Inter-American Development Bank
IMF	International Monetary Fund
ISO	International Organization for Standardization
LAC	Latin America and the Caribbean
M&E	Monitoring and Evaluation
MDS	<i>Ministerio de Desarrollo Social</i> Ministry of Social Development.
MEI	<i>Metas de Eficiencia Institucional</i> Institutional Efficiency Goals
MIDEPLAN	<i>Ministerio de Planificación y Cooperación</i> Ministry of Planning & Cooperation

MINSEGPRES	<i>Ministerio Secretaría General de la Presidencia</i> Ministry for the Presidency's General Secretariat
OECD	Organization for Economic Co-Operation and Development
PAIS	Public Affairs Information Service International
PMG	<i>Programa de Mejoramiento de la Gestión</i> Management Improvement Program
PMO	Project Management Officers
PPBS	Planning, Programming, and Budgeting System
PRAPS	<i>Programa de Reforzamiento de la Atención Primaria de Salud</i> Primary Health Care Reinforcement Program
RISS	<i>Red Integrada de Servicios de Salud</i> Integrated Health Services Network
SAFI	<i>Sistema de Administración Financiera Integrado</i> Integrated Financial Information System
SENAMA	<i>Servicio Nacional del Adulto Mayor</i> National Service for Seniors
SIGEC	<i>Sistema de Gestión de Convenios</i> Agreement Management System
SMM	<i>Sistema de Metas Ministeriales</i> Ministerial Goals System
SSCI	Social Sciences Citation Index
UGCC	<i>Unidad de Gestión Centralizada de Camas</i> Unit of Centralized Beds Administration
UN	United Nations
ZBB	Zero-based Budgeting

## Introduction

This dissertation analyzes the use of performance information under performance budgeting systems. This study starts with a review of the concepts of public budgeting and performance budgeting. Chapter 1 depicts the stages of the budget cycle and introduces the first generation of performance-based reforms. Chapter 2 explains the main concepts related to the contemporary definition of performance budgeting. This includes a discussion on how performance information is expected to inform decision-making processes throughout each stage of the budget cycle, a review of the main tools used to make performance budgeting successful, and the clarification that in this study we address performance budgeting as an overarching concept that includes performance management.

The third and fourth chapters show empirical evidence of the implementation of performance budgeting. The former focuses exclusively on Latin American and Caribbean (LAC) countries. The latter presents a meta-analysis of studies that analyze the use of performance information in places where a government-wide performance budgeting reform has been implemented.

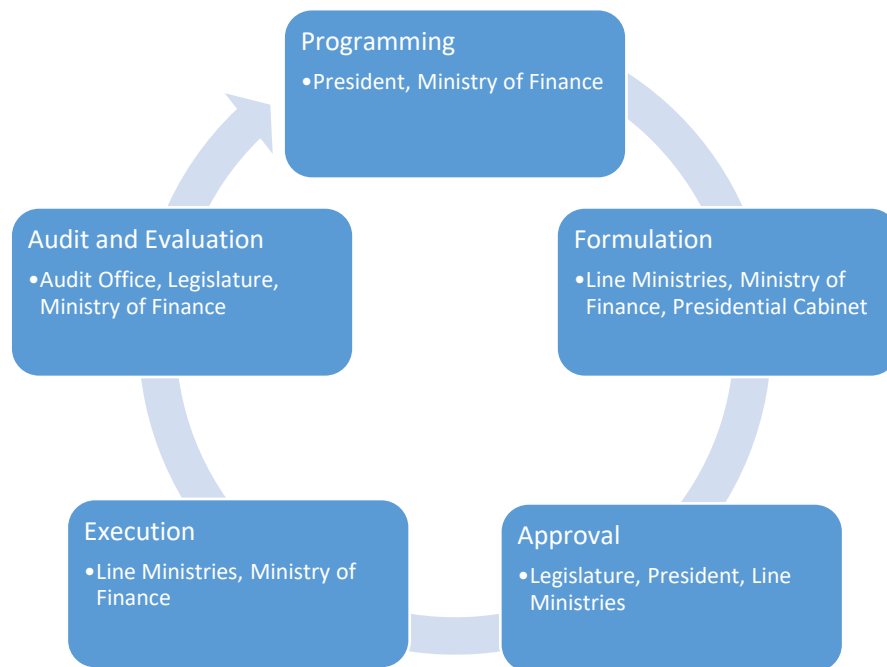
The results from the meta-analysis motivate the research questions and objectives of this dissertation. Chapter 5 details the implications of these objectives, sets three hypotheses, and explains the methodological considerations related to the case study selection, data collection, and data analysis.

Chapters 6, 7, and 8 present empirical evidence linked to all the explanatory variables in our research framework. Then, Chapters 9 and 10 build on those variables to analyze the main question of this study: is performance information used for decision-making? The dissertation ends with Chapter 11 which provides an analytical summary of the findings, reviews the empirical evidence related to the research objectives and hypotheses, and concludes with general implications and policy recommendations.

## Chapter 1: Introduction to Public Budgeting and to Early Budgetary Reforms

Public budgeting is based on a continuous and repetitive cycle that results in the allocation and the execution of government resources during a fiscal period. While this cycle can have different characteristics when compared across governments, it is generally composed by five stages and it usually involves a common list of actors (Figure 1).

**Figure 1: Budget Cycle and Actors**



Note: author's elaboration

The first stage of the cycle is referred to as programming. The decisions taken at this stage relate to aggregate fiscal policy and are commonly based on macroeconomic estimations provided by the Ministry of Finance<sup>1</sup>. Some of the key outcomes at this stage are the overall size of public expenditure, public debt, and aggregate expenditure ceilings for each line ministry. In many cases, the programming phase ends with the submission of an internal document elaborated by the Ministry of Finance and approved by the President, which provides a set of rules for line ministries to submit their budget proposals, including the maximum amount of resources that they may request.

The formulation stage starts with the submission of budgetary requests by line ministries to the Ministry of Finance. Line ministries often start preparing their budget requests a year in advance, which are then re-shaped so that they fit the instructions that they receive from the Ministry of Finance during the programming phase. Budgetary specialists at the Ministry of Finance analyze the budgetary requests submitted by line ministries. This process involves meetings and negotiations between individual line ministries and the Ministry of Finance, where the latter works to elaborate a unified budget from the numerous individual requests. The formulation stage ends with a unified budget proposal that the President submits for legislative approval.

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<sup>1</sup> The term Ministry of Finance will be used generically in this section to refer to certain offices, such as the Central Budget Office, which are commonly part of that Ministry.

The budget approval stage varies widely between governments, mainly as a function of how powerful the legislative branch is vis-à-vis the executive. On the one side, in the United States Congress has both the authority to pass a budget that does not even consider the one submitted by the executive (although it is subject to the President's veto), and to shut-down the government (as it has become more common in recent years). On the other side, in some countries the President has the authority to unilaterally disregard any congressional action and to sign its own budget proposal into law.

The fourth stage, budget execution, is the lengthiest one. This stage comprises the entire fiscal year which typically lasts twelve months. Line ministries and agencies are the key players as they are the ones that will spend the resources allocated through the previous stages. The focus in this stage moves away from the discussion of what to fund, and towards how to manage organizations to better execute resources. Other actors, such as the Ministry of Finance, may have important responsibilities during this stage, including setting quotas to smooth expenditure throughout the period, managing liquidity and cash balances, and even producing updated macroeconomic estimations that may impact original budget allocations.

The final stage is audit and evaluation. The objective of this stage is to ensure that the execution of public resources complied with the agreements that were made when they were allocated. Those agreements may range from avoiding financial mismanagement, to meeting certain policy objectives. The results from this stage

should serve as an input for the allocation and execution of resources during future fiscal years. Given different levels of institutional capacity and political independence, some countries may have strong audits and evaluations, while in other countries these functions may be non-existent.

### **1.1. Line-item Categorization and Incrementalism**

While the details of the aforementioned budget cycle can be very different between governments, there are two budgetary traditions that, at least originally, were present almost everywhere. Those traditions are the allocation of funds through *incrementalism* and based on line-item expenditure categories. Incrementalism refers to the practice of allocating resources for each fiscal year simply by keeping the same allocations made on the previous fiscal year (which is called the budget base), and by adding a similar marginal percentage of resources for each area. A line-item expenditure category is one where funds are allocated and audited based on specific expenses (such as specific office items, salaries, vehicles, etcetera).

The emergence of these two traditions is a factor of their benefits. In the case of incrementalism, the main benefit is that it facilitates complex decisions. This argument was built through a long tradition of academic debate. Its academic inception comes from a paper written half a century ago by Charles Lindblom, where the author analyzes decision-making processes by contrasting two methods that government officials may follow when facing a difficult decision (such as allocating public resources) (Lindblom, 1959). The first method is called rational comprehensive (root). It involves setting specific ends (objectives), and then testing



means (policy options) based on how they help to reach such ends. The second method is called successive limited comparisons (branch). This method chooses both means and objectives simultaneously by focusing on marginal changes and a small number of alternatives. Lindblom argues that, in practice, government officials use the branch method. His conception of the branch method is the cornerstone of what has been defined as budgetary incrementalism.

Lindblom provides specific reasons why government officials use the branch method. One of the main arguments is that ends cannot be used as a mechanism to decide resource allocation because decision-makers have no clear or agreed preferences between ends, and even if they did, they cannot easily rank and compare between those ends. Another argument is that as the number policy options becomes larger and more complex, government officials cannot fully understand and analyze all of them, but instead they decide based on marginal or incremental differences between a small set of options.

A few years after Lindblom's article, Aaron Wildavsky provided a detailed theory of budgetary incrementalism. He defined budgeting as "incremental, not comprehensive. The beginning of wisdom about an agency budget is that it is almost never actively reviewed as a whole every year in the sense of reconsidering the value of all existing programs as compared to all possible alternatives. Instead, it is based on last year's budget with special attention given to a narrow range of increases and decreases. Thus, the men who make the budget are concerned with relatively small

increments to an existing base. Their attention is focused on a small number of items over which the budgetary battle is fought” (Wildavsky, 1964, p. 15).

In his definition, Wildavsky is stating important aspects about budgeting systems that make them incremental. He argues that decisions are taken by looking at small (marginal) changes. This goes hand-in-hand with Lindblom’s argument that government officials only consider a small number of options and decide based on small differences between them. The fact that decisions only focus on small changes also entails that policymakers are not looking at the entire budget, basically by obviating a large base from last year’s budget. This point is better illustrated through an iceberg analogy, which has most of its mass underwater (representing the base, not even analyzed) and only a small part over water (the small number of items over which decisions are made).

Not only did Wildavsky explained the main characteristics that make budget incremental, but he also defended those characteristics as desirable. Wildavsky argues that incrementalism allows resolving conflicts, reduces the burden of calculations, and eliminates the need to agree upon goals. He strengthens his case by comparing incrementalism to program budgeting, where he concludes that “the incremental, fragmented, non-programmatic, and sequential procedures of the present budgetary process aid in securing agreement and reducing the burden of calculation” (Wildavsky, 1964, p. 136).

The use of a line-item expenditure categorization has not received the same level of support as incrementalism. Instead, line-item budgeting was a consequence of the fact that early stages of budget reform prioritized having a strict control of budgetary resources over using the budget as a management and planning mechanism (Schick, 1966). In that sense, line-item categorization was desirable because it provides a more strict and straightforward mechanism for budget offices to control the expenditures of line ministries and agencies.

### **1.2. Planning, Programming and Zero-based Budgeting Systems**

Critics of incrementalism and line-item budgeting have pointed out many of their flaws and limitations. First, incrementalism does not provide decision-makers an intellectual basis for deciding where to allocate funds; instead, it calls for political allocation based on previous year's budget with a similar marginal change among most government agencies. This leads to one of the most cited criticisms of early budgetary theory: that it does not provide an answer to the basic question of "on what basis shall it be decided to allocate x dollars to activity A instead of activity B?" (Key, 1940). A second line of criticism is that, by focusing on inputs rather than on results, line-item budgeting provides no mechanism for governments and public managers neither to ensure that they are spending resources in a way that allows them to meet their policy objectives (effectiveness), nor to carry out their activities in a cost-effective manner (efficiency) (Schick, 2014; Shah & Shen, 2007). Other authors have argued that incrementalism exacerbates three types of *government failures*:

principal-agent, common-pool, and intertemporal inconsistencies (Marcel, Guzmán, & Sanginés, 2014).

The first set of reforms that challenged the predominance of incrementalism appeared in the United States during the post-World War II decades. In an influential article, Allen Schick explains the budgetary reforms of those times as a consequence of an evolution of the key budgetary objectives (Schick, 1966). The initial objective of budgeting systems was to keep tight control over the objects of expenditure. Line-item categorization served the control purpose well, as it provided detailed accounts of the specific goods on which money was spent. The years of the New Deal brought a different view on the functions of the government. The institution of new and large social programs required better management systems to facilitate the task of public agencies of providing benefits to large segments of the population. The new management orientation was crystalized when in 1949 the Hoover Commission called for the use of functional and activity based resource-allocation criteria instead of line-item or object of expenditure criteria. Following the management orientation, the final stage denoted by Schick in his 1966 article was a planning orientation. This new orientation was the consequence of three factors. First, the advent of economic theory resulted in an increased role for both macro and microeconomic analysis in policy decisions. Second, the emergence cost-benefit and organizational analysis provided tools for policy makers to compare between potential alternatives to be included in the budget. Finally, practices such as multiyear budget projections, have been bringing two intrinsically opposed ideas – the backward looking budgeting and the

forward-looking planning – closer together. The reform that better exemplified the new planning orientation was known as Planning, Programming, and Budgeting System (PPBS) (also commonly referred to as Program Budgeting), initially adopted by the U.S. Defense Department and later tested throughout the federal government.

The PPBS system was a radical departure from incrementalism. Diamond (2003) explains that PPBS consisted of three phases: a planning phase in which policy objectives were decided upon, a programming phase in which those objectives were transformed into multi-year programs, and a budgeting phase that allocated resources for the initial year of those programs. The expectation was that this new budgetary system would finally bring rational decision-making to budgetary decisions by breaking the cycle of quasi-mechanical incremental allocations. However, the story of PPBS is not one of success: in 1971, not many years after it was mandated as the new budgeting system for the US federal government, the Office of Management and Budget (OMB) announced that PPBS was no longer required.

The demise of PPBS has been attributed to a number of problems. First and foremost, its introduction across-the-board overlooked important differences between agencies and programs, including leadership support (Schick, 1973; West, 2011; Diamond, 2003). Second, PPBS required government agencies to deal with the task of establishing a hierarchy of their goals and objectives. This task proved to be specially challenging when attempted at the program level on a federal scale, given that “many agencies activities served multiple objectives under any conceivable

program structure” (West, 2011, p. 22) . Third, decision-making processes under PPBS are considerably more complex and prone to conflict than on incrementalism (West, 2011; Wildavsky, 1964; Schick, 1973). Some additional problems with PPBS include resistance to change at the agency and department levels (West, 2011; Schick, 1973); lack of presidential support (Schick, 1973; Diamond, 2003); and the absence of key information systems, including cost information (Schick, 1973).

The end of PPBS was by no means the end of budgetary reforms. The decades of the 1970s and 1980s witnessed both a new reform idea that ended in complete failure, and the proliferation of some useful bits-and-pieces of these reforms throughout the world. The story of complete failure belongs to a technique known as Zero-based Budgeting (ZBB). The main feature of this budgeting technique was that it did not consider previous year’s budget as a factor in determining next year’s budget; in other words, it was an ahistorical budget process (Marcel, Guzmán, & Sanginés, 2014). By not considering previous year’s budget, ZBB required “the review and justification of all public expenditure every year” (Robinson, 2007, p. 7). After short-lived attempts, ZBB was dismissed because it demanded too much effort, making it impractical (Marcel, Guzmán, & Sanginés, 2014; Robinson, 2007; Shah & Shen, 2007).

In spite of their failure, the PPBS and ZBB systems resulted in an increased use of novel budgetary practices throughout the world. The United Nations (UN) had an important role in the exportation of budgetary innovations from the United States

to the rest of the world (Diamond, 2003; Robinson, 2007; Dean, 1986). In the year 1965, the UN published its *Manual for Programme and Performance Budgeting*, which praised the reforms started in the United States and recommended its introduction in other countries. While many countries did not meet the institutional preconditions included in the UN document, around 50 countries (including several developing countries) adopted some variation of these reforms (Diamond, 2003).

Two years after PPBS was dismissed, Allen Schick predicted that “with so much of the business undone, it is probable that under a different label, and with somewhat different approaches and techniques there eventually will be a return to the aims of PPBS” (Schick, 1973, p. 155). In that same article, Schick notes that in spite of its dismissal, PPBS’ heritage remained in many agencies where cost and performance information systems were being developed for the purpose of increasing managerial accountability. Decades later, many authors have agreed with Schick’s argument by noting that more recent budget reforms have been built on the ideas and the lessons learned from the reforms mentioned in this chapter (Kelly, 2005; Diamond, 2003; Rubin, 1990).

## Chapter 2: Contemporary Performance Budgeting

The previous chapter presented the initial concepts and ideas that were introduced to make public budgeting systems more results-oriented. In spite of implementation failures, “spending money on the basis of performance is such a compelling idea that neither failure nor disappointment deter reform-minded politicians and managers from pursuing it. Failure or disappointment embolden a new cadre of politicians or managers to try again” (Schick, 2014, p. 4).

The decade of the 1990’s saw a revival of the budgeting reform movement. This revival was marked by the influence of the ideas proposed by the *New Public Management*, which emphasized the need for the public sector to incorporate some management strategies from its private counterpart to improve its effectiveness and efficiency<sup>2</sup>. More specifically, many authors have highlighted the bestseller by (Osborne & Gaebler, 1992) *Reinventing Government* as a catalyst in bringing more of a market- or results-oriented approach into government and budgeting reforms (Diamond, 2003; Joyce & Sieg, 2000; Kelly, 2005; Hou, Lunsford, Side, & Jones, 2011). This revival has already lasted more than 20 years, and the contemporary version of performance budgeting<sup>3</sup> is now fully implemented and used in many countries around the world.

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<sup>2</sup> For a more detailed recount of the link between public management theory and public budgeting reform, see (Marcel, Guzmán, & Sanginés, 2014).

<sup>3</sup> A note on terminology. The name given to the type of budgeting reforms referred to in this document varies across authors and across governments. For example, the terms ‘program budgeting’ ‘results-based budgeting’ and ‘performance budgeting’ are sometimes used by different



This chapter explains the contemporary version of performance budgeting. Section 2.1. puts forwards a definition of performance budgeting and clarifies the main terms related to it. Section 2.2. introduces recent discussions on the role of performance information in decision-making processes and argues for performance-informed budgeting. Section 2.3. clarifies the linkage between performance budgeting and performance management. Section 2.4. describes some of the main tools used in performance budgeting systems.

## **2.1. The Definition of Performance Budgeting**

In the past, authors have noted that performance budgeting is a term for which there is a multiplicity of definitions (Robinson & Brumby, 2005; Marcel, Guzmán, & Sanginés, 2014; Joyce, 2011). Some of the most widely used definitions of performance budgeting have been put forward in publications from international organizations. A publication by the World Bank presents the following definition: “performance budgeting is a system of budgeting that presents the purpose and objectives for which funds are required, the costs of programs and associated activities proposed for achieving those objectives, and the outputs to be produced or services to be rendered under each program. (...) The prominent concern of performance budgeting is to achieve operational efficiency and to improve accountability for results” (Shah & Shen, 2007, pp. 141, 143). Similarly, a book

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authors to refer to the same reforms. In this document, the term performance budgeting will be used when referring to the wave of budgeting reforms that started in the 1990s and that continue today.

published by the International Monetary Fund (IMF) defines performance budgeting as “public sector funding mechanisms and processes designed to strengthen the linkage between funding and results (outputs and outcomes), through the systemic use of formal performance information, with the objective of improving the allocative and technical efficiency of public expenditure” (Robinson, 2007, p. 1).

Both definitions refer to performance budgeting as a system that introduces performance information in the budgeting cycle, and both provide explicit objectives for performance budgeting. Those objectives include allocative efficiency, operational or technical efficiency, and accountability for results. In addition, both definitions link these objectives to outputs and/or outcomes. The following paragraphs provide a conceptual definition for each of those terms, and adds the term efficacy/effectiveness which also appears often on performance budgeting literature:

**Accountability for Results** exists when there is *answerability* and *enforcement*. “Answerability refers to the obligation of the government, its agencies and public officials to provide information about their decisions and actions and to justify them to the public and to those institutions of accountability tasked with providing oversight. Enforcement suggests that the public or the institution responsible for accountability can sanction the offending party or remedy the contravening behavior” (Stapenhurst & O'Brien, p. 1).

**Allocative Efficiency** is “the delivery by government of the mix of different types of services which most closely reflect social priorities, based on society’s valuations of output choices” (Robinson, 2007, p. xxiii).

**Efficacy/Effectiveness** is “the extent to which the development intervention’s objectives were achieved, or are expected to be achieved, taking into account their relative importance” (OECD, 2002, p. 20).

**Operational (or Technical) Efficiency** is “the production of an output at minimum cost while holding quality constant, given prevailing input prices” (Robinson, 2007, p. xxviii).

**Outcomes** are “changes brought about by public interventions upon individuals, social structures, or the physical environment. Expressed differently, the impacts of government agencies” (Robinson, 2007, p. xxvi).

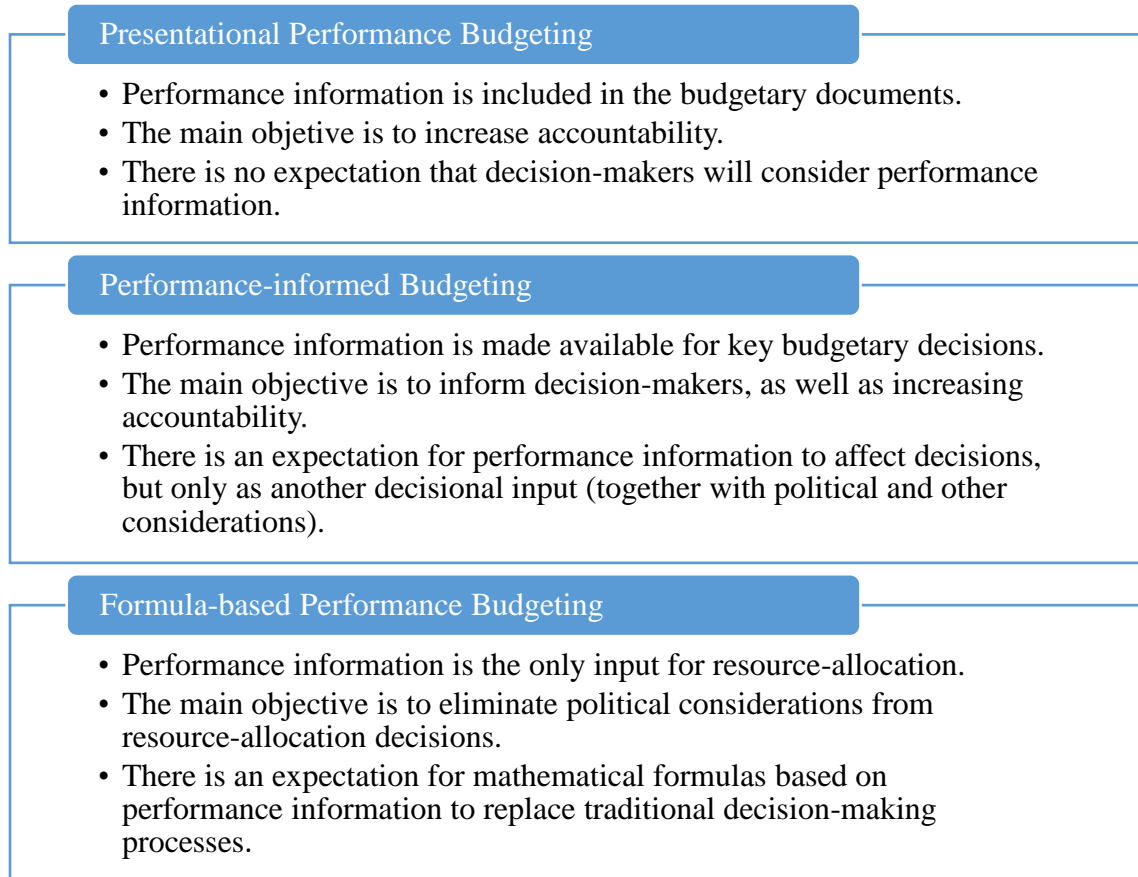
**Outputs** are “goods or services provided by an agency to or for an external party” (Robinson, 2007, p. xxvi).

Based on these concepts and definitions, in this document we refer to performance budgeting as a system that links performance information to the different process of the budgetary cycle with the objective of increasing allocative efficiency, operational efficiency, and accountability for results.

## **2.2. The Role of Performance Information**

While the definitions of performance budgeting presented in the previous section agree that its focus is to include performance information in the budgeting cycle, they differ on the specific role that performance information should have. For example, the definition presented in (Shah & Shen, 2007) refers to the presentation of performance information; in contrast, the definition in (Robinson, 2007) goes beyond presentation and argues for strong ties between performance information and resource-allocation. The debate has led to three categories of performance budgeting: presentational, informed, and formula-based (Figure 2).

**Figure 2: Categorization of Performance Budgeting Based on How Performance Information is Used**



Note: adapted from (OECD, 2007).

The presentational category of performance budgeting focuses on increasing accountability. It meets that objective by adding performance reports to budgetary documents, and making them available to legislators and the public. However, presentational performance budgeting by itself does not contribute to two of the objectives of performance budgeting reforms: allocative and operational efficiency. For that reason, presentational performance budgeting is never the end goal of

reforms, but instead a preliminary step towards getting performance information to be considered in decision-making.

The other two categories, performance-informed and formula-based performance budgeting, aim at making performance information a valuable input for decision-making, but they do so through very different methods. Performance-informed budgeting makes performance information available for key decision-making processes in all stages of the budgeting cycle. It does not aim for performance information to replace political and other considerations, but instead its purpose is that performance information becomes an additional decision-making input. In contrast, formula-based performance budgeting predefines resource-allocation as a function of performance, eliminating political considerations.

In practice, it is much more common for countries to have performance-informed than formula-based performance budgeting (Schick, 2014; Marcel, Guzmán, & Sanginés, 2014). While a reason why performance-informed budgeting is more common might be that it is more prone to be accepted by politicians who want to keep a level of budgetary discretion, “proponents of performance informed budgeting regard it as the optimal approach, not as a second-best concession to budgetary realities” (Schick, 2014, pp. 2-3). The main reason why its proponents see it as a superior approach is that it allows the interpretation of performance information (Shah & Shen, 2007; Joyce, 2011; Moynihan, 2006). As Moynihan explains “even if two individuals agree that the performance information should

influence resource allocation, performance data do not tell us how to tradeoff between multiple program and agency goals” (Moynihan, 2006, p. 157). In fact, the problem described by Moynihan can be easily exemplified: an educational program where students are not meeting performance targets might be (a) a good program with funding shortage, (b) a good program with managerial or other non-funding related issues, or (c) a bad program that should be eliminated or reduced. This example shows that while unsatisfactory performance might require changes in resource-allocation (cases “a” and “c”), it might be the case that the total funding of a program should not be changed to improve performance (case “b”).

Besides the fact that performance information needs to be interpreted, those same authors agree that it is naïve to expect that performance information will drive out all political considerations from the budget process (Shah & Shen, 2007; Joyce, 2011; Moynihan, 2006). Finally, other benefits of performance-informed budgeting are that “it reduces conflict over objectives and priorities; allows politicians and managers broad discretion in allocating resources on the basis of their preferences; and facilitates timely completion of budget work” (Schick, 2014, p. 12).

### **2.3. Consideration of the Entire Budget Cycle**

The objective of this section is to clarify that performance budgeting, as used in this document, includes all stages of the budget cycle. This clarification is relevant because there are authors who refer to performance budgeting exclusively for

resource-allocation decisions (budget formulation and approval) while budget execution is labeled as performance management<sup>4</sup>.

The use of performance budgeting as a concept that includes all stages of the budget cycle has become common in the last ten years. This is partly because recent evidence suggests that while legislators often disregards performance information during budget approval<sup>5</sup>, performance budgeting reforms lead to increased use of performance information in government agencies during budget execution (Ho, 2011; Joyce, 2003; Smith & Cheng, 2006; Poister & Streib, 1999; Melkers & Willoughby, 2005; Wang X. , 1999; Schick, 2014). As Joyce argued, the “lack of evidence (of the use of performance information) occurs because observers have not looked in the right places. That is, the assumption that is implicitly used most frequently is that resource allocation is something that occurs only (or at least mostly) in the central budget office or in the legislature” (Joyce, 2003, p. 7).

When looking at the entire budget cycle, what types of decisions should we expect performance budgeting to influence? Table 1 presents a non-exhaustive list of examples. At the preparation stage, agency officials can use performance information to compare between expenditure options, justify their selections, and coordinate actions that involve more than one department. At the approval stage, the legislature can hold accountable those who have not met their goals, and clarify their

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<sup>4</sup> For example, that definition of performance budgeting is used in (Robinson, 2007).

<sup>5</sup> For examples of cases where legislators disregards performance information see: (Dean, 1986; The World Bank & Inter-American Development Bank, 2005; Berry, Brower, & Flowers, 2000; Blöndal & Sang-In, Budgeting in Thailand, 2006; Cheung, 2006; Breul, 2007; White, 2012).



expectations for upcoming years. At the execution stage, agencies need to take real-time decisions to ensure that their programs will meet their strategic goals. Finally, at the audit and evaluation stage governments can focus not only on financial, but also on performance accountability.

**Table 1: Dimensions of Performance Measurement in the Budget Process**

<b>STAGE OF BUDGET PROCESS</b>	<b>MEASURES AVAILABLE:</b>	<b>USE OF MEASURES TO:</b>
<b>BUDGET PREPARATION: AGENCY LEVEL</b>	<ul style="list-style-type: none"> <li>- Agency strategic planning and performance planning.</li> <li>- Cost accounting.</li> <li>- Performance (outcome) measures.</li> </ul>	<ul style="list-style-type: none"> <li>- Make tradeoffs between agency subunits to allocate funds strategically.</li> <li>- Build budget justification for submission to central budget office.</li> <li>- Determine overlapping services within agencies.</li> </ul>

<p><b>BUDGET PREPARATION: CENTRAL BUDGET OFFICE</b></p>	<ul style="list-style-type: none"> <li>- Government wide strategic planning and performance planning.</li> <li>- Cost accounting.</li> <li>- Performance (outcome) measures.</li> </ul>	<ul style="list-style-type: none"> <li>- Make tradeoffs between agencies to allocate funds strategically.</li> <li>- Build budget justification for submission to legislative body.</li> <li>- Determine overlapping services between agencies.</li> </ul>
<p><b>BUDGET APPROVAL: LEGISLATIVE</b></p>	<ul style="list-style-type: none"> <li>- Performance measures, accurate cost estimates, and strategic/ performance plans included with budget justifications.</li> </ul>	<ul style="list-style-type: none"> <li>- Compare costs to marginal effects on performance during legislative funding process.</li> <li>- Make performance expectations clear as part of budget allocation.</li> </ul>
<p><b>BUDGET APPROVAL: CHIEF EXECUTIVE</b></p>	<ul style="list-style-type: none"> <li>- Implications of legislatively approved budget for achieving government strategic objectives.</li> </ul>	<ul style="list-style-type: none"> <li>- Make decisions on signature, veto, or line item veto/reduction informed by performance implications.</li> </ul>

<b>BUDGET EXECUTION</b>	<ul style="list-style-type: none"> <li>- Agency and government wide strategic plans.</li> <li>- Performance (outcome) measures.</li> <li>- Cost accounting.</li> </ul>	<ul style="list-style-type: none"> <li>- Use spending discretion and flexibility to allocate funds in line with strategic priorities and consistent with achievement of agency performance goals.</li> </ul>
<b>AUDIT AND EVALUATION</b>	<ul style="list-style-type: none"> <li>- Agency strategic goals.</li> <li>- Actual performance data.</li> <li>- Cost accounting information.</li> </ul>	<ul style="list-style-type: none"> <li>- Shift focus of audits/evaluations to include performance questions, rather than only financial compliance.</li> </ul>

Note: from (Joyce & Sieg, 2000, p. 34).

#### **2.4. The Tools of Performance Budgeting**

A performance budgeting system may include many different tools that facilitate the use of performance information. This section provides an overview of the main tools: monitoring and evaluation, strategic planning, program classification, and monetary and non-monetary incentive systems.

Monitoring and Evaluation (M&E) systems are an indispensable tool of performance budgeting. Monitoring systems are used to gather periodic performance information of all government activities, while evaluations are conducted only for a small portion of government areas to have a deeper understanding of their performance. The two functions are complementary as monitoring explains “the

degree of achievement of expected outcomes but does not explain why the interventions do or do not work or what effect they have on society. This role is fulfilled by evaluation, through specific studies” (Feinstein & García Moreno, 2015, p. 196).

One of the objectives of performance budgeting is to allocate resources in the way that most closely reflects social priorities. Therefore, it is important to have a clear definition of those priorities so that they can guide budgetary decision-making processes. Strategic planning is a tool that helps set those priorities and establish an actionable roadmap to meet them. Strategic plans are especially common in developing countries, where they are known as development plans or poverty reduction strategies. The articulation of strategic objectives under an umbrella of overall national growth and development can serve both as motivation and a source of stronger public accountability.

Traditional budgetary structures, based on line-item categories, are more effective for tight expenditure controls than for performance analysis. In contrast, many governments have incorporated program structures that facilitate performance budgeting by grouping inputs and activities together with the outputs and/or outcomes that they intend to achieve (OECD, 2007). When successfully implemented, program structures facilitate shifting budgetary deliberations from inputs toward goals and objectives during the preparation and approval phases. In the execution phase a program structure provides more clarity on the goals that program managers should

seek as they spend resources. Finally, a program structure can also be used as a basis for budgetary audit and evaluation.

Some design characteristics might make the difference between successful and unsuccessful program structures. (Robinson & van Eden, 2007) provide a list of those characteristics, including the subdivision of programs into subprograms and activities, the distribution of administrative costs among programs, the number of programs in each line ministry, and the design of programs that affect more than one organization. There is not a unique way of addressing these characteristics; instead, the context of each specific country should inform the design of its program structure.

Implementing a program structure does not immediately shift budgetary decisions towards performance. This is especially true for countries that do not create incentives for the use of performance information (OECD, 2007; Marcel, Martínez Guzmán, & Sanginés, 2012). Table 2 presents a list of potential rewards and sanctions to motivate performance. Rewards and sanctions can be linked to the funding of certain parts of the organization, to the managerial flexibility awarded to decentralized units, and to the public recognition of the organizational achievements.

**Table 2: Potential Mechanisms to Motivate Performance**

<b>MECHANISM</b>	<b>REWARDS</b>	<b>SANCTIONS</b>
<b>FUNDING</b>	Increase funding to the agency.	Reduce or restrict agency funding.
	Maintain status quo on agency funding.	Eliminate agency funding.
	Provide management and/or employee bonuses.	Cut the salary of management and/or employees.
	Increase the staff budget.	Cut the staff budget.
<b>FLEXIBILITY</b>	Allow the agency to retain and carry-over efficiency gains.	Return all funding to the center.
	Allow flexibility to transfer funds between different programs and/or operating expenditures.	Restrict the ability to transfer funds.
	Exempt the agency from certain reporting requirements.	Increase the reporting requirements.
		Order a management audit of the agency.
<b>PUBLIC RECOGNITION</b>	Publicly recognize the agency's achievements.	Publicly criticize the agency's performance.

Note: from (OECD, 2007, p. 48).

This chapter explained the main concepts and characteristics of contemporary performance budgeting reforms. Those characteristics include the expectation for performance information to become an input for decision-making (instead of the *only*

input), and the relevance of decision-making processes throughout all stages of the budget cycle. This chapter ended with a description of the tools used to make performance budgeting reforms more effective. The next chapter explores the experiences of Latin American and Caribbean (LAC) countries with performance budgeting reforms.

## Chapter 3: Institutional Context and Budgeting Reforms in Latin America and the Caribbean

The previous chapter introduced the concept of performance budgeting. In this chapter, we provide an overview of performance budgeting reforms in Latin American and Caribbean (LAC) countries. The available evidence suggests that while many governments in the region have taken initial steps towards implementing performance budgeting, at this point there are only a handful of cases where substantial progress has been made.

The next section of this chapter introduces the reader to some basic macroeconomic and institutional characteristics that are common throughout the region and that might affect performance budgeting reforms. The last section provides an overview of the current situation and illustrates progress through some specific examples.

### **3.1. Macroeconomic and Institutional Context**

While LAC countries are not macroeconomically nor institutionally homogeneous, in this section we focus on some aspects that affect budgetary processes in most of them. Those aspects include high fiscal volatility due to reliance



on natural resources, low taxation and small governments as compared to other regions, underdeveloped civil service systems, and strong *presidentialist* traditions<sup>6</sup>.

Commodity exports are a key driver of fiscal revenue in many LAC countries. For instance, 93% of the population of the region live in countries that are net commodity exporters (de la Torre, Sinnott, & Nash, 2010). In 2008, revenues from natural resource represented 10% of total fiscal revenues in eight countries in the region, reaching more than 30% in five of those cases (de la Torre, Sinnott, & Nash, 2010). The implication of relying on natural resources is that revenues tend to be volatile as commodity prices change every day in global markets. In fact, fiscal revenues are twice as volatile in LAC countries as compared to developed countries (Marcel, Guzmán, & Sanginés, 2014). That volatility has a direct impact in budgeting as it often leads to overoptimistic forecasts that result in added pressure to change approved budgets (Marcel, Guzmán, & Sanginés, 2014).

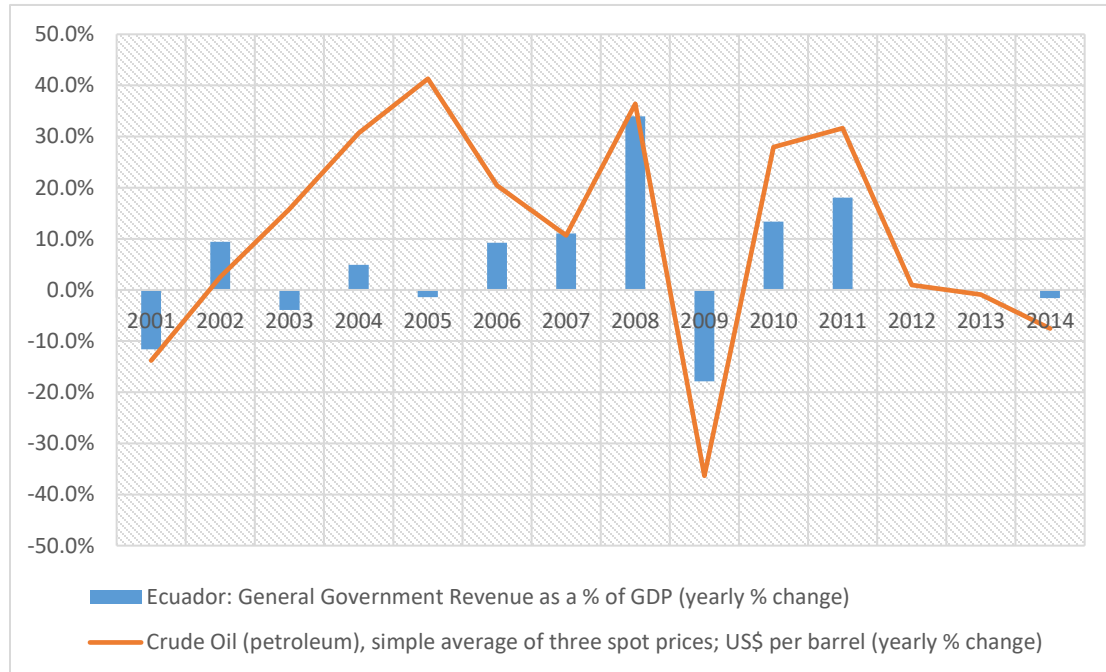
The case of Ecuador exemplifies how commodity revenues can lead to fiscal volatility. As Figure 3 shows, Ecuador's fiscal revenues are highly correlated with the price of oil. In the year 2008, when oil prices were at their highest point, oil revenues represented 40% of Ecuador's fiscal revenues (de la Torre, Sinnott, & Nash, 2010). The government of Ecuador has not taken any measures to manage fiscal volatility in recent years. Instead, during periods of oil price hikes Ecuador's government

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<sup>6</sup> Presidentialist tradition refers to the fact that the executive branch tends to have much larger budgetary powers in Latin American countries than in developed countries (Hallerberg, Scartascini, & Stein, 2009; Marcel, Guzmán, & Sanginés, 2014).

spending increased faster than its total revenues, and much faster than non-oil revenues; therefore, the government failed to accumulate saving and was forced to reduce spending when oil prices dropped (de la Torre, Sinnott, & Nash, 2010).

**Figure 3: Comparison of Crude Oil Prices and Ecuador's Fiscal Revenues**

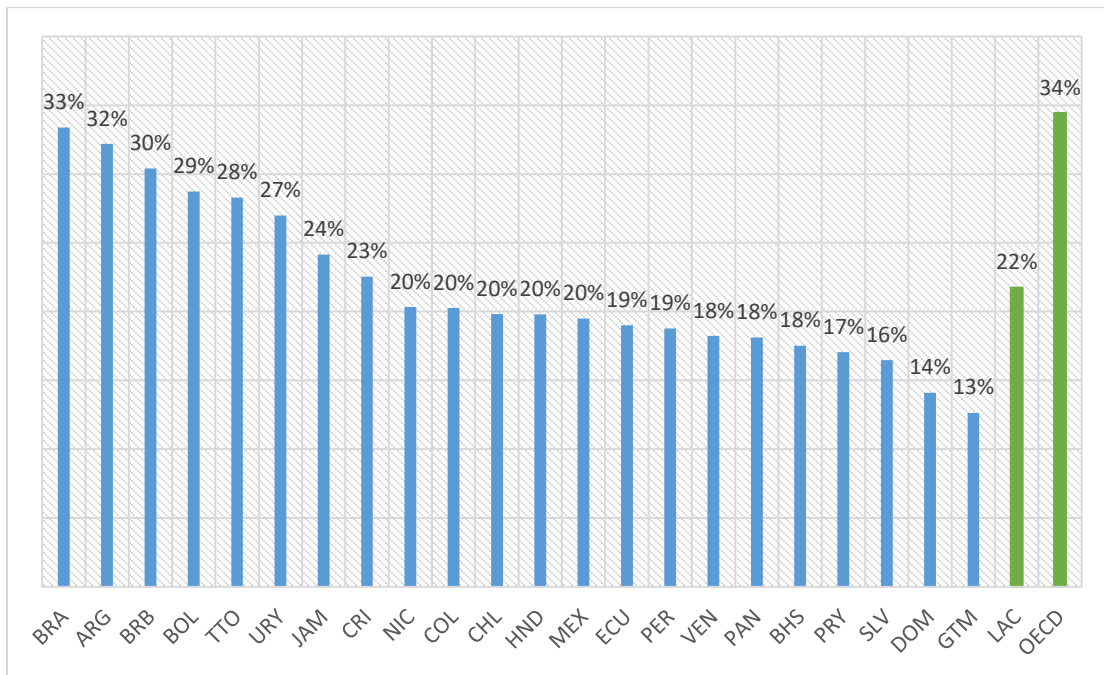


Note: author's elaboration from International Monetary Fund, World Economic Outlook Database, October 2016.

The problems of depending on the revenues from natural resources are aggravated by the fact that LAC governments have low tax collection rates. Figure 4 shows that tax collection as a percentage of the Gross Domestic Product (GDP) in LAC countries is much lower than that in Organization for Economic Co-Operation and Development (OECD) countries (Arizti, Lafuente, Manning, Rojas, & Thomas, 2009; OECD, 2016). The largest gap is for income- and wealth-related taxes, as

advanced countries, on average, collect three times more than LAC countries do (Marcel, Guzmán, & Sanginés, 2014). Low tax collection and large revenues from natural resources are correlated. A study of 30 hydrocarbon-producing countries (including four from LAC) suggests that natural resource revenues reduce the pressure to improve tax collection (Bornhorst, Gupta, & Thornto, 2009).

**Figure 4: Tax Revenues as a Share of GDP, Year 2014**



Note: from OECD (2016) Revenue Statistics in Latin America (database).

Weaknesses in revenue collection are coupled with inadequate expenditure. While many of those who live in LAC countries are in poverty and/or do not have access to appropriate health care, education, and housing; the median LAC government spends 12% of GDP in social services, which is much lower than the 21% of GDP spent in developed countries (Marcel, Guzmán, & Sanginés, 2014).

Lower expenditure in social services is partly explained by the fact that LAC countries have smaller governments than OECD countries (OECD, 2016).

The proper execution of government programs might be more challenging in Latin American countries due to inadequate civil service capacity. A recent survey of the civil service systems of sixteen LAC countries suggest that those systems remain ‘relatively undeveloped’ (Cortázar Valverde & Lafuente, 2014). The survey classifies the sixteen cases between low, medium, and high levels of civil service development. As Table 3 shows, more than half of the countries fall in the lowest category. Despite some score changes, no country was able to move to a higher development level between the first version of the survey in 2004 and the second version in 2011/2013.

**Table 3: Description of Civil Service Development Levels and Countries in Each Level**

<p><b><i>Low Development Level: 10 out of 16 countries.</i></b></p> <p><b><i>Countries in this level: Bolivia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Peru.</i></b></p>
<p>“This group was characterized by significant levels of discretionary authority in HRM decision making, very low or no acceptance of the merit principle, severe difficulties in attracting and retaining staff, and minimal general strategic coherence. Although they did have some HRM technical and regulatory instruments in place, there was a complete lack of or limited implementation, which hampered institutionalization of the policies.”</p>

<p><b><i>Medium Development Level: 4 out of 16 countries.</i></b></p> <p><b><i>Countries in this level: Colombia, Costa Rica, Mexico, Uruguay.</i></b></p>
<p>“These countries are characterized by greater strategic coherence, which is reflected in a wider acceptance of merit criteria and, to a certain extent, application of performance incentives. The leadership units within the civil service agencies are more robust, although not necessarily more consolidated. In contrast with the previous group, HR policies are actually applied in a variable but visible fraction of civil service and are based on regulatory and technical instruments accepted by the agencies.”</p>
<p><b><i>High Development Level: 2 out of 16 countries.</i></b></p> <p><b><i>Countries in this level: Brazil, Chile.</i></b></p>
<p>“This group is characterized by solid strategic coherence and greater acceptance of the merit principle, as well as flexibility (albeit with differentiated emphasis in each case, as will be shown below). Both have civil service agencies with the political capacity to place professionalization high on the agenda, the technical capacity to design and implement effective policies, and the coordinating capacity to efficiently organize, orient, and supervise the work of the HRM offices. In contrast to the other groups, these regulatory and technical instruments govern the policies that are applied throughout the entire public administration, and they enjoy a level of institutionalization that makes them more stable over time.”</p>

Note: author’s elaboration based on (Iacoviello & Strazza, 2014, pp. 20-21).

The last aspect discussed in this section is the *presidentialist* budgetary tradition in LAC countries. This tradition refers to the fact that in most Latin American countries the executive branch tends to have much larger budgetary powers than in developed countries (Hallerberg, Scartascini, & Stein, 2009; Marcel, Guzmán, & Sanginés, 2014). For example, while in 80% of OECD countries the executive

branch has no veto authority over the approved budget, that number drops to 20% in LAC countries (Marcel, Guzmán, & Sanginés, 2014). In many cases, the budgetary authority of the executive branch leads to the development of a very powerful central budget office. These central budget offices have had a pivotal role in proposing budgetary reforms, and take on responsibilities that are not common in OECD countries such as testifying and defending the budget proposal in front of the legislature (Marcel, Guzmán, & Sanginés, 2014; OECD, 2016). Finally, the large authority of the executive is complemented with weak authority from the legislatures. As Table 4 shows, almost all LAC countries place restrictions on how the legislature can change the executive budget proposal.

**Table 4: Powers of the Legislative Branch to Make Changes in the Executive Proposal**

	<i>Restriction</i>		<i>Form</i>			
	<i>No</i>	<i>Yes</i>	<i>Cannot increase or propose new expenditure</i>	<i>Can re-allocate or increase, only if new sources of financing are identified</i>	<i>Can re-allocate, increase, and create new expenditure only if new sources of financing are identified</i>	<i>Other</i>
Argentina		X		X		
Bolivia	X					
Brazil		X		X		
Chile		X	X			
Colombia		X	X			
Costa Rica		X		X		
Dom. Republic		X				X
Ecuador		X	X			
El Salvador		X	X			
Guatemala	X					
Honduras		X		X		
Mexico		X			X	
Nicaragua		X			X	
Panama		X		X		
Paraguay		X			X	
Peru		X	X			
Uruguay		X	X			
Venezuela		X	X			

Note: from (Filc & Scartascini, 2007, p. 169)

### **3.2. Overview of Budgeting Reforms in Latin America and the Caribbean**

In the previous section we stated that many LAC countries rely on volatile sources of income that have led them to overoptimistic forecasts. We start this section with three types of reforms that have become popular in the region and that aim at managing fiscal volatility: medium-term fiscal frameworks, fiscal responsibility laws, and stabilization funds.

Medium-term fiscal frameworks facilitate the task of managing fiscal volatility by providing a forecast of future revenues and expenditures. A recent study by the Inter-American Development Bank (IDB) shows that 20 out of 24 LAC countries have implemented a medium-term fiscal framework (Makón & Varea, 2015). The medium-term fiscal frameworks of those countries include, at least, projection of GDP, inflation, aggregate spending, and aggregate revenues. A smaller group of countries have further developed their medium-term fiscal framework to include projections by function and/or administrative units and/or results frameworks.

Nicaragua is an example of a LAC country that has institutionalized the use of a highly-elaborate medium-term fiscal framework. For more than a decade, Nicaragua's *Ministerio de Hacienda y Crédito Público* (Ministry of Finance and Public Credit) has updated and annexed medium-term projections to the budget request that is sent to the legislature<sup>7</sup>. Their most current projection covers the period

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<sup>7</sup> Nicaragua's medium-term fiscal frameworks can be downloaded from <http://www.hacienda.gob.ni/marcopresupuestario>



from 2016-2019 and includes macroeconomic aggregates, a public investment plan, and budget projections and results frameworks for each public sector institution<sup>8</sup>.

Other tools to manage fiscal volatility, such as fiscal responsibility laws and stabilization funds, have also become common in the region (Marcel, Guzmán, & Sanginés, 2014). Fiscal responsibility laws commonly include quantitative rules that limit at least one of the following: aggregate expenditure, fiscal balance, and debt. As of 2013, eight LAC countries had fiscal responsibility laws (Makón & Varea, 2015). Stabilization funds work by requiring additional savings during ‘boom’ years that can be used only in ‘bust’ years.

Despite these reforms, revenue volatility and recurrent fiscal deficits remain an issue for many LAC countries. This is partly a consequence of the fact that many of these reforms have failed. For instance, while there is evidence that some LAC countries have improved their fiscal situation after implementing fiscal responsibility laws, there are also cases where such laws have been constantly modified or even abolished (Marcel, Guzmán, & Sanginés, 2014; Hallerberg, Scartascini, & Stein, 2009; Makón & Varea, 2015).

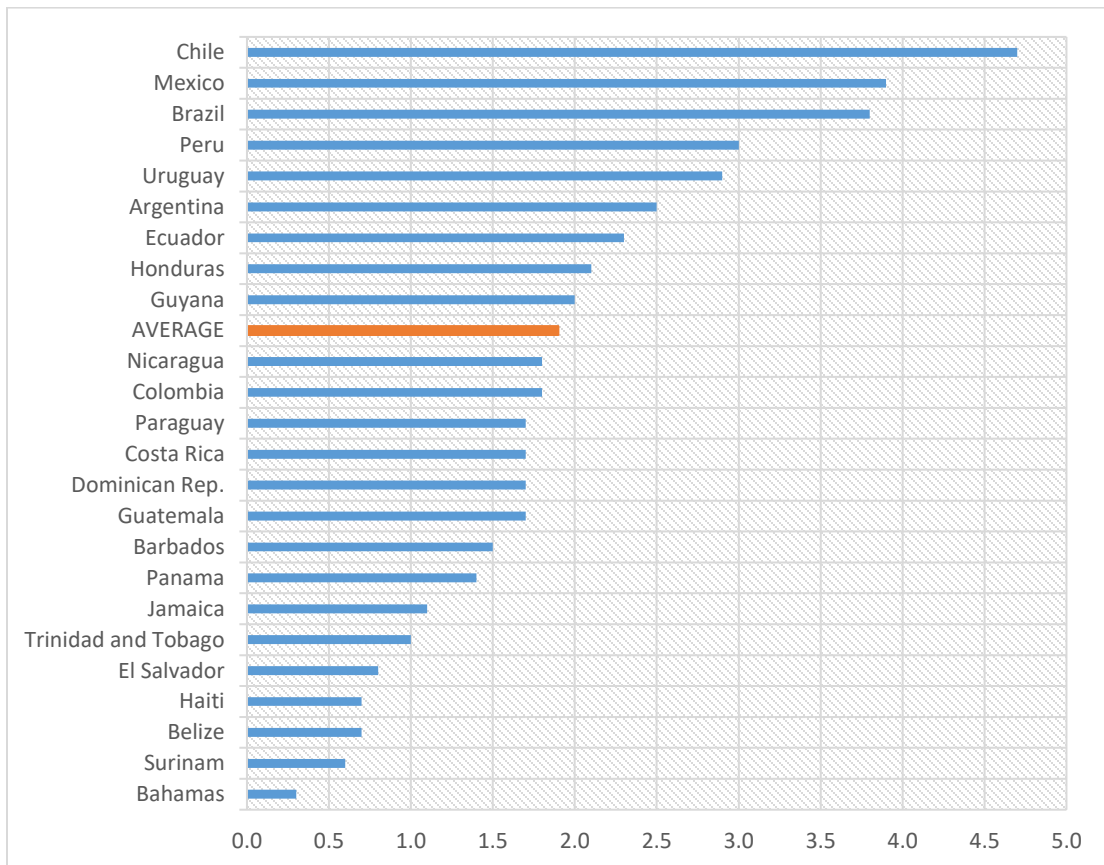
At least 16 LAC countries have taken steps towards implementing performance budgeting. However, in most cases these reforms are still in early stages, while only few countries have achieved substantial progress (Makón & Varea, 2015).

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<sup>8</sup> For more information, see (Ministerio de Hacienda y Crédito Público, 2016).

Figure 5 shows the scores, on a scale of 0 to 5, of a performance budgeting survey of LAC countries conducted by the IDB. From that figure one may infer that only three countries -Chile, Mexico, and Brazil- have made substantial progress, while 75% of the countries in that figure do not even get half of the total score.

**Figure 5: Index of Performance Budgeting by Country, Year 2013**



Note: from (Makón & Varea, 2015, p. 82)

Some LAC countries have adopted a program-based structure for their budgets. A survey by the IDB shows that in 2007 there were eight countries that used a program-based structure (García López & García Moreno, 2010). The 2013 version

of that same survey argues that the use of program-based budgeting has improved, but it does not specify how many countries use it (Makón & Varea, 2015).

Strategic planning processes allow countries to define a set of national goals for upcoming years. A survey of 25 LAC countries shows that 18 of them had at least one of the following strategic planning documents: a long-term vision, a medium-term plan, and/or a presidential agenda (García López & García Moreno, 2010). However, that same survey found that most countries have weak or no coordination between strategic planning and budgeting.

Only a few Latin American countries have had some success in linking strategic planning and the budget. For example, the government of Mexico has an openly accessible website that links budgetary programs with their *Plan Nacional de Desarrollo 2013-2018* (National Development Plan)<sup>9</sup>. The website includes a total of 654 budget programs with detailed financial and performance information for each of them. As one accesses the detailed information of each program, there is a section called *¿A qué contribuye?* (What does it contribute to?) that specifies the strategic goal to which the program is aligned.

Monitoring and Evaluation (M&E) is the performance budgeting component on which LAC countries have made the least progress. Chile, Colombia and Mexico are the only three countries in the region that have implemented ex-post evaluation

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<sup>9</sup> The platform can be accessed at <http://www.transparenciapresupuestaria.gob.mx>

systems, while Brazil, Peru and Uruguay have taken some steps towards having such systems (Feinstein & García Moreno, 2015). The situation is similar for performance monitoring systems, as only Brazil, Chile, Colombia and Mexico have implemented them, while other four countries are working towards that (Feinstein & García Moreno, 2015). In sum, this means that there are only three LAC countries -Chile, Colombia and Mexico- that have M&E systems. One particularity of these three cases is that they have all developed highly centralized M&E systems that are administered by institutions such as Planning and/or Finance Ministries (Arizti, Lafuente, Manning, Rojas, & Thomas, 2009).

In conclusion, this overview of LAC countries shows that (1) most countries have macroeconomic and institutional challenges that they need to manage in order to implement performance budgeting; (2) most countries have taken steps towards managing those issues by implementing fiscal rules and medium-term fiscal frameworks; (3) more than half of the countries have taken initial steps to implement performance budgeting; (4) but that only a handful of those countries have already made substantial progress.

## Chapter 4: Has Performance Budgeting Been Successful?

The use of performance budgeting is now common practice around the world. For example, in the following pages we present evidence that performance budgeting has been introduced at the national level in at least 86 countries during the past 30 years. Despite numerous research papers, lack of clarity remains on whether performance budgeting reforms have been successful. In this chapter we analyze the success of performance budgeting reforms through a meta-analysis of relevant studies published in the past 30 years.

Measuring the success of performance budgeting is not straightforward. In Chapter 2 we explained that the objectives of performance budgeting reforms are to increase allocative efficiency, operational or technical efficiency, and accountability for results. However, it is virtually impossible to measure the impact of performance budgeting in a government's efficiency. For that reason, we analyze *the use of performance information* as an instrumental measure of success of performance budgeting reforms. The logical connection is that the only mechanism for performance budgeting reforms to increase allocative and technical efficiency is by getting decision-makers to use performance information.

#### **4.1. Meta-Analysis: Performance Budgeting and the Use of Performance**

##### **Information**

A meta-analysis is a technique that allows synthesizing the findings of a large number of research projects that analyze the same question, even when they are conducted in different settings or geographic areas (Rodgers & Hunter, 1992; Ringquist & Anderson, 2013). While to this author's knowledge there is no previous meta-analysis of performance budgeting, there are two studies that have used similar techniques. The first one was published by the International Monetary Fund in the year 2005. That study presents an analytical review of papers that analyze the efficacy of government-wide performance budgeting systems. Its authors conclude that, while the literature is limited, "it does appear to provide some support for the proposition that, where the necessary investment in the development of performance measurement and other performance information has been made, it is possible to use that information in budgeting to improve both allocative and productive efficiency. It certainly cannot be said that the empirical literature demonstrates the failure of performance budgeting" (Robinson & Brumby, 2005, p. 44). The other study that uses a similar technique presents a "systematic review of articles on research related to performance budgeting in major journals in the ten years between 2002 and 2011" (Lu, Mohr, & Ho, 2015). Based on a total of 61 studies, the authors present a list of the most commonly mentioned factors that affect the use of performance information and the impact of performance budgeting reforms across different stages of the budget cycle. The authors also find that most papers lack research frameworks and

argue for the creation of a research framework for performance budgeting. The findings from that paper will be further discussed later in this chapter.

This meta-analysis differentiates itself from the two aforementioned studies in at least three aspects. First, this is the first attempt to synthesize evidence of performance budgeting reforms in a transparent and replicable manner. These characteristics have been guaranteed by systematically documenting every step of the process, and detailing those steps in this publication. Second, this meta-analysis is not confined to scholarly articles, but instead it considers articles published by major non-governmental organizations that have produced a vast amount of empirical reports in the past decades. Those organizations include the Organization for Economic Co-Operation and Development (OECD), the World Bank, the International Monetary Fund (IMF), the Inter-American Development Bank (IDB), the African Development Bank (AfDB), and the Asian Development Bank (ADB). The inclusion of non-academic studies is recommended by (Ringquist & Anderson, 2013). Finally, the focus of this study is narrower in that it does not consider all publications on performance budgeting, but instead it includes only those that explicitly assess the use of performance information in places where a government-wide performance budgeting reform has been implemented.

This meta-analysis was conducted by following a five-stage process adapted from the one suggested in (Ringquist & Anderson, 2013). The process has been adapted to fit the needs of a meta-analysis that focuses on synthesizing qualitative,

instead of quantitative, results. The first stage of the process is called scoping, and it involves defining and operationalizing a research question. The literature search is the second stage and it is the process of using transparent and replicable steps to find and categorize the database of studies. Third, the data-coding stage is when the required information is extracted from the selected studies and tabulated into a dataset. The fourth stage presents and explains the results, while the final stage concludes.

#### ***4.1.1. Stage I: Scoping***

This meta-analysis does not consider all available assessments of performance budgeting reforms. Instead, it has a narrower scope: it only includes original studies that examine the use of performance information in places where a government-wide performance budgeting reform has been implemented. One challenge of this scope is that there is no clear standard to determine if a performance budgeting reform is still in implementation or fully implemented. Therefore, in this meta-analysis we accept the definition of implementation used by the author of each original study.

Additional delimitations were included for practical matters and/or to ensure comparability across studies. The practical delimitations exclude original studies published prior to the year 1985, written in any language other than English, and self-assessments produced by government institutions. The delimitations to ensure



comparability exclude analyses of performance budgeting reforms that are not part of a government-wide reforms<sup>10 11</sup>, and those that are based on funding formulas<sup>12</sup>.

#### ***4.1.2. Stage II: Literature Search***

The literature search was conducted following a five-step process (see Figure 6). The first step was to use the same search term<sup>13</sup> on a group of databases and recording all of the results. The academic search included the following indexes: ProQuest, Social Sciences Citation Index (SSCI), JSTOR, EBSCO, and Public Affairs Information Service International (PAIS). The non-academic search was carried-out through the official websites of the following organizations: OECD, World Bank, IMF, IDB, AfDB, and ADB. The total number of *hits* or results was 1,448.

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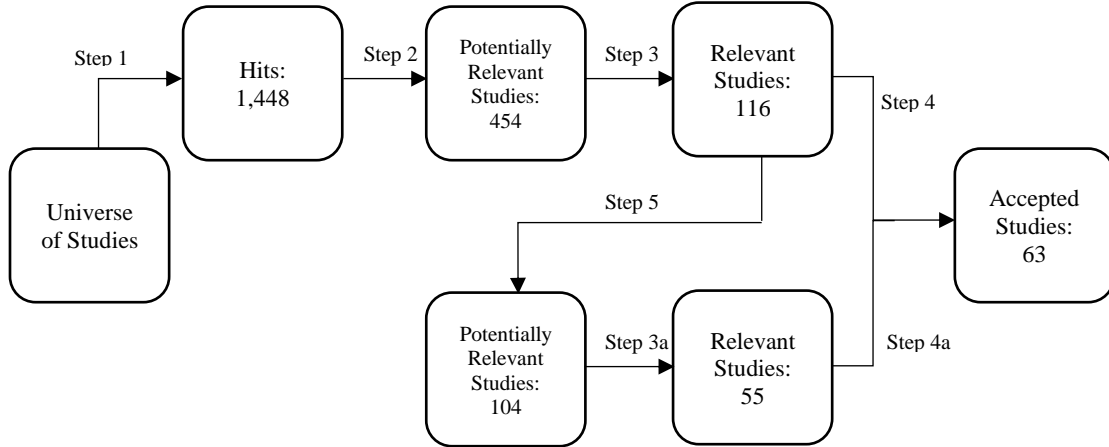
<sup>10</sup> These refer to budgeting reforms that were implemented in single agencies or points of service that belong and/or report to government areas that do not use PB. The most common example of the excluded reforms is the use of Programme Budgeting and Marginal Analysis in public hospitals.

<sup>11</sup> This delimitation does not exclude government-wide reforms that were implemented at the subnational level, such as state and local governments.

<sup>12</sup> Budgeting reforms that are based on funding formulas aim at replacing decision-making processes with fixed methods of allocating resources. That type of reform is not compatible with a study that attempts to analyze decision-making processes.

<sup>13</sup> The search term used in every database was: (("Performance Budget\*") OR ("Performance-informed Budget\*") OR ("Results-based Budget\*") OR ("Performance-based Budget\*") OR ("Budget\* for Results")).

**Figure 6: Flow Diagram of the Literature Search**



Note: adapted from (Ringquist & Anderson, 2013).

The second step was to review the title and the abstract of all of the hits in order to filter them into a sub-group called *potentially relevant studies*. Documents were excluded based on the following criteria (1) records that are not studies (such as letters, notes, introductions, and editorials) and/or that are written in any language other than English; (2) studies that are not about public sector performance budgeting; and (3) duplicates.

In the third step, the number of studies was narrowed down to a sub-group of *relevant studies*. This group excluded all studies about performance budgeting that did not specifically analyze the use of performance information, and/or that should not have been considered as relevant. These exclusions were decided upon by skimming through the full text of all the potentially relevant studies.

The fourth step included a review of the full text of all relevant studies in order to determine if they could be *accepted* for this meta-analysis. This step involved two criteria for exclusion. First, studies were excluded if they did not address the specific relationship studied in this meta-analysis, i.e. the use of performance information in places where a performance budgeting reform has been implemented. Many of the studies excluded based on this criterion were mail-in surveys where the researchers presented the results in an aggregated form that does not allow any distinction between cases that have implemented a performance budgeting reform and those that have not. Second, studies based on secondary data were also excluded (the next paragraph explains how the original sources of the data used in these studies were included).

The fifth step did not involve excluding studies, but instead adding potentially relevant studies. The objective of this step was to avoid the omission of studies due to inevitable limitations of the original search. For this reason, a list was elaborated that included all citations found in the list of relevant studies that (a) referred to a study that analyzed the use of performance information in budgeting decision-making, and/or (b) were listed as the original source of the information analyzed in the study. The studies added through this mechanism were filtered following the exact same procedures described for steps three and four, and are presented in Figure 6 as steps 3a and 4a<sup>14</sup>. The complete list of accepted studies is presented in Appendix 1.

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<sup>14</sup> Three potentially relevant studies added through citations were not found through library services; therefore, they were not considered.

#### ***4.1.3. Stage III: Data Coding***

The data coding phase involves deciding what and how to code (Ringquist & Anderson, 2013). The fact that this meta-analysis predominantly involves qualitative data allows for a simpler coding process<sup>15</sup>. The main aspect to be coded is the use of performance information which was coded separately depending on who uses the information: legislature, executive (central budget office, President/executive cabinet), or line ministries/agencies; and on the type of decision: resource allocation or managerial. The main obstacle that needed to be addressed was the fact that the accepted studies analyzed the use of performance information in a non-standardized manner. To address this obstacle, part of the work of this meta-analysis was to standardize and code the findings from the accepted studies, which was carried out using the scale shown in Table 5.

***Table 5: Qualitative Scale of the Use of Performance Information***

Performance information is not considered	0
Performance information is seldom used, and/or there is little evidence of it being used regularly	1
Performance information is regularly used	2

Note: author's elaboration.

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<sup>15</sup> Data coding for quantitative studies involves the calculation of effect sizes, which demands the coding of specific statistics presented in each accepted study (Ringquist & Anderson, 2013).

In addition, several aspects specific to each study were also coded to facilitate comparison and analysis. Those aspects include the data collection methods, theoretical framework, country, level of government, type of publication, and the explanatory variables mentioned by the researcher.

#### ***4.1.4. Stage IV: Results***

The fourth stage consists of presenting and explaining the results. Table 6 presents detailed information about the 63 accepted studies included in this meta-analysis. The accepted studies are disaggregated in two categories: cases (378) and observations (816). A case is a specific government or government agency analyzed in the study. While most of the accepted studies are single case (70%), there are studies that analyze more than fifty cases. In turn, each case may include a minimum of one, and a maximum of four observations. Each observation consists on the analysis of the use of performance information for one of the following:

- Budget elaboration by the executive (President, presidential cabinet and/or central budget office; hereafter referred to as the executive).
- Budget approval by the legislature.
- Budget elaboration by line ministries and/or agencies.
- Budget execution by line ministries and/or agencies.

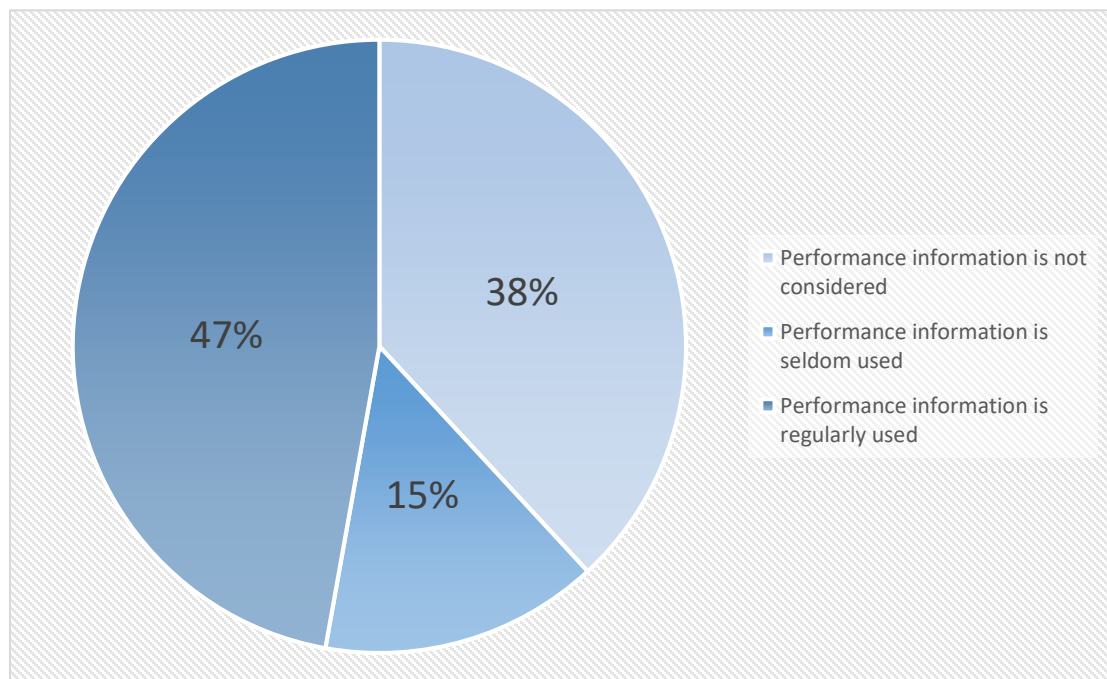
**Table 6: Summary Statistics of Accepted Studies**

<b>NUMBER OF ACCEPTED STUDIES</b>	63
<b>TYPE OF PUBLICATION</b>	21 studies from academic journals. 33 studies from non-academic institution. 9 studies from books.
<b>NUMBER OF CASES ANALYZED</b>	378
<b>NUMBER OF CASES ANALYZED PER STUDY (DISTRIBUTION)</b>	44 studies analyze one case. 11 studies analyze between 2 and 5 cases. 6 studies analyze between 6 and 50 cases. 2 studies analyze more than 50 cases.
<b>NUMBER OF OBSERVATIONS</b>	816
<b>AVERAGE NUMBER OF OBSERVATIONS</b>	Each case includes, on average, 2.7 observations. Each study includes, on average, 14.2 observations.
<b>NUMBER OF COUNTRIES ANALYZED</b>	86
<b>LEVEL OF GOVERNMENT ANALYZED</b>	177 observations at the national level. 126 observations at the state level. 75 observations at the local level.
<b>PUBLICATION DATE (RANGE)</b>	1986-1990: 1 1991-1995: 2 1996-2000: 11 2001-2005: 14 2006-2010: 28 2011-2015: 7

Note: author's elaboration.

The results of the meta-analysis suggest that governments with performance budgeting systems are in fact likely to consider performance information in decision-making processes. Figure 7 shows the aggregated results for all 816 observations. Performance information was regularly used for decision-making in almost half of the observations, while it was disregarded in 38% of them.

**Figure 7: Use of Performance Information Under Performance Budgeting Systems**

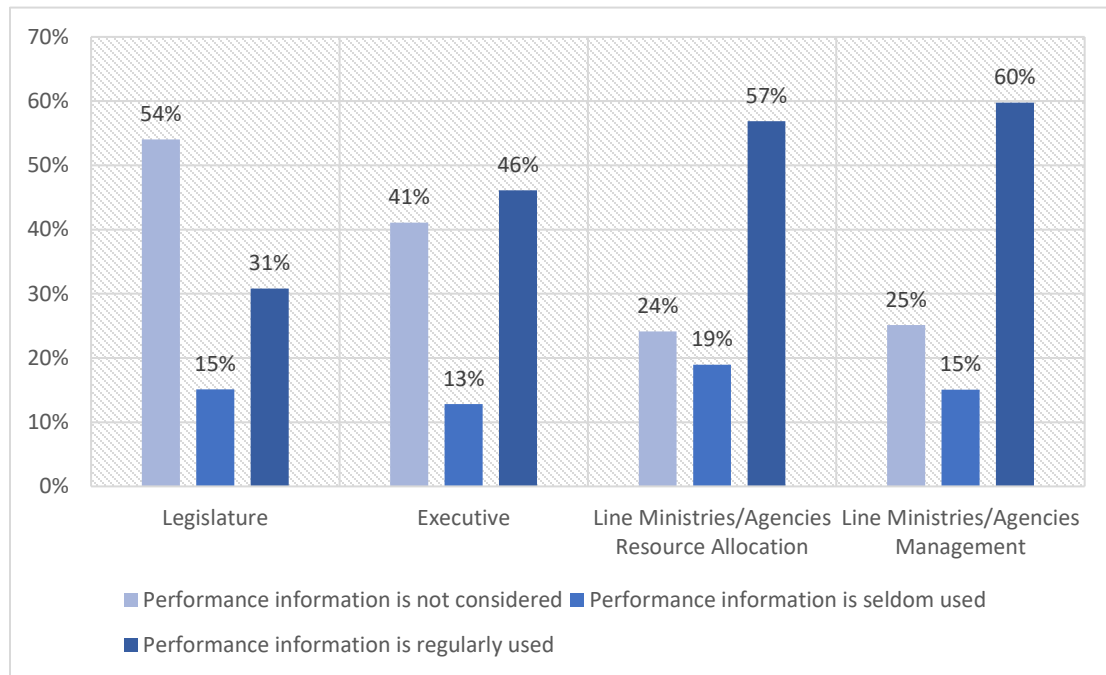


Note: author's elaboration.

The use of performance information differs depending on the actor and the stage of the budget cycle that is analyzed (Figure 8). The results of this meta-analysis suggest that line ministries are more likely to use performance information than the

executive and the legislature, that line ministries are more likely to use performance information during budget execution as compared to budget preparation, and that legislators are the most likely to completely disregard performance information.

**Figure 8: Use of Performance Information Under Performance Budgeting Systems per Type of Budgetary Decision**

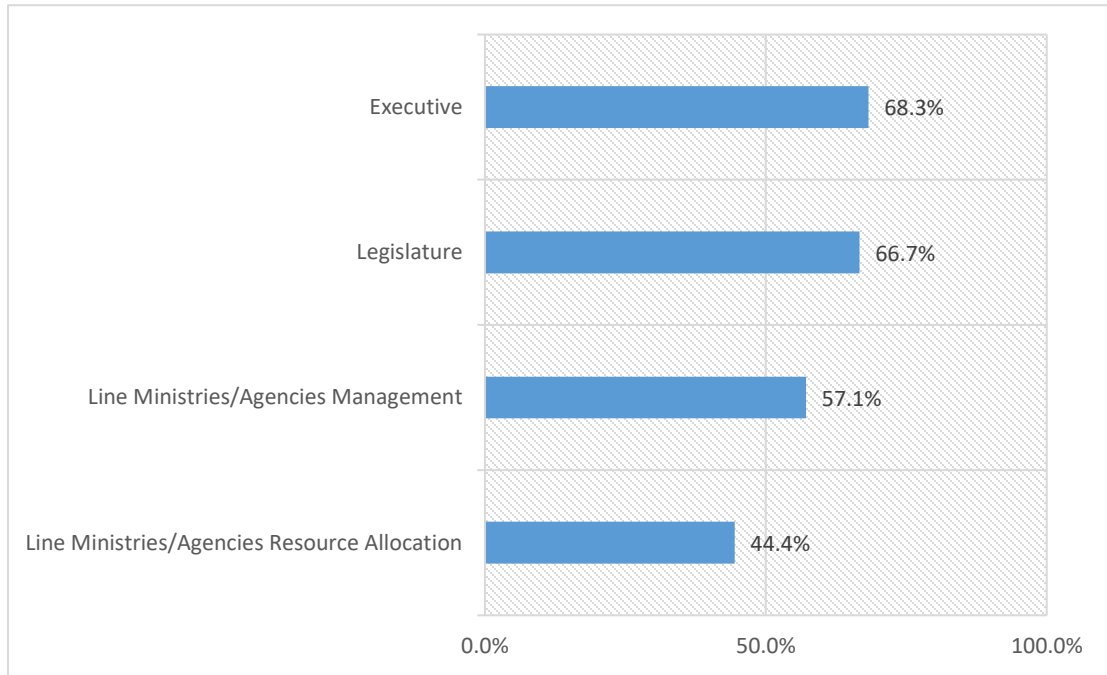


Note: author's elaboration.

Despite the fact that performance information is more likely to be considered at the line ministry level, Figure 9 shows that researchers have paid more attention to the executive and the legislature.



**Figure 9: Number of Studies with at Least One Observation per Type of Budgetary Decision**



Note: author's elaboration.

The research framework and the data collections methods of the accepted studies are not as clear as one might expect. Out of the 63 studies, only 37 specified how they collected their data. Papers published in academic journal were three times more likely to explain data collection as compared with non-academic publications. Both academic and non-academic publications seldom provided a detailed theoretical framework that guided their analysis (only 6 of the 63 studies did). Further analysis of the six studies that did include a theoretical framework reveals that there is no consistency between their frameworks.

Despite lacking theoretical frameworks, the authors of 42 out of the 63 accepted studies did introduce explanatory factors in their analyses. We use those factors to build a research framework to analyze the use of performance information. Unfortunately, the explanatory factors mentioned by the studies in the meta-analysis were presented in a non-standardized manner, making it a challenging task to categorize and summarize them. To accomplish this task, we follow two steps: we build a standardized list of factors and we create broad categories to group them.

Our first step is building a standardized list of factors. We carry-out this task by listing the factors mentioned in three studies that use a research framework to analyze performance-based reforms: (Lu, Mohr, & Ho, 2015; Kroll, 2015; Ehrenhard, Muntslag, & Wilderom, 2012). These studies were selected because they are particularly clear in listing relevant explanatory factors. Table 7 presents a list of 23 explanatory factors that were included in at least two out of those three studies.

**Table 7: Factors Affecting the Use of Performance Information Under Performance Budgeting Systems Mentioned in Selected Studies**

<b>Factor</b>	<b>Similar or identical factor available in:</b>		
	<b>Lu, Mohr, &amp; Ho (2015)</b>	<b>Kroll (2015)</b>	<b>Ehrenhard, Muntslag, &amp; Wilderom (2012)</b>
Ability to link strategic plans to organizational activities	x	x	x
Executive leadership support	x	x	x
General political support	x	x	x
Input- vs performance-oriented culture	x	x	x
Legislative support	x	x	x
Management support	x	x	x
Staff buy-in	x	x	x
Stakeholder involvement (e.g., planning ministry, finance ministry, audit office)	x	x	x
Time investment	x	x	x
Ability to link resources to organizational activities	x		x
Availability of data	x	x	

Citizen support and performance culture	x	x	
Demographic characteristics of the population	x	x	
Economic factors (e.g., economic downturn, budget cuts)	x		x
Informational system capacity	x	x	
Organizational factors (e.g., size, reorganization)	x		x
Performance budgeting legislation	x		x
Quality of the measurement system	x	x	
Reform timing (e.g., too many reforms, complementary reforms)	x		x
Resources for performance-based reforms	x	x	
Self-interested motivation		x	x
Staff capacity	x	x	
Top-down or bottom-up approach to performance budgeting	x		x

Note: author's elaboration.

The second step consists on creating aggregated categories to group our factors. We again rely on three studies that are particularly clear on this issue: (Helmuth, 2010; Yang & Hsieh, 2007; Ho, 2005). We develop four broad categories based on those frameworks: external environment, political environment, characteristics of the system, and characteristics of the organizations.

Table 8 presents the results of our standardization and categorization process. The table also presents a measure of the frequency, which represents the percentage of studies that mentioned each factor<sup>16</sup>. The most mentioned factor is the quality of the measurement system, which matches the one with the highest frequency. Regarding the categories, the external environment appears to be the least important one, while all of the other three categories have many factors with a relative high frequency. Finally, the total number of factors in Table 8 is 26, which includes the 23 factors from Table 7 plus three factors that were especially relevant in the studies included in this meta-analysis: characteristics of the PB system (e.g., complexity, objectives, methodologies, program structure), characteristics of budgetary processes (e.g., timelines, earmarks, aggregations), and fear of transparency.

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<sup>16</sup> Based on a total of 43 accepted studies that described at least one factor in their analyses.

**Table 8: Frequency of Categorized and Factors Affecting the Use of Performance Information Under Performance Budgeting Systems**

<b>Categories and Factors</b>	<b>Frequency</b>
<b>Category: External Environment</b>	
Reform timing (e.g., too many reforms, complementary reforms)	5%
Citizen support and performance culture	2%
Economic factors (e.g., economic downturn, budget cuts)	2%
Demographic characteristics of the population	0%
<b>Category: Political Environment</b>	
General political support	21%
Stakeholder involvement (e.g., planning ministry, finance ministry, audit office)	21%
Legislative support	14%
Executive leadership support	10%
<b>Category: Characteristics of the System</b>	
Quality of the measurement system	45%
Characteristics of the performance system (e.g., complexity, objectives, methodologies, program structure)	26%
Availability of data	24%
Characteristics of budgetary processes (e.g., timelines, earmarks, aggregations)	14%
Top-down or bottom-up approach to performance budgeting	10%
Performance budgeting legislation	0%
<b>Category: Characteristics of the Organizations</b>	
Staff capacity	24%
Fear of transparency	17%
Management support	14%
Organizational factors (e.g., size, reorganization)	14%
Staff buy-in	14%

Resources for performance-based reforms	12%
Informational system capacity	7%
Ability to link resources to organizational activities	5%
Ability to link strategic plans to organizational activities	5%
Input- vs performance-oriented culture	5%
Time investment	5%
Self-interested motivation	0%

Note: author's elaboration.

#### ***4.1.5. Stage V: Conclusions***

The evidence presented in this meta-analysis supports the claim that performance budgeting reforms have a greater impact in line ministries than in the top levels of the executive and the legislature. In addition, it also supports the claim that performance budgeting is not only about resource-allocation, but instead it affects managerial aspects linked to budget execution. These findings are consistent with recent literature (Ho, 2011; Joyce, 2003; Melkers & Willoughby, 2005; Moynihan, 2008; Poister & Streib, 1999; Smith & Cheng, 2006; Zaltsman, 2009).

Overall, performance budgeting reforms will not always be successful. About half of the total observations presented in this meta-analysis suggest that performance information is regularly used. However, this number might have been higher if researchers had placed as much attention to the most effective actors (line ministries) as they did to the least effective ones (executive, legislature).

Finally, this meta-analysis shows that only a small fraction of empirical studies of performance budgeting detail their research framework and their data collection methods. This finding is consistent with (Lu, Mohr, & Ho, 2015), who reported that only 16 out of the 61 studies included in their systematic review include a theoretical framework. That finding motivated the elaboration of the research framework presented in the previous section.

There are important limitations to the findings of this meta-analysis. First, the diversity of research methods and approaches makes it difficult to suggest strict causality between the implementation of performance budgeting reforms and the use of performance information. While such a causal relation might be strong in some studies, it can be judged weak in some others. Second, there are not standardized definitions for aspects relevant to this study such as the level of use of performance information and the inflection point when a performance budgeting reform is considered implemented. While this limitation cannot be fully eliminated, it has been addressed by using a simple scale with three broad categories for the use of performance information, and by accepting the judgment of the author of each study regarding the implementation level of each case.



## Chapter 5: Research Questions and Research Methods

This chapter presents the research questions, objectives, design and methods. The three objectives of this project are to (1) propose a research framework for the analysis of performance budgeting at line ministries, (2) understand differences between the way line ministries use performance information, and (3) have a better understanding of performance budgeting at line ministries in the context of Latin America and Caribbean (LAC) countries. These objectives will be met by building from the research framework presented in Chapter 4, analyzing within-unit variation in a single country study, collecting data through multiple methods, and examining the data through the lens of the process-tracing method.

The focus of this project is on LAC countries. This is a result of the author's research agenda and of the fact that many countries in that region are initiating performance budgeting reforms. As explained in Chapter 3, so far only a few LAC countries have been successful in using performance budgeting systems. For example, two versions of a survey by the Inter-American Development Bank (IDB) found that Chile, Mexico, and Brazil (in that order) are the most advanced countries of the region (García López & García Moreno, 2010; Makón & Varea, 2015). That finding is consistent with that from a study by the Organization for Economic Co-Operation and Development (OECD) which shows that Mexico and Chile are among the countries with the most developed performance budgeting system among its member

countries<sup>17</sup> (OECD, 2013). While there have been many case studies of performance budgeting reforms in Latin America, to this author's knowledge there has not been one that addresses the use of performance information at the line ministry level. As it will be explained in this chapter, this study analyzes the case of performance budgeting in Chile, and includes eight units of analysis divided between four different line ministries.

### **5.1. Research Objectives and Hypotheses**

The research objectives and questions of this study are the following:

- 1. Propose a research framework for the analysis of performance budgeting at line ministries:** What are the most relevant factors that determine whether performance information is used for decision-making at line ministries?
- 2. Understand differences between the way line ministries use performance information:** Does the use of performance information differ depending on certain characteristics of the line ministries?
- 3. Have a better understanding of performance budgeting at line ministries in the context of LAC countries:** How do the proposed typologies and research framework fit the study of LAC countries?

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<sup>17</sup> Brazil is not a member of the OECD. Unlike the IDB, the OECD gives Mexico a better score than Chile.

The research framework that will be used is the one that was put forward in the meta-analysis presented in Chapter 4. The framework includes a total of 26 factors or variables<sup>18</sup> that are grouped in four categories: the external environment, the political environment, the characteristics of the system, and the characteristics of the organizations.

The external and political environment includes variables such as the timing of the reform, the economic condition of the country, the general political support for the reform, the involvement from key stakeholders, among others. The relative importance of the support from some political actors might be much higher than that from other actors. In terms of budgetary decision-making, many countries have seen how most responsibilities move towards the executive, instead of the legislative branch. This phenomenon has been found to respond to factors such as lack of resources of the legislature to generate their own budgetary and performance information, scarce technical capacity or legislative staff to analyze complex information, a rich and diverse party system that encourages deliberation, among others (Joyce, 2007; Posner & Park, 2008; Schick, 2002).

As shown in Chapter 3, the norm in LAC countries is to have a strong executive power that controls the budget process at the expense of the legislature (Marcel, Guzmán, & Sanginés, 2014; Hallerberg, Scartascini, & Stein, 2009). That

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<sup>18</sup> In the next section, we present a detailed recount of all the variables including examples of relevant questions and their expected impact.

same situation describes the case of Chile, where several authors have observed that it has a strong executive that dominates Congress in most issues, including budgeting (Schick, 2002; Aninat, Landregan, Navia, & Vial, 2006; Siavelis, 2000). This brings us to our first hypothesis.

***Hypothesis 1: given that Chile has a strong executive vis-à-vis the legislature, decision-makers at the line ministries will focus most of their budgetary efforts in satisfying demands from the executive and not from the legislature.***

The third category of variables are those that describe the characteristics of the system. These characteristics include the quality of the measurement system, the availability of information, the use of a top-down or a bottom-up approach, the budgeting legislation, the characteristics of the budgetary system, and the elements of the performance budgeting reform. The availability of performance information should be distinguished as a key variable within this group: if there is no performance information available, then it is utterly impossible for anyone to take decisions based on performance.

Previous studies of Chile have noted that the most relevant source of performance information is its system of ex-post evaluations, which has been described as “quite exceptional by contemporary international standards” (Hawkesworth, Huerta Melchor, & Robinson, 2013). A study that focuses on decision-making at Chile’s central budget office, found that the results of evaluations

tend to get more attention than other sources of performance information (Zaltsman, 2009). This is a consequence of the fact that “DIPRES (central budget office) and the evaluated ministry discuss the recommendations of the evaluations and agree on the actions which should be taken in response to evaluation recommendations. This then becomes the subject of a formal agreement, the implementation of which is monitored in subsequent years by DIPRES” (Hawkesworth, Huerta Melchor, & Robinson, 2013, p. 6).

On average, the government of Chile carries-out almost 30 ex-post evaluations per year (Guzmán, Irrarrázaval, & de los Ríos, 2014). As with any evaluation system, some government areas may not be subject to evaluation for several years. Given this situation, one may contrast areas within a line ministry that have been subject to a recent evaluation with those that have not. Areas with recent evaluations have more performance information available (the results of the evaluation and the commitments drawn from it), so comparing them with non-evaluated areas may yield interesting results related to the impact of the availability of performance information.

*Hypothesis 2: because ex-post evaluations are a major source of performance information, areas within line ministries that have recently been the subject of an evaluation will be more likely to use performance information for decision-making purposes.*

The final category is the characteristics of each individual organization. The research framework consists of 12 of such characteristics, including the capacity of the staff, the level of support from management, the organizational resources, the size of the organization, among others. Among these variables, we will be paying special attention to the size of the organization.

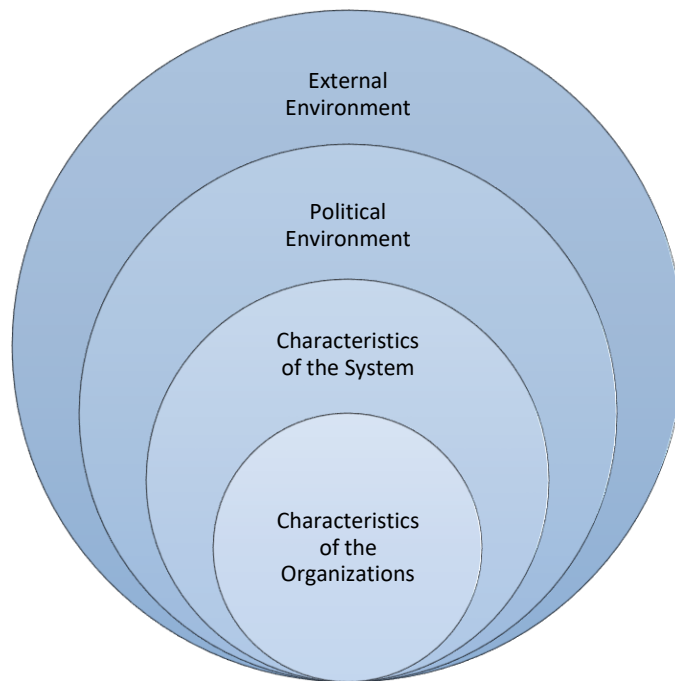
The size of the organization has been predicted to be an important factor in decision-making processes. For example, Downs argues that larger bureaus have weaker coordination among its members and present a harder environment for top officials to maintain control of their subordinates (Downs, 1966). The situation described by Downs suggests that the challenge of collecting pertinent and timely performance information for decision-making is greater in larger bureaus. There is one additional benefit of placing special focus on this variable: it is potentially the only variable in this group that can be easily measured and observed prior to starting the empirical research. This feature allows a better case selection, allowing a structured comparison by choosing line ministries that differ in size.

*Hypothesis 3: decision-makers in line ministries that are smaller in size are, all else equal, more likely to collect and regularly use performance information as an input for their decisions.*

## **5.2. Research Strategy and Specification of Variables**

This section details the research strategy and the list of variables. The research strategy for this project proposes analyzing the most exogenous variables first, i.e. the ones related to the external and political environment, followed by the most endogenous to the organization (Figure 10). Sections 5.2.1-4. provide further details of the four areas in Figure 10 and introduce a preliminary list of questions and expected impacts for each variable.

***Figure 10: Areas that Impact the Use of Performance Information***



Note: author's elaboration

### ***5.2.1. External Environment***

Our research strategy is to start analyzing the external environment, focusing on certain factors that may influence the success of a performance budgeting reforms. The factors included here are linked to certain characteristics of the population, the economic situation of the country, and other relevant changes or milestones that, while exogenous to the performance budgeting reforms, might have affected its design or implementation.

Based on our research framework, there are four factors of interest in the external environment (Table 9): citizen support and performance culture, demographic characteristics of the population, economic factors (e.g., economic downturn, budget cuts), reform timing (e.g., too many reforms, complementary reforms). These factors should be analyzed from a historical perspective in many different key points in time.



**Table 9: Description of Variables in the External Environment**

<b>Citizen support and performance culture</b>	
<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- Are citizens commonly engaged with the performance objectives?</li> <li>- Has any part of the reform been influenced by citizen pressure for increased accountability and/or efficiency?</li> <li>- Is government performance commonly a relevant factor in electoral results?</li> </ul>	<p>As citizens are more engaged with performance-based accountability, government officials will be more likely to take performance-based reforms seriously.</p>
<b>Demographic characteristics of the population</b>	
<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- How well educated is the average citizen and the average beneficiary of government programs?</li> </ul>	<p>A more educated population is more capable of understanding and demanding accountability based on performance information.</p>
<b>Economic factors (e.g., economic downturn, budget cuts)</b>	
<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- Has the country experienced significant economic shocks in the period since the reform was introduced?</li> <li>- Are government revenues highly volatile?</li> </ul>	<p>Performance information can have a lower impact during economic downturns, as other considerations (mostly political) become more urgent.</p>

### **Reform timing (e.g., too many reforms, complementary reforms)**

<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"><li>- Has the government been involved in multiple reforms running concurrently with performance budgeting?</li><li>- Has the government pursued reforms complementary to performance budgeting, such as those in areas like financial management, strategic planning, monitoring and evaluation, and civil service career system?</li><li>- In general terms, how successful have complementary reforms been?</li></ul>	<p>On the one hand, having strong financial management, strategic planning, monitoring and evaluation, and civil service career systems provide the basis for a more effective introduction of performance budgeting.</p> <p>On the other hand, implementing multiple reforms at the same time is more burdensome and can lead to ‘reform fatigue’.</p>

Note: author’s elaboration.

#### ***5.2.2. Political Environment***

The second set of factors are those in the political environment. The political environment includes an analysis of the general political support for the reform, and the role and the positions taken by important players in the legislature, the executive, and other relevant stakeholders (such as the central budget office) (Table 10). As it is the case for the external environment, the factors in the political environment should also be analyzed from a historical perspective in many different key points in time.

**Table 10: Description of Variables in the Political Environment**

<b>Executive leadership support</b>	
<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- Are there high-level officials in the government who have taken a leadership role in promoting the use of performance measures?</li> <li>- Has leadership been constant from the years when the reform was initiated until it was implemented?</li> </ul>	<p>Strong and constant leadership can help a reform move forward and gain notoriety, making it more likely that officials at line ministries will take the reform seriously.</p>
<b>General political support</b>	
<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- Are politicians invested in the concept of performance-budgeting?</li> <li>- Has the level of political support changed depending on the political party of the President?</li> <li>- Is the political system stable enough to introduce reforms that impact only in the medium-term?</li> </ul>	<p>If politicians support the reform, then line ministries will be more interested in achieving and demonstrating performance improvements.</p>
<b>Legislative support</b>	
<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- Are legislators invested in the concept of performance-budgeting (mainly those in budget-related committees)?</li> <li>- Does the legislature demands the presentation of performance information during budget deliberations?</li> </ul>	<p>If the legislature is interested in performance, then line ministries will need to make sure that their budget requests are clearly linked to performance targets.</p>

Stakeholder involvement (e.g., planning ministry, finance ministry, audit office)	
Example of relevant questions	Expected impact
- Are the stakeholders involved in performance budgeting working in coordination?	The more coordination and collaboration between stakeholders, the higher the probability of success.
- Are there political rivalries between key stakeholders?	

Note: author's elaboration.

### ***5.2.3. Characteristics of the System***

There are many specific characteristics that can make the difference between a failed and a successful performance budgeting system. These characteristics may be shaped by the external and political environments, but also by technical aspects or even by features of the 'old' budgetary process. A list of the factors included in this section is available in Table 11.

**Table 11: Description of Variables of the Characteristics of the System**

<b>Availability of data</b>	
<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- Is there a monitoring system that provides regular performance information?</li> <li>- Are the results of evaluations available when determining budget allocations?</li> <li>- Is there a clear schedule that shows what programs will be evaluated?</li> <li>- Is costing information made available to compare alternatives?</li> </ul>	<p>Performance information is more likely to be considered only when up-to-date information is made available at key decision-making periods.</p>
<b>Characteristics of budgetary processes (e.g., timelines, earmarks, aggregations)</b>	
<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- Is there enough ‘fiscal space’ to allocate funds based on performance?</li> <li>- The budgetary process allows enough time for performance deliberation?</li> </ul>	<p>A clear and ordered budgetary process, which allows time for deliberation and has a limited percentage of allocations earmarked, is more prone to be influenced by performance information.</p>

**Characteristics of the performance system (e.g., complexity, objectives, methodologies, program structure)**

<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- Are clear methodological guidelines available and are they periodically updated?</li> <li>- Are the requirements too complex and demanding for line ministries?</li> <li>- Is the program structure divided in ways that it becomes operational (such as subprograms and projects)?</li> <li>- Is the performance budgeting system intended to be used throughout the budgeting cycle?</li> </ul>	A well-designed performance budgeting system is more likely to be correctly implemented.

**Performance budgeting legislation**

<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- Is there a legislation that requires the use of performance measures in the budgeting process?</li> <li>- The legislation provides clarity on the individual responsibilities of different stakeholders?</li> </ul>	Cases with a clear legislation are more likely to endure political changes.

**Quality of measurement system**

<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- Is the performance information perceived to be fair and trustworthy?</li> <li>- Is there a performance measurement system that has political autonomy and sufficient resources?</li> </ul>	Information presented by a strong and independent performance measurement system is more likely to be trusted.

### **Top-down or bottom-up approach to performance budgeting**

<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"><li>- In top-down approaches: has the reform considered the individual needs of line ministries?</li><li>- In bottom-up approaches: have measures been implemented to assure certain level of uniformity in reporting among line ministries?</li></ul>	Each approach has both strengths and weaknesses, so the expected impact is a priori indeterminate.

Note: author's elaboration.

#### ***5.2.4. Characteristics of the Organizations***

The final step in our research strategy is to analyze the characteristics of each individual line ministry. Table 12 shows the complete list of relevant factors for this section, which includes measures of the institutional capacity, and the attitudes of both managers and staff.

**Table 12: Description of Variables of the Characteristics of the Organizations**

<b>Ability to link resources to organizational activities</b>	
<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- Are there specific guidelines that detail how to link individual budget sections to specific activities of the organization?</li> <li>- Are there processes to verify that resources are used to help reach the intended goals?</li> <li>- Are there documents that describe the activities of the organization with enough detail for them to be linked to budget allocations?</li> </ul>	<p>Linking resources to specific goals signals that performance results matter.</p>
<b>Ability to link strategic plans to organizational activities</b>	
<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"> <li>- Are there specific guidelines that detail how to link individual strategic objectives to specific activities of the organization?</li> <li>- Are there documents that describe the activities of the organization with enough detail for them to be linked to strategic goals?</li> </ul>	<p>Members of the organization will be more committed to its goals if they can trace a clear linkage between their regular activities and the achievement of results.</p>



### **Fear of transparency**

<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"><li>- Is there an expectation that performance information will be used for political persecution?</li><li>- Has performance information been used to punish people, instead of improving services?</li></ul>	Members of the organization will resist performance budgeting reforms if they perceive that their goal is to punish and to persecute opponents.

### **Informational system capacity**

<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"><li>- Does the organization has enough technical capacity to administer performance information systems?</li><li>- Are the performance information systems user-friendly and available to a wide group of stakeholders?</li></ul>	Performance information will be more readily available when it is handled through appropriate informational systems.

### **Input- vs performance-oriented culture**

<b>Example of relevant questions</b>	<b>Expected impact</b>
<ul style="list-style-type: none"><li>- Are the organizations' accountability systems built around controlling the use of inputs instead of the achievement of goals?</li><li>- Are internal reports based on inputs instead of performance measures?</li></ul>	Performance information will become more relevant when it is not only a requirement from outsiders, but instead part of the internal culture.

Management support	
Example of relevant questions	Expected impact
- Are organizational managers transmitting the importance of performance measures to their subordinates?	Organizations where managers communicate and lead based on performance will develop an environment where performance measures are seen as relevant.
- Are organizational managers including performance measures in personnel evaluation?	
Organizational factors (e.g., size, reorganization)	
Example of relevant questions	Expected impact
- What are the main organizational factors that distinguish this organization from other line ministries?	There are several organizational factors that could have opposite impacts, so the effect of this variable is a priori indeterminate
Resources for performance-based reforms	
Example of relevant questions	Expected impact
- Are there resources for the collection and management of performance information?	An organization that sets aside a constant and appropriate amount of resources for performance measurement will be more likely to periodically generate relevant information.
- Is the resource allocation for performance-related purposes particularly volatile?	
Self-interested motivation	
Example of relevant questions	Expected impact
- Is there a strong sense of commitment to the goals of the organization?	Officials who truly believe in the goals of the organization are more likely to be interested in measuring and considering performance.
- Have managers shown willingness to take risky actions in order to reach the goals of the organization?	

Staff buy-in	
Example of relevant questions	Expected impact
<ul style="list-style-type: none"> <li>- The staff of the organization believes that the performance budgeting system is a beneficial one?</li> <li>- Is there a sense of ownership for the performance budgeting reform (instead of a sense of it being only an externally imposed burden)?</li> </ul>	Internal ownership of the reform makes members of the organization more prone to take the reform seriously.
Staff capacity	
Example of relevant questions	Expected impact
<ul style="list-style-type: none"> <li>- Are training services offered to keep staff updated in performance budgeting requirements and techniques?</li> <li>- Is the recruitment system prone to hiring personnel with appropriate technical qualifications?</li> </ul>	The organization needs to have adequate human resources for performance information to be gathered and analyzed.
Time investment	
Example of relevant questions	Expected impact
<ul style="list-style-type: none"> <li>- Are the requirements from the performance budgeting reform too burdensome and time consuming?</li> </ul>	Performance budgeting is less likely to be found useful if it becomes too burdensome.

Note: author's elaboration.

Besides the variables in Table 12, the analysis of each organization must also consider our dependent variable: the use of performance information for decision-making. In the meta-analysis included in this document (Chapter 4) it was explained that there is no standardized measurement for the use of performance information for

decision-making. Having a standardized measurement framework for this variable could be an important theoretical advancement as it may facilitate future comparisons between case studies, and even comparisons within units of a single case. Table 13 presents the proposed scale which is based on the stages of the budget cycle for which line ministries consider performance information as an input. The scale distinguishes between line ministries that use performance information for all of the listed actions, from those who use it only for some or none of those actions. Table 13 also includes a checklist of examples of potential uses of performance information that can serve as a grading checklist.

**Table 13: Scale to Grade the Use of Performance Information**

<b>GRADE</b>	<b>EXPLANATION</b>
<b>A</b>	Decision-makers consider performance information during all the following: budget preparation/approval, budget execution, and to enhance budget accountability.
<b>B</b>	Decision-makers consider performance information for two of the following: budget preparation/approval, budget execution, and to enhance budget accountability.
<b>C</b>	Decision-makers consider performance information for only one of the following: budget preparation/approval, budget execution, and to enhance budget accountability.
<b>F</b>	Decision-makers do not consider performance information in any of the following: budget preparation/approval, budget execution, and to enhance budget accountability.

## **EXAMPLES OF POTENTIAL USES OF PERFORMANCE INFORMATION:**

### **BUDGET PREPARATION/APPROVAL**

Prepare strategic plans and set clear goals for the fiscal year.  
Make tradeoffs between agency subunits to allocate funds strategically.  
Build budget justification for submission to central budget office.  
Decide which agencies or programs should get additional (reduced) funding.  
Determine overlapping services within agency.  
Defend budget requests during legislative session.

### **BUDGET EXECUTION**

Decide on budgetary re-allocations.  
Evaluate staff performance.  
Change program strategic framework and results timeliness.  
Determine mechanisms to enhance cost-efficiency.  
Update strategic plans.  
Encourage areas/departments to cooperate towards shared goals.

### **BUDGET ACCOUNTABILITY**

Communicate planned and achieved strategic goals.  
Publish performance-based justifications for budget allocations.  
Publish performance-based justifications for budget re-allocations.

Note: author's elaboration. Examples based on (Ho, 2005; Joyce & Sieg, 2000).

### **5.3. Case Study Selection**

This research project is based on single case study methodology, which is the “intensive study of a single unit for the purpose of understanding a larger class of (similar) units” (Gerring, 2004, p. 342). Single case studies have been commonly used to assess performance budgeting reforms (Massey & Smith, 1994; Xavier, 1996;

Hendon, 1999; VanLandingham, Wellman, & Andrews, 2005; Breul, 2007; Lu Y. L., 2007; Zaltsman, 2009; White, 2012; Broom, 1995; Frisco & Stalebrink, 2008). The case analyzed in this study is the government of Chile including multiple units of observation that will be described later in this chapter.

The use of a single case study allows for an in-depth examination of the causal mechanisms, while using multiple units of analysis within the case study allows controlling for variables that are exogenous to them, such as environmental factors, political factors, and the characteristics of the reform. The major weakness of a single case study is its low potential for generalization. This study addresses that issue by following two recommendations from (Yin, 2009): use a clearly defined theoretical framework, and apply replicable processes that can later be tested in other countries. Despite those measures, each finding from this research project will have to be carefully analyzed to determine if it's likely to be found in other contexts, or if it is particular of Chile.

Chile is a strong case for this research project because it has a longstanding performance budgeting system that has been found to be strong by previous researchers. As mentioned at the start of this chapter, surveys by both the IDB and the OECD have concluded that Chile has one of the most developed performance budgeting systems among their respective member countries.

The units of analysis of this study are programs within line ministries. In total, the study includes eight units of analysis divided between four different line ministries. The selection of the individual line ministries, and of the programs within them, is a challenging task since we do not have ex-ante values for neither our dependent variable, nor for most of our independent variables. One problem of selecting cases without prior knowledge of the dependent variable is the potential for an undetermined result, i.e. finding the same value for the dependent variable in spite of variation in the explanatory variables (Gisselquist, 2014). We address this challenge by selecting two independent variables that are expected to be relevant and for which we have ex-ante information. These variables and the specific case selection are described in the remainder of this section.

### ***5.3.1. Selection of Line Ministries Based on Size***

The size of the organization has been predicted to be an important factor in decision-making processes. More specifically, Downs argues that larger bureaus have weaker coordination among its members and present a harder environment for top officials to maintain control of their subordinates (Downs, 1966). The situation described by Downs suggests that the challenge of collecting pertinent and timely performance information is greater in larger bureaus.

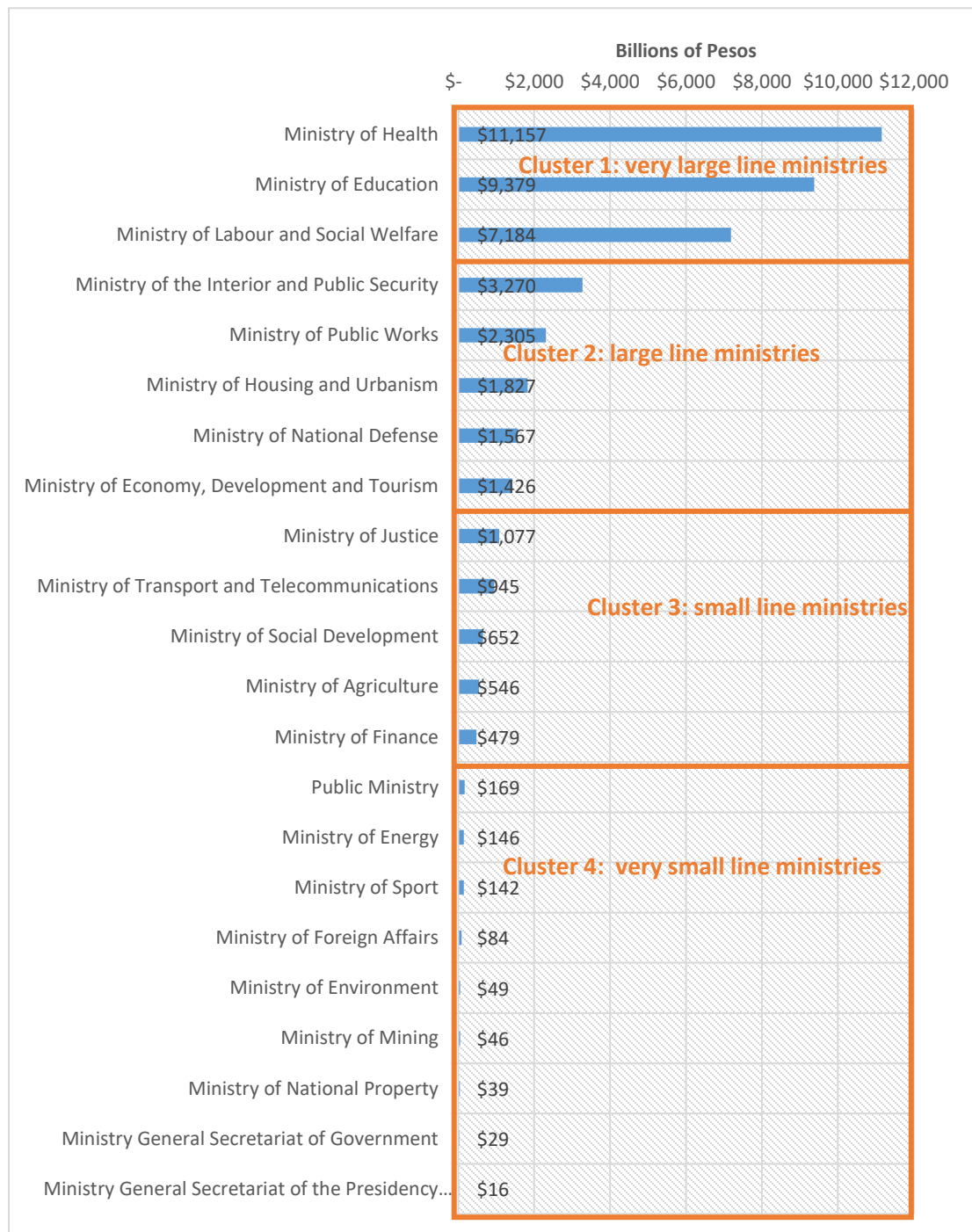
The most straightforward way of comparing the size of line ministries is by comparing their budgets<sup>19</sup>. The distribution of resources among Chile's line ministries does not allow for a clear differentiation between large and small; instead, it shows some very large and some very small line ministries, coupled with a diverse group of middle-sized ones. In order to separate line ministries into more precise groups, they were analyzed using k-means clustering methods. Figure 11 presents Chile's line ministries, sorted from the largest to the smallest budget and divided into four clusters: very large, large, small, and very small line ministries. This study analyses a single line ministry from each of the four clusters.

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<sup>19</sup> An alternative is to use the size of their labor force, but that measure is biased towards labor intensive sectors.



**Figure 11: Chile's Line Ministries Ordered by the Size of Their Budgets,  
Clustered, Year 2016**

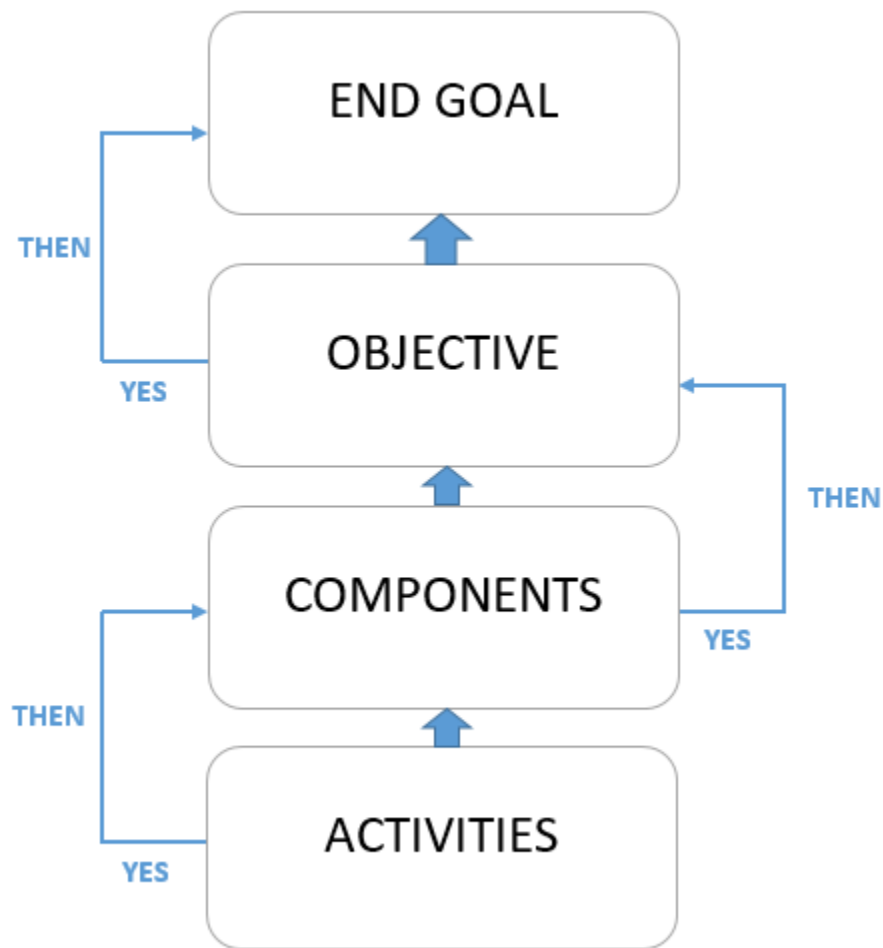


Note: author's elaboration. Names of line ministries translated by the author.

### ***5.3.2. Selection of Programs Within Line Ministries Based on the Availability of Performance Information***

Chile's ex-post evaluation system produces information that is directly linked with government's performance. Since its inception, the objective of the ex-post evaluation system has been to "generate performance information, introduce practices to improve the quality of public spending, and increase transparency about public sector results" (Arenas de Mesa & Berner Herrera, 2010, p. 13). As the official methodological document explains, Chile's ex-post evaluations are based on a logical framework methodology that is used to establish a clear link between the government's inputs, activities and results (Figure 12). The results of the evaluations are a key source of performance information. For example, 79% of the institutions and 76% of the programs evaluated in the period from 2000-2005 carried-out significant restructuring of their internal management systems and/or their organizational structures to become better capable of reaching their stated objectives (Guzmán, 2005).

**Figure 12: Results Matrix Used in Chile's Ex-Post Evaluation System**

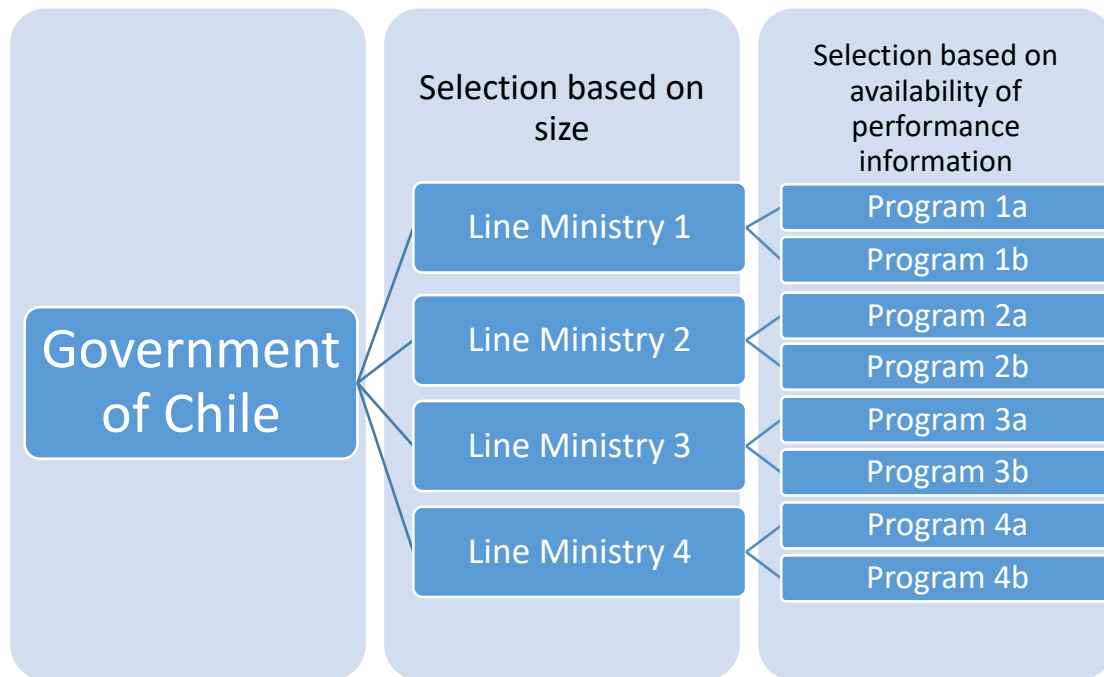


Note: from (DIPRES, 2015, p. 18). Translated by the author.

The case of Chile allows differentiating between programs within a line ministry based on their availability of performance information. This is possible because ex-post evaluations are only applied to a certain number of programs each year. This results in a situation where in most line ministries at any given point in time there are some program that have been recently evaluated and some that have

not. Figure 13 provides a summarized illustration of the criteria for selecting line ministries and the programs within them.

**Figure 13: Selection of Line Ministries and Programs**



Note: author's elaboration.

Based on their size and on the availability of performance information, the four line ministries and eight programs selected for this research project are:

- *Ministerio de Salud* (Ministry of Health)
  - *Programa Más Adultos Mayores Autovalentes* (More Self-Sufficient Seniors Program).
  - *Programa Vida Sana* (Healthy Life Program).
- *Ministerio de Obras Públicas* (Ministry of Public Works)

- *Conservación de las Riberas de los Ríos* (Riverbank Conservation).
- *Programa de Agua Potable Rural* (Rural Drinking Water Program).
- *Ministerio de Desarrollo Social* (Ministry of Social Development)
  - *Programa Noche Digna* (Decent Night Program).
  - Programa Vínculos (Linkages Program).
- *Ministerio de Energía* (Ministry of Energy)
  - *Programa de Alumbrado Público* (Public Lights Program).
  - *Programa de Acceso y Suministro Eléctrico en Zonas Rurales y Aisladas* (Electric Access and Supply in Rural and Isolated Areas).

#### **5.4. Methods for Data Collection**

This research project builds from three sources of information. The most important one is individual interviews, which are coupled with documentation and archival records. This section of the paper defines those three sources of information, and describes the strategies followed to gather the information.

In a book about case study research, (Yin, 2009) lists six potential sources of information: documentation, archival research, interviews, direct observation, participant-observation, and physical artifacts. This research project builds from the

first three sources of information included in that list. Based on that same book, documentation, archival records, and interviews may include the following:

- Documentation: letters, memoranda, e-mail correspondence, minutes of meetings, administrative reports, formal studies and evaluations, and articles appearing in the mass media.
- Archival records: public use files such as census and other statistical data, service records, organizational records, budgets, and previously collected survey data.
- In-depth interviews: type of interviews that analyze matters, opinions, and insights into more detail. They may or may not use a structured questionnaire.

Our strategy for data collection consisted of five steps. The first step was to have an initial understanding of the particularities of the case by searching for and analyzing some of the most important and the most readily accessible documentation and archival records. This and the next steps followed the order explained in the research strategy, i.e. start with the external environment, continue with the political environment, then with the characteristics of the system, and end with individual organizations.

The archival records and the documentation gathered at the first stage allowed a better understanding of the following topics: the economic environment that surrounded the adoption and some key periods of the implementation of performance

budgeting reform; the existence, timing, and characteristics of complementary reforms; any particularly relevant characteristics of the population, as well as past survey that may have assessed the public opinion on government reforms; previous evaluations of the country's performance budgeting system; and the quality and comprehensiveness of relevant legislation.

The second step had one main and one secondary objective. The main objective was to confirm my association with a local think-tank that could help me set up interviews with government officials. The think-tank I associated with is the *Centro de Políticas Públicas de la Pontificia Universidad Católica de Chile* (Public Policy Center of the Pontifical Catholic University of Chile). The secondary objective was to have some initial interviews to help me validate some inferences made from the data gathered through documentation and archival records. Those interviews were held in-person with experts from Washington, DC-based international organizations that work with the government of Chile, and through Skype with experts located elsewhere.

The third step was preparing for field work. This included defining a complete list of interviews, establishing dates for interviews, and designing draft questionnaires.

The fourth step was field work, which I carried-out in Santiago, Chile from June 14 to July 13, 2016. The main activities were in-person interviews with current

and past government officials. Besides getting questions answered, I requested additional documentation that was not easily and/or publicly accessible. I tried to establish rapport through conversational interviews by asking open-ended questions, and then prompted and probed on the specifics. Open-ended questions are a good fit for research projects that analyze complex processes as they allow respondents to structure responses in their own framework (Aberbach & Rockman, 2002). As agreed in my project submission to the Institutional Review Board, I granted anonymity to all interviewees. I did not record the interviews to help interviewees feel comfortable to express their true opinions. Instead, I took notes in paper and tabulated the interviews into my computer as soon as possible. Finally, I made sure that the language used was broad enough to include aspects that might be locally linked to reforms other than performance budgeting.

In total, I conducted 51 interviews for this study. The last section of this document presents a list of interviews, including the institution to which the interviewee is affiliated and the date when the interview was held. Six of those interviews were carried out prior to field work in Chile, the next forty interviews were held in Chile, and the final five interviews happened after returning from Chile. Some interviewees were later contacted to validate and/or provide additional information. Some sections of this study were made available for comments to officials from the four line ministries analyzed here.



## **5.5. Methods for Data Analysis**

This research project will use a specific data analysis methodology, called process-tracing. This section of the paper starts with an explanation of the concept and the characteristics of process-tracing, followed by a justification of why it is an appropriate approach for this project.

Process-tracing is a methodological approach that “attempts to trace the links between possible causes and observed outcomes” through the examination of “histories, archival documents, interview transcripts, and other sources to see whether the causal process a theory hypothesizes or implies in a case is in fact evident in the sequence and values of the intervening variables in that case. (...) Process tracing can perform a heuristic function, generating new variables or hypotheses on the basis of sequences of events observed inductively in case studies” (George & Bennett, 2005, pp. 6-7).

The emergence of process-tracing dates to at least 1985, when George and McKeown conceptualized the idea as a solution to the lack of rigor of qualitative methods in historical and observational studies. The authors argued that while you cannot establish causality from a mere observation, causality may be established if the observation is informed by a theory or pre-theory. The idea of strengthening observations by linking them to theory is complemented with the use of in-depth observations, as the authors describe that process-tracing “attempts to uncover what stimuli the actors attend to; the decision process that makes use of these stimuli to

arrive at decision; the actual behavior that then occurs; the effect of various institutional arrangements on attention, processing, and behavior; and the effect of other variables of interest on attention, processing, and behavior” (George & McKeown, 1985, p. 35).

Throughout the last couple of decades, several authors have contributed to strengthening the methodological approach of process-tracing. Some of the most important of those contributions are the following:

- Besides using clearly established theories for each individual event, researchers should spell out the rival explanations that could potentially fit that same event (Collier, 2011). In that same article, he suggests that the evidence that is collected should be analyzed from both angles: how it affects the possibility of each theory and each alternative theory.
- The evidence that is collected through process-tracing should be weighted based on how they affect the probability that one or another hypothesized mechanism is the one that explains the empirical results. A good explanation of this point is offered in (Bennett, 2008), who takes a Bayesian approach to look at evidence not from the standpoint of number of observations (as quantitative analysis does), but from the probabilities, given available evidence, that a hypothesis (and alternative hypotheses) is true.

- An additional idea on how to analyze evidence through process-tracing suggests differentiating between necessary and sufficient evidence (Bennett, 2010). This idea is further detailed in Figure 14.
- A final recommendation is using auxiliary outcomes, which are “particular occurrences that should occur alongside (or perhaps as a result of) the main outcome of interest if in fact that outcome were caused in the way stipulated by the theory under investigation” (Mahoney, 2010, p. 129). This idea suggests that, especially in cases where the main outcome of interest is not easily observable, one could search for auxiliary outcomes that should be present if our hypothesized causal relation did in fact occur.

**Figure 14: Tests for Causal Inference Using Process-Tracing**

		Sufficient for affirming causal inference	
		Yes	No
Necessary for affirming causal inference	Yes	<p><b>a. Passing:</b> Affirms relevance of hypothesis, but does not confirm it.</p> <p><b>b. Failing:</b> Hypothesis is not eliminated, but is slightly weakened.</p> <p><b>c. Implications for rival hypotheses:</b>  <b>Passing</b> slightly weakens them.  <b>Failing</b> slightly strengthens them.</p>	<p><b>a. Passing:</b> Confirms hypothesis.</p> <p><b>b. Failing:</b> Hypothesis is not eliminated, but is somewhat weakened.</p> <p><b>c. Implications for rival hypotheses:</b>  <b>Passing</b> substantially weakens them.  <b>Failing</b> somewhat strengthens them.</p>
	No	<p><b>a. Passing:</b> Affirms relevance of hypothesis, but does not confirm it.</p> <p><b>b. Failing:</b> Eliminates hypothesis.</p> <p><b>c. Implications for rival hypotheses:</b>  <b>Passing</b> somewhat weakens them.  <b>Failing</b> somewhat strengthens them.</p>	<p><b>a. Passing:</b> Confirms hypothesis and eliminates others.</p> <p><b>b. Failing:</b> Eliminates hypothesis.</p> <p><b>c. Implications for rival hypotheses:</b>  <b>Passing</b> eliminates them.  <b>Failing</b> substantially strengthens.</p>

Note: from (Collier, 2011, p. 825).

There are two major lines of criticism of process-tracing. First, that process-tracing increases the number of variables without increasing the number of observations; thus, reducing the degrees of freedom to establish causal relations (King, Keohane, & Verba, 1994). Second, that process-tracing leads the researcher to “infinite regress”, which is a situation with infinite possibilities of intervening causal processes (King, Keohane, & Verba, 1994, p. 86).

On the first line of criticism, one must remember that process-tracing builds its capacity of inference on the depth of its observations, which leads to stronger quality of evidence. For example, while in quantitative research all observations have the same value, in process-tracing a single observation could be deemed as sufficient evidence to prove a causal relationship. Therefore, while the number of observations is more valuable for quantitative analysis, the quality of the evidence is more valuable in qualitative analysis (George & McKeown, 1985; Collier, Brady, & Seawright, 2010; Bennett, 2008; Collier, 2011; Mahoney, 2010).

On the second line of criticism, it is true that that process-tracing may lead to a situation where there is more than one plausible explanation for a phenomenon. This issue is referred to as equifinality or multiple convergence, and it “challenges and undermines the common assumption that similar outcomes in several cases must have a common cause that remains to be discovered” (George & Bennett, 2005, p. 161). Equifinality is not only an issue for qualitative, but also for quantitative analysis, and it should be specified when analyzing causal processes.

There are several reasons why process-tracing is appropriate for this research project. However, there are also important weaknesses with this approach. In the remainder of this chapter we detail the strengths and weaknesses of process-tracing in the context of this study.

First, process-tracing is a powerful method for understanding complex decision-making processes. Data collection in process-tracing is specifically focused on discovering the commonly obscure procedures of decision-making, and data analysis emphasizes the use of hypotheses in order to test potential explanations of the causal mechanisms that lie behind decision-making.

Second, since process-tracing relies on in-depth analysis, it is an appropriate method for discovering new variables, or for understanding the impact of variables that have been previously overlooked. This means that process-tracing is a methodological alternative that facilitates finding any variable that might be missing in our initial research framework.

Third, process-tracing helps increase the internal validity of research projects. For example, comparing a theoretically expected pattern with an empirical one and addressing the possibility of rival explanations are two tools that increase the internal validity of research projects (Yin, 2009).

Fourth, process-tracing is a methodology that facilitates the use of findings from multiple sources. The use of multiple sources, together with establishing chains of evidence and having key informants to review the findings, is known as data triangulation and it strengthens the construct validity of the findings (Yin, 2009).

Finally, process tracing enhances external validity by providing a carefully designed methodological process that allows replication. From this point of view, “generalization is not automatic (...) a theory should be tested by replicating the findings. Once such direct replications have been made, the results might be accepted as providing strong support for the theory, even though further replications had not been performed. This replication logic is the same that underlies the use of experiments” (Yin, 2009, p. 44).

## Chapter 6: The External and Political Environment

In order to properly understand Chile's performance budgeting reforms, we start by analyzing if and how certain the factors in the country's external and political environment shaped such reforms. This chapter traces the circumstances that led to the emergence of modernization reforms, placing special attention to the key moments where changes were introduced, starting from Chile's return to democracy in the year 1990 and advancing all the way until the current situation in the year 2016. The technical details of the reforms are discussed in the next chapter.

The research framework of this study suggests eight factors that may prove relevant. Some of those factors are about the support for performance budgeting reforms, a condition that is expected to be indispensable for any change to take place. They include a general level of support, the existence of a group of high-level officials that take a leadership role, the position taken by members of the legislature, and the involvement and coordination of other relevant stakeholders. Other factors are the economic situation when the reforms are proposed, citizen engagement in pushing for reforms, and the evolution of the demographic characteristics of the population. The final factor is the timing of the reforms, where certain considerations should be analyzed, such as the existence of complementary reforms that provide the conditions for performance budgeting, and the occurrence of extraordinary events that affect the interest in the reforms. All of these factors are considered in this chapter.



### **6.1. The Return to Democracy and the Cornerstone of the Reforms (1990-1993)**

Following a coup d'état that ousted President Salvador Allende on September 11, 1973, Chile fell under the dictatorship of a military junta presided by Augusto Pinochet. The dictatorship, which lasted almost 17 years and which has been declared responsible of numerous and vicious human's right violations, ended peacefully in early 1990 when the democratically elected Patricio Aylwin took office as President. While the transition from a military regime to a democratic government was peaceful, it was by no means easy. For instance, Aylwin had to deal with the fact that Pinochet remained active in public life both as a Senator and as the Commander in Chief of the Chilean Army. For that and other reasons, it is not surprising that there is near consensus that the main goal of the Aylwin administration was to strengthen the transition to democracy in order to avoid a potential reversal (Ramírez Alujas, 2001; Blöndal & Curristine, 2004; Waissbluth, 2006; Armijo Quintana, 2005; OI5, 2016; OI7, 2016)<sup>20</sup>.

Besides ensuring a strong transition to democracy, the Aylwin administration addressed major issues that had been neglected during the military dictatorship, such as social and economic inequalities, the rights of women and young people, environmental control, indigenous affairs, public sector remunerations, among others (Armijo Quintana, 2005; Dussauge Laguna, 2013; OI6, 2016; OI11, 2016). In order to address those issues, the Aylwin administration created new public institutions

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<sup>20</sup> Citations using the acronyms: ME, MH, MOP, MS, OI, SES, and SSS, refer to in-depth interviews conducted for this study. The last section of this document presents a list of interviews, including the institution to which the interviewee is affiliated. All interviewees were granted anonymity.

such as the *Corporación Nacional de Desarrollo Indígena* (National Corporation for Indigenous Development), the *Servicio Nacional de la Mujer* (National Women Service), and the *Instituto Nacional de la Juventud* (National Institute for Young People). In general terms, these reforms were not highly demanding in managerial and administrative capacities, but instead they were aimed at giving the government a role in issues that it had previously ignored (Waissbluth, 2006).

One of the new line ministries established during the Aylwin administration was the *Ministerio Secretaría General de la Presidencia* (MINSEGPRES, or Ministry for the Presidency's General Secretariat) which was a modified version of the already existent *Secretaría General de la Presidencia* (SEGPRES, or Presidency's General Secretariat). The creation of the MINSEGPRES in the year 1990 was the first reform towards enhancing the efficiency of the Chilean government. One of MINSEGPRES' institutional roles was to lead the creation of annual institutional goals, *Sistema de Metas Ministeriales* (SMM, or Ministerial Goals System), for other line ministries. Through the SMM "central ministries established specific ministerial goals, in line with the government's programmatic priorities, which were then reported to MINSEGPRES. The information produced was used directly by the President and in cabinet meetings" (Dussauge Laguna, 2013, p. 76). The information from the SMM was also used in inter-ministerial meetings headed by MINSEGPRES (OI7, 2016). However, the SMM gradually "lost its political and administrative relevance" (Dussauge Laguna, 2013, p. 77).

While the Aylwin administration focused on the priorities mentioned in the previous paragraphs, some activity was happening in the background that would later prove to be the cornerstone of government modernization reforms in Chile. A small group of public officials led by Mario Marcel, who was a mid-level official at the *Dirección de Presupuesto* (DIPRES, or Central Budget Office), started discussing the need to modernize Chile's public administration. Marcel, who found it hard to gain any support for his cause in the first few years, built his argument on two facts: that the military dictatorship left the Chilean public administration weak and unprofessional; and that modernization reforms had shown positive results in other countries (Ramírez Alujas, 2001; Marcel, 2002; Armijo Quintana, 2005; Dussauge Laguna, 2013; OI5, 2016; OI7, 2016; OI6, 2016).

Marcel's efforts were rewarded in the year 1993 as he and his team were successful in pushing for a small pilot initiative. This initiative, called the *Plan Piloto de Modernización en la Gestión de los Servicios Públicos* (Pilot Plan for the Modernization of Management in Government Agencies) included only five *servicios públicos* (public services, hereafter referred to as government agencies)<sup>21</sup> and consisted in establishing basic parameters such as institutional mission, strategic objectives, strategic products, and clients and beneficiaries (Arenas de Mesa & Berner Herrera, 2010). These parameters eventually translated into a set of

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<sup>21</sup> Public service is the term used in Chile for the executing agencies within line ministries. Their responsibilities and their relation to line ministries is explained in Chapter 8.

performance indicators that were added as appendixes to the budgetary process (Guzmán, 2005; OI7, 2016; Marcel, 2002).

## **6.2. The Creation of the Performance Budgeting System (1994-1997)**

While they have continued to evolve over the years, most of the components of today's Chile performance budgeting system were instituted within a period of four years between 1994 and 1997. The first component of the system were performance indicators. After introducing them in only five government agencies in the early months of 1993, they were extended to 26 government agencies in 1994 (Arenas de Mesa & Berner Herrera, 2010; Marcel, 2002). In December 1994 President Frei instituted a *Comité Interministerial de Modernización de la Gestión Pública* (Inter-Ministerial Committee for the Modernization of Public Management) to coordinate modernization reforms (Ramírez Alujas, 2001; Dussauge Laguna, 2013). Evaluations and institutional reports were officially introduced in late 1996 as part of an agreement between the executive and the legislature called the *Protocolo de Acuerdo entre el Congreso y el Ejecutivo* (Agreement Protocol Between Congress and the Executive) in the budget law for the next year (Guzmán, 2005; Marcel, 2002; Arenas de Mesa & Berner Herrera, 2010). In 1997 a total of 20 *Evaluaciones de Programas Gubernamentales* (EPG, or Government Program Evaluations) were carried out and presented for the first time for budget discussions (Arenas de Mesa & Berner Herrera, 2010). The institutional reports, which would later become known as the *Balance de Gestión Integral* (BGI, or Integral Management Report) were also introduced for budget discussions in 1997. As part of that same agreement performance indicators

were introduced to most government agencies, reaching a total 67 in the year 1997 (equivalent to 80% of Chilean p government agencies) (Arenas de Mesa & Berner Herrera, 2010; Marcel, 2002; OI11, 2016). Finally, late in 1997 President Frei enacted the *Plan Estratégico de Modernización de la Gestión Pública* (Strategic Plan for the Modernization of Public Management) and his cabinet reached an agreement with public sector unions and the legislature to establish a performance-based salary system known as the *Programa de Mejoramiento de la Gestión* (PMG, or Management Improvement Program) (Arenas de Mesa & Berner Herrera, 2010; Dussauge Laguna, 2013). The PMG was enacted into law in February of 1998<sup>22</sup>. The creation of the Inter-Ministerial Committee and the introduction of different types of performance information were the cornerstone of Chile's performance-based reforms (OI7, 2016).

Some factors in the external and political context were enablers of the reforms that occurred in this period. Those factors are an increase in executive leadership support, a more appropriate timing for introducing reforms due to a more stable democracy and to the groundwork laid during the previous government, and the fact that the government and the public sector employees union, the *Agrupación Nacional de Empleados Fiscales* (ANEF, or National Association of Public Employees), negotiate salary increases every year. Notwithstanding, reformers still had to overcome several obstacles. Weak involvement from key stakeholders, the lack of a sense of urgency to enact reforms due to a good macroeconomic scenario, and the

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<sup>22</sup> Law number 19.553.

absence of citizen pressure for public sector reform were among the main challenges. The following paragraphs explain these factors in further detail.

As mentioned earlier in this chapter, Mario Marcel had a key leadership role for modernization reforms during the Aylwin administration. As it has been noted by many authors and interviewees, Marcel's leadership remained just as critical during the first half of the Frei administration until he left DIPRES at the end of 1996 (Guzmán, 2008; Dussauge Laguna, 2013; OI1, 2016; OI3, 2016; Panzardi, 2005). Early in Frei's administration Marcel was awarded a higher-level position as the head of the Inter-Ministerial Committee for the Modernization of Public Management, providing him higher authority to push reforms forward. As (Dussauge Laguna, 2013, p. 90) explains, the committee's goal was to "design government-wide reform initiatives, and it also provided a forum for government officials to discuss administrative modernization topics." Furthermore, one interviewee explained that the Frei administration provided continuity to the technocratic team inside DIPRES, allowing them to continue pushing for reforms (OI7, 2016). The creation of the aforementioned committee was not Frei's only involvement in modernization reforms. Instead, Frei repeatedly showed interest in modernizing Chile's public sector, explicitly including this issue in his government agenda (Ramírez Alujas, 2001; Armijo Quintana, 2005; Waissbluth, 2006; OI3, 2016; OI11, 2016).

Without denying Frei's own genuine interest in modernization reforms, it is important to note that his administration coincided with a much better timing to

initiate those reforms than that of his predecessor. There are at least two aspects worth mentioning. First, Chile's democracy was more stable than during the Aylwin administration, allowing the government more tranquility to initiate deeper reforms. As one academic explains, Chile's "democracy moved from the intensive care unit to a regular hospital room" (Waissbluth, 2006, p. 39). Second, the steps towards modernization reform taken during the Aylwin administration, particularly the pilot plan, provided the cornerstone for change to happen. The most important consequence of the pilot plan was that it generated a critical mass of public sector managers that became acquainted with and interested in the idea of public sector modernization (Waissbluth, 2006; Dussauge Laguna, 2013; OI3, 2016; OI7, 2016). One example mentioned by interviewees is the fact that a year after launching the pilot plan in five government agencies, DIPRES felt pressured to expand the pilot to more than 20 other institutions that were voluntarily asking to participate (OI6, 2016; OI11, 2016). It is hard to determine if the improved timing had a causal effect on, or was independent of, Frei's attitude towards modernization reforms; but it is clear that both the timing and Frei's attitude ended up being positive catalysts for the reform process.

At the end of 1996, Marcel left his posts both in DIPRES and in the inter-ministerial committee, being replaced first by Ramón Figueroa and later by Claudio Orrego. By the time Marcel left, the Agreement Protocol Between Congress and the Executive had already been reached, ensuring the expansion of performance indicators and the introduction of EPG and BGI. However, one final modernization

reform of Frei's administration was yet to come: the PMG. The yearly salary negotiations between the government and the public sector employees union, the ANEF, facilitated the introduction of the PMG. As the prospect of increasing salaries seemed certain, the government decided to ask for higher performance in exchange for the higher compensation, reaching an agreement with the ANEF on October of 1997 (Armijo Quintana, 2005; OI1, 2016; OI5, 2016; OI6, 2016; OI7, 2016; Centro de Sistemas Públicos, 2016). The concept of performance-based remunerations still had a lot of opponents in Congress, as the right called it too 'soviet' and the left too 'neoliberal', but Congress did not have much option but to approve the reform as they were pressured by both the executive and the ANEF (OI5, 2016).

As mentioned above, not all factors were positively aligned for the reforms to happen. Among the major obstacles for reformers were the lack of buy-in of some key stakeholders. For example, interviewees explained that, in spite of his efforts, Marcel had very few allies and that for most politicians the reforms were a low priority (OI2, 2016; OI3, 2016; OI11, 2016). The response from line ministries was heterogeneous, as some got involved in the reforms voluntarily, while others resisted changes (Ramírez Alujas, 2001; OI7, 2016).

Chile introduced its performance budgeting reforms during a period of macroeconomic stability. Between 1990 and 1997, Chile's economy was characterized by a high Gross Domestic Product (GDP) growth rate, fiscal discipline, and increased public savings (Marcel, 1998; Blöndal & Curristine, 2004; Waissbluth,



2006). The downside of introducing modernization reforms during good macroeconomic periods is that there is a lack of a sense of urgency to be more efficient when spending public monies. In fact, some interviewees confirmed that the lack of political urgency due to the good economic situation was a real obstacle for reformers (OI5, 2016; OI11, 2016). Furthermore, there was no general pressure from the population to introduce the reforms (OI3, 2016; OI5, 2016; OI6, 2016; OI7, 2016).

***Table 14: Chile's Revenue Volatility as Compared to Other Latin American and Caribbean Countries***

Chile is no exception in the reliance on natural resources that is common in many Latin American and Caribbean (LAC) countries (see Chapter 3). As shown in a report by the government of Chile, in the period between the years 2001 and 2014 the revenues from mining (particularly from copper) equaled 16% of total fiscal revenues, reaching a high-point of 34% in the year 2006 (Rodríguez Cabello, Vega Carvallo, Chamorro Montes, & Acevedo Olavarría, 2015). In the period between 1990-2008, Chile's revenues from natural resources were highly volatile, with a standard deviation 18 times higher than that of other revenues (de la Torre, Sinnott, & Nash, 2010).

However, Chile is one of LAC most successful countries in terms managing fiscal volatility. One of the key steps to reduce fiscal volatility was the introduction

of the *Fondo de Compensación del Cobre* (Copper Compensation Fund). The fund has been subject to some changes: in the late 1980s it was directed towards managing exchange rate fluctuations, in the 1990s it was redirected towards managing fiscal volatility due to changes in the price of copper, and in 2006 it was combined into a single stabilization fund called the *Fondo de Estabilización Económica y Social* (Economic and Social Stabilization Fund) (Marcel, Guzmán, & Sanginés, 2014).

The stabilization fund was complemented by a fiscal rule and a fiscal responsibility law. Chile's fiscal rule, which focuses on the structural fiscal balance, "shows favorable results in each of the dimensions of its performance, notably during the first seven years of its implementation. While the fiscal rule has been a crucial tool to consolidate discipline in the management of public finances, several studies also conclude that the rule helped reduce fiscal and macroeconomic volatility, net public debt, and risk perceptions, also reducing sovereign spreads and internal and external financing costs" (Marcel, 2013, p. 28).

Note: author's elaboration

At the same time, the stable economic situation did have a positive effect on the results: it allowed a gradual, instead of a rushed, reform implementation (Armijo Quintana, 2005; OI3, 2016; OI6, 2016). The fact that Chile's reform was implemented gradually, allowing for its components to mature before additional ones were introduced, has been commonly described as a key success factor (Ramírez

Alujas, 2001; Guzmán, 2005; Armijo Quintana, 2005; Guzmán, 2008; Arenas de Mesa & Berner Herrera, 2010; Guzmán, Irarrázaval, & de los Ríos, 2014).

### **6.3. Learning While Doing & Fine-Tuning the System (1998-2009)**

The final years of the Frei administration were challenging for the performance budgeting reforms. For instance, the year 1998 was the first one with PMG and concluded evaluations, and the second since expanding performance indicators. For that reason, those at DIPRES, which has always been the leading institutions in Chile's performance budgeting system, had to learn almost overnight how to ensure the quality of an evaluation system, how to use evaluation's results in decision-making, and how to successfully launch a government-wide performance-based salary system. To make things more complicated, these challenges had to be met without the leadership of Mario Marcel, who left DIPRES at the end of 1996.

As it could be expected, the last two years of the Frei administration have been described by some as a deceleration of the reforms. For example, it is commonly argued that the initial technical quality of the EPG and of the PMG were not optimal during this period (Dussauge Laguna, 2013; OI7, 2016; Guzmán, 2005).

When Ricardo Lagos took office in March of 2000, he brought Mario Marcel back to DIPRES, only that this time as the head of the institution. During the six years of the Lagos administration, Marcel and his team addressed technical deficiencies and expanded the main instruments that they had helped create during the 1990s, as well

as introduced a few complementary components to the system. The following is a summary of the reforms by year as recounted in (Guzmán, 2005):

Year 2000:

- Government agencies are mandated to submit a strategic definition (known as form A1).
- Performance indicators were reintroduced as a budget appendix (they had been excluded for the previous two years as they were used for the PMG).
- The PMG was reformulated to focus on management systems instead of performance indicators. This decision was taken because linking performance indicators with salary benefits is prone to ‘gaming’ behavior by line ministries, while the development of management system is verifiable and provides the basis for good governance (OI7, 2016).

Year 2001:

- A new line of evaluation, known as *Evaluación de Impacto* (EI, or Impact Evaluation) was introduced; and the *Fondo Central de Recursos para Prioridades Gubernamentales – Fondo Concursable* (Central Resource Fund for Governmental priorities - Bidding Fund), a system for reviewing new and existing programs, was created.

Year 2002:

- A third line of evaluations was introduced: *Evaluación del Gasto Institucional* (EGI, or Institutional Expenditure Evaluation).

Year 2003:

- The evaluation system was strengthened by introducing a legal requirement for the Ministry of Finance to carry-out yearly evaluations<sup>23</sup>.
- Individual monetary incentives, introduced together with the PMG, were eliminated in favor of team-based incentives known as the *Convenio de Desempeño Colectivo* (CDC, or Collective Performance Agreement). The institutional-level incentives, the PMG, were kept.

Year 2005:

- The PMG institutional-level incentives were aligned with certifications from the International Organization for Standardization (ISO) (Arenas de Mesa & Berner Herrera, 2010).

Besides the list of changes described above, the Lagos administration introduced two additional reforms that, while not technically part of the performance budgeting system, are important complements. The first reform was a structural budget balance rule that limited the government's capacity to run fiscal deficits. This rule, which years later became law, has been internationally praised for how it has

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<sup>23</sup> Law Number 19.896 which modified article 52 of the Law Number 1.263 of 1975.

helped Chile maintain fiscal discipline (Rodríguez C., Tokman R. , & Vega C., 2007; Kumhof & Laxton, 2009). The second complementary reform was the *Sistema de Alta Dirección Pública* (ADP, or Public Sector Senior Executive Service System), which created a merit-based system for hiring and evaluating public sector managers (Deloitte LLP, 2014; Ministerio de Hacienda, 2015; Guzmán, Irrarrázaval, & de los Ríos, 2014). These two reforms have one additional particularity: the motivation to implement them was not entirely technical, but rather the consequence of external pressure from two different sources. In the first case, Lagos' motivation to add this rule (which restricted his budgetary powers) was, at least partially, to provide tranquility to those who worried because he was Chile's first President from the Socialist Party since Salvador Allende (Guzmán & Marcel, 2008). In the second case, the motivation to implement the ADP was directly linked to corruption scandals in a line ministry that Lagos himself headed before becoming President (Waissbluth, 2006; Pliscoff, 2008; Ministerio de Hacienda, 2015; OI3, 2016; OI11, 2016).

In the year 2006 Michelle Bachelet was sworn in for her first term as President of Chile. Unlike Lagos and Frei, Bachelet's administration had no specific plans for modernization reforms (Pliscoff, 2008). As will be described later in this chapter, Bachelet's apparent lack of interest in this type of reforms was also evident in her second term in office. Despite this reduction in executive leadership, the performance budgeting system continued to expand through smaller reforms introduced by the new team at DIPRES. The main reforms were the creation of a new system of performance-based rewards called the *Metas de Eficiencia Institucional*

(MEI, Institutional Efficiency Goals) which affects institutions not covered by the PMG; the establishment of a short-lived bidding fund for modernization initiatives labeled as the *Fondo de Modernización de la Gestión Pública* (FMGP, Public Management Modernization Fund); and the introduction of the *Evaluación de Programas Nuevos* (EPN, or Evaluation of New Programs). Finally, the total number of yearly evaluations (the sum of all types of evaluations: EPG, EI, ECG, and EPN) increased by over 30% from 2005 to 2010.

#### **6.4. New Ideas that (Mostly) did not Survive (2010-2016)**

The year 2010 brought a significant change in Chile's government: it marked the end to 20 years of Presidents from the *Concertación de Partidos por la Democracia* (Coalition of Parties for Democracy), Chile main center-left political coalition. The new President, Sebastián Piñera, introduced several reforms to the government's management systems that mainly consisted of adding complementary functions to institutions other than DIPRES. There is no consensus regarding Piñera's motivations for the reforms, with his supporters arguing that they originated mainly from external evaluations that evidenced weaknesses in the system<sup>24</sup>, while his detractors maintain that the key factor was his intention to put his own stamp on systems that were created by the opposition (OI2, 2016; OI3, 2016; OI7, 2016; OI8, 2016; OI9, 2016; OI10, 2016; OI1, 2016).

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<sup>24</sup> Examples of those evaluations are (The World Bank, 2008; Hawkesworth, Huerta Melchor, & Robinson, 2013; Deloitte LLP, 2014).

There were four major reforms during the Piñera administration (Guzmán, Irrarrázaval, & de los Ríos, 2014). First, a legal reform was adopted eliminating the *Ministerio de Planificación y Cooperación* (MIDEPLAN, or Ministry of Planning & Cooperation) in favor of the new *Ministerio de Desarrollo Social* (MDS, or Ministry of Social Development). With its creation, the MDS took certain tasks that were responsibilities of MIDEPLAN, such as the ex-ante evaluation of public investment projects, as well as additional tasks such as the coordination, ex-ante evaluation, and monitoring of social programs through the new *Banco Integrado de Programas Sociales* (BIPS, or Integrated Repository of Social Programs). For its coordination role, it created the *Comité Interministerial de Desarrollo Social* (Inter-Ministerial Committee on Social Development). Second, an initiative called *ChileGestiona* (ChileManages) was introduced in the Ministry of Finance with the objective of improving management in government agencies. Third, a *Unidad Presidencial de Gestión de Cumplimiento* (Presidential Compliance Management Unit), commonly referred to as the Delivery Unit, was established within MINSEGPRES. The Delivery Unit coordinated and monitored presidential priorities. Finally, one of the existing systems, the PMG, was significantly modified, moving away from its focus on management systems and towards output performance indicators.

After these reforms were introduced, coordination was one key challenge. The reason for that is that these reforms were the first to add responsibilities to an institution other than DIPRES. Both MINSEGPRES as well as the MDS had frequent working meetings with DIPRES, while the team of ChileManages worked on



improving central coordination with individual government agencies (MH1, 2016; OI8, 2016; OI10, 2016).

In March 2014 Bachelet returned to the presidency. Two out of the four reforms introduced by Piñera were abandoned by Bachelet: ChileManages and the Delivery Unit. There are two reasons why this happened. The first reason is that both reforms did not have enough time to become fully internalized as the four-year period was not enough to understand the issues, design a solution, and fully implement it (OI7, 2016; OI8, 2016; OI9, 2016). An OECD report describes the Piñera team as “suddenly finding itself in charge of the massive ship of state, discovering that it is no easy matter to fully master the controls and move public policies and expenditure in the direction of its priorities” (Hawkesworth, Huerta Melchor, & Robinson, 2013, p. 148). Furthermore, these reforms were never introduced into law, making them easier to remove (Guzmán, Irrarrázaval, & de los Ríos, 2014).

However, the reason that most interviewees mention as the most important one is that the Bachelet administration did not place much attention in management issues. As it happened during her first-term in office, management issues barely made it into the government agenda, which only refers to reforming the ADP.

Bachelet agenda has overwhelmingly focused on massive educational, tributary, and constitutional reforms. As one interviewee, critical of the President’s approach, argued, “the President is focusing on major reforms that she considers to be

foundational, leaving aside how the actual implementation will follow; trying to get her to focus on management is like trying to get people during the French Revolution to do so” (OI7, 2016).

## **6.5. Summary**

Since returning to democracy in the year 1990, the Chilean government has introduced more than 20 reforms related to performance budgeting (see Table 15). The first decade of reforms, which include the Aylwin and the Frei administrations, involved the creation of what remain today as the main components of the system: evaluations, performance indicators, and the PMG. The reforms during the Lagos administration were largely intended at improving the already existing components, while the Piñera administration was the first to introduce substantive changes to the system, most of which were dropped by the next government.

***Table 15: Timeline of Chile’s Performance Budgeting Reforms***

<b><i>President</i></b>	<b><i>Year</i></b>	<b><i>Reform</i></b>
<b><i>Aylwin</i></b>	1990	<i>Sistema de Metas Ministeriales</i> (SMM, or Ministerial Goals System).
	1993	<i>Plan Piloto de Modernización en la Gestión de los Servicios Públicos</i> (Pilot Plan for the Modernization of Management in Government Agencies) which introduces performance indicators.
<b><i>Frei</i></b>	1994	<i>Comité Interministerial de Modernización de la Gestión Pública</i> (Inter-Ministerial Committee for the Modernization of Public Management).

	1996	<i>Protocolo de Acuerdo entre el Congreso y el Ejecutivo</i> (Agreement Protocol Between Congress and the Executive) which introduces <i>Evaluaciones de Programas Gubernamentales</i> (EPG, or Government Program Evaluations), and <i>Balance de Gestión Integral</i> (BGI, or Integral Management Report); and expands performance indicators.
	1997	<i>Plan Estratégico de Modernización de la Gestión Pública</i> (Strategic Plan for the Modernization of Public Management).
		<i>Programa de Mejoramiento de la Gestión</i> (PMG, or Management Improvement Program).
<b>Lagos</b>	2000	Adds strategic definitions for government agencies.
		Performance Indicators are reintroduced to the budget documents.
		PMG reformulation towards management systems.
	2001	<i>Evaluación de Impacto</i> (EI, or Impact Evaluation)
		<i>Fondo Central de Recursos para Prioridades Gubernamentales – Fondo Concursable</i> (Central Resource Fund for Governmental Priorities - Bidding Fund).
	2002	<i>Evaluación del Gasto Institucional</i> (EGI, or Institutional Expenditure Evaluation).
	2003	Legal requirement to carry-out evaluations.
		<i>Convenio de Desempeño Colectivo</i> (CDC, or Collective Performance Agreement).
		<i>Sistema de Alta Dirección Pública</i> (ADP, or Public Sector Senior Executive Service System)
<b>Bachelet</b>	2005	Introduction of ISO certifications to the PMG.
	2007	<i>Metas de Eficiencia Institucional</i> (MEI, Institutional Efficiency Goals).
	2008	<i>Fondo de Modernización de la Gestión Pública</i> (FMGP, Public Management Modernization Fund).

	2009	<i>Evaluación de Programas Nuevos</i> (EPN, or Evaluation of New Programs).
<b>Piñera</b>	2011	<i>Ministerio de Desarrollo Social</i> (MDS, or Ministry of Social Development), which includes social programs' coordination, ex-ante evaluation of social programs, and monitoring of social programs through the <i>Banco Integrado de Programas Sociales</i> (BIPS, or Integrated Repository of Social Programs).
		<i>Unidad Presidencial de Gestión de Cumplimiento</i> “Delivery Unit” (Presidential Compliance Management Unit),
		ChileGestiona (ChileManages)
		PMG reformulation towards performance indicators.
<b>Bachelet</b>	2016	ADP reforms.
	2016	<i>Evaluación Focalizada de Ámbito</i> (EFA, or Evaluation with Focused Scope).

Note: author's elaboration.

The objective of this chapter was to analyze what and how certain external and political factors influenced the decision to introduce modernization reforms. The following is a summary of the main takeaways of that analysis:

**Executive leadership was the most important factor, both from the President as well from lower levels.** During the past 25 years, presidential support for performance budgeting reforms has been critical. This can be confirmed by two facts. First, that all major reform periods have appeared immediately after a new President took office. This was the case of Frei, Lagos, and Piñera. Second, that interviewees and prior reports unanimously confirm that the three Presidents were highly invested in these reforms. Besides the President, Mario Marcel was a key

source of executive leadership, participating extensively for more than a decade with three different administrations. Interviewee reports and documents of his influence are abundant.

**External pressure for politically motivated reforms had some, but not much impact.** There is clear evidence of two cases that were motivated, at least partly, by external pressure to reform. Both of those cases happened during the Lagos administration – one responded to general uneasiness from the private sector, and the other from popular demand to act against corruption. While it is almost impossible to prove unequivocally that other reforms were not politically motivated, it seems reasonable to say that the case of Chile was driven by a small group of leaders that wanted to improve governance.

**Reforms were almost never systemic, arguably resulting in concentration of power.** In almost every case, performance budgeting reforms were designed inside DIPRES and introduced directly by DIPRES in budget negotiations. It is very likely that that is one reason why almost all components of the performance budgeting system are managed by DIPRES. While there is a probability that DIPRES is naturally the most suitable institution to carry-out these tasks, it seems likely that a more systemic approach (like Piñera intended) would have resulted in less attribution for DIPRES and more for other institutions such as MINSEGPRES or the now abolished MIDEPLAN.

**The economic situation had a negative consequence, but also an unexpected positive one.** Performance budgeting reforms often appear in times of economic downturns. This happens because as resources become scarcer, the perceived urgency to use resources efficiently rises. Many interviewees confirmed that the perceived abundance of resources was in many cases used as a reason not to prioritize reforms. However, the case of Chile shows an positive unexpected consequence: lack of urgency allowed reformers to introduce performance budgeting gradually, i.e. allowing each component to mature before expanding it throughout the government, and before introducing more components on top of it.

## Chapter 7: Characteristics of the System

The previous chapter presented an analysis of the circumstances that led to the introduction performance budgeting reforms. In this chapter, we turn to the technical characteristics of those reforms. The description of the systems presented in this chapter is based on the current situation, unlike the historical analysis used in the previous chapter. The research framework of this study provides guidance on which factors to focus. Those factors include the quality and the timely availability of performance information; the horizontal and/or vertical structural arrangements under which institutions interact; the reform's legal framework; and other general characteristics of the budgeting cycle and/or the performance budgeting reforms that are particularly notorious for this case.

The chapter is divided in three sections. Section 7.1. presents an overview of the budgetary cycle, including a description of its timeline, the responsibilities of its participants, and an analysis of its distinctive characteristics as highlighted in the literature and by interviewees. Section 7.2. describes the technical characteristics of each component of the performance budgeting system and provides an analysis of each of them based on the variables in our research framework. The final section summarizes the main findings and links them with those of the previous chapter.

## **7.1. Characteristics of the Budgetary Cycle**

### ***7.1.1. Budget Formulation***

The formulation of the budget for any given year officially starts when the Central Budget Office (DIPRES) communicates budgetary ceilings to all line ministries<sup>25</sup>. This information, which is not made public, is sent out in the month of July, five months prior to the start of the fiscal year. Line ministries may try to negotiate these ceilings with DIPRES, but this normally does not happen (Blöndal & Curristine, 2004). This fact was further confirmed by an officer at the Ministry of Finance who explained that line ministries need to be careful when asking for changes in their budgetary ceilings, as these requests, if unsubstantiated, may result in budget reductions (MH3, 2016).

A month after receiving their budgetary ceilings, line ministries submit their proposals and individually meet with DIPRES officials to discuss them. The DIPRES officials leading these meetings, known as *sectorialistas* (sectorialists), have a particularly low turnover rate and specialize in specific line ministries which they tend to cover for many years. Therefore, those officials are usually very experienced and knowledgeable about the budgetary history of the line ministries that they analyze. Negotiations happen almost entirely during the month of August, and the results are documented in reports that are presented to the Budget Director (the head of DIPRES).

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<sup>25</sup> Chile's fiscal year matches the calendar year.



September is the final month of budget formulation. In this month discussions are taken to a higher level. First, the Budget Director presents his proposal to the Minister of Finance; then, the Minister of Finance does the same with the President. As this chain of discussions moves forward, the level of details discussed get reduced; for example, the President usually focuses only on particular programs that are being expanded (MH3, 2016). As the final document is agreed upon, DIPRES prepares the final documentation that is submitted to Congress by the end of September.

There are certain particularities of the formulation stage that have been identified in previous studies. Arguably the most relevant of those particularities is how budgetary power is centralized in the executive branch, which holds exclusive authority to initiate legal reforms that affect public monies and which has much stronger technical capacity to deal with the complexities of budgeting issues (Marcel, 1998; Zaltsman, 2009; Blöndal & Curristine, 2004). Furthermore, within the context of a strong executive branch, the DIPRES is particularly powerful in managing processes, leaving little space for input from line ministries (Rojas, et al., 2005; Blöndal & Curristine, 2004; Marcel, 1998).

**Table 16: Chile's Executive Budgetary Authority as Compared to Other Latin American and Caribbean Countries**

As in many Latin American and Caribbean (LAC) countries (see Chapter 3), Chile's executive budget authority is much higher than that of the legislature. For example, the Chilean Congress is limited in that it may not revise revenue calculations nor increase expenditures (Schick, 2002). That same article explains that the few budget changes made by the Chilean Congress are the result of negotiations with the executive.

Another publication explains that "the Chilean political system is one of the strongest presidential systems in Latin America. The Executive has exclusive legislative initiative on several policy areas, has a highly hierarchical control of the budget process, and has an array of urgency and veto options, which makes it a de facto agenda-setter. (...) Within matters of law, the Executive has the sole legislative initiative over legislation concerning the political and administrative divisions of the state, its financial administration, the budget process and the selling of state assets. Also, the Executive has sole initiative in areas such as taxation, labor regulation, social security and legislation related to the Armed Forces. Therefore, the Executive has sole authority to initiate legislation that requires budget increases or allocation of new funds, which gives it exclusive legislative initiative over most economic policy areas" (Aninat, Landregan, Navia, & Vial, 2006, pp. 27-28).

Besides the strength of the executive branch as compared to the legislature, Chile has a very powerful central budget office (DIPRES). As explained in Chapters 6 & 7, DIPRES has had prominent role in proposing and implementing budgetary reforms, as well as a strict control over the budget formulation and approval phases. While these characteristics are similar to that of other LAC countries, they are not shared by most Organization for Economic Co-Operation and Development (OECD) countries (Marcel, Guzmán, & Sanginés, 2014; OECD, 2016).

Note: author's elaboration.

A second particularity of Chile's budgeting process is that it functions within a context of fiscal responsibility, increasing the credibility of the commitments made in the budget law. The case for fiscal responsibility was further institutionalized with the adoption of a structural budget balance rule in the year 2000, which later became the basis for the very highly appraised fiscal responsibility law (Rodríguez C., Tokman R. , & Vega C., 2007; Kumhof & Laxton, 2009; Marcel, 2013; Frankel, 2011).

A recent study published by the Organization for Economic Co-Operation and Development (OECD) criticized the fact that Chile's budget lacks a program-based structure. The study argues that Chile's budget does not link expenditure line items with strategic objectives, which reduces transparency and obstructs the use of performance information in budget discussions (Hawkesworth, Huerta Melchor, &

Robinson, 2013). Interviewees at the Ministry of Finance agree that they should adopt a program-based structure, but one of them explained that they do internally define ad-hoc programs when analyzing the budget with each government agency (MH1, 2016; MH3, 2016).

Finally, the same study by the OECD also criticizes Chile's medium-term framework, describing it as too aggregated and not fully reliable (Hawkesworth, Huerta Melchor, & Robinson, 2013). The study explains that "ministry-level forward estimates are purely internal to the Ministry of Finance and are not made available to the ministries and institutions concerned", which causes these estimates not to "play the role of reducing spending institution uncertainty about future funding levels", and that DIPRES needs to work on its methodologies for expenditure and revenue estimates (Hawkesworth, Huerta Melchor, & Robinson, 2013, p. 173).

### ***7.1.2. Budget Approval***

The budget approval stage in Chile is characterized by the fact that Congress is heavily restricted in what it can do with the executive's budget proposal (see Table 17). Some examples are that if Congress fails to pass a budget by the end of November, the executive proposal automatically becomes law; and that Congress has no authority to neither increase spending nor amend the revenue forecast.

**Table 17: Constitutional Restrictions on the Role of Congress in Chile**

- Congress may only decrease expenditures for programs. It may not increase expenditures or reallocate expenditures between programs.
- Congress cannot amend the economic assumptions or the revenue forecasts used in the budget proposal.
- If Congress does not approve a budget (either the original proposal from the government or as amended by Congress) by 30 November, the original government proposal becomes law.
- Congress may not scrutinize arms purchases by the military. This applies to the 10% of the gross revenue of the government-owned copper mining company which must be transferred to the military.
- The President sets the agenda of Congress by giving priority status to bills that he desires and gives Congress a specific number of days to consider them.

Note: from (Blöndal & Curristine, 2004, p. 21).

Within that restricted environment, a Budget Committee in Congress listens to the proposal set forth by the Minister of Finance and the Budget Director. The Budget Committee then splits into subcommittees, each of which analyses a different area of the budget (for example, health, education, etcetera). While there are some ‘rare’ behind-the-scenes negotiations between Congress and the executive, the former has little budgetary impact (Blöndal & Curristine, 2004).

The budget proposal returns to the executive no later than November 30 and gets signed by the President early in the month of December. Just a month after that, the cycle starts all over again as the formulation of the next budget begins (see Table 18).

**Table 18: Chile's Budget Cycle**

<b>Month</b>	<b>Activity</b>
<b>January</b>	- Final information gathering of budgetary execution from year t-1.
<b>February</b>	- Presentation of statistics of budgetary execution from year t-1.
<b>March</b>	- Prepare to evaluate budgetary execution from year t-1.
<b>April</b>	- Evaluation of budgetary execution from year t-1.
<b>May</b>	- Evaluation of continuity expenditure.
<b>June</b>	- Inform Congress of year t-1 budgetary execution' evaluation results. - Update forecast for year t.
<b>July</b>	- Submission of budgetary ceilings to line ministries. - Line ministries submit their budget requests.
<b>August</b>	- Technical meetings between DIPRES and line ministries. - Definition of macroeconomic forecasts based on the judgement from independent experts. - Determine resource availability minus continuity expenditure.

<b><i>September</i></b>	<ul style="list-style-type: none"> <li>- Allocation of available resources to program expansions, and/or new initiatives.</li> <li>- Bilateral meeting between DIPRES and line ministries to determine allocation of additional resources.</li> <li>- Submission of budget proposal to Congress.</li> </ul>
<b><i>October</i></b>	<ul style="list-style-type: none"> <li>- Presentations from the Ministry of Finance to Congress.</li> <li>- Budget analysis by congressional sub-commissions.</li> <li>- Draft of Agreement Protocol.</li> </ul>
<b><i>November</i></b>	<ul style="list-style-type: none"> <li>- Voting in Congress.</li> <li>- Signing of the Agreement Protocol.</li> </ul>
<b><i>December</i></b>	<ul style="list-style-type: none"> <li>- Enactment of Budget Law.</li> <li>- End of current fiscal year.</li> </ul>

Note: from (DIPRES, 2005, p. 8).

### ***7.1.3. Budget Execution and Evaluation***

Budget execution is carried-out throughout the fiscal year, concurrently with the formulation and approval of the budget for the following year and the evaluation of the budget from the previous year. During budget execution, line ministries get monthly disbursements limits and might see their approved budget changed through executive decrees that modify the budget law (DIPRES, n.d.). However, the latter tend to be small as Chile's approved and executed budgets usually differ by not more than three or four percentage points. Another characteristic of budget execution in Chile is that providers are rarely paid at all during the first month of the year and that all projects must end by December (reopening in January if needed) (MOP3, 2016). Interviewees at the Ministry of Public Works explained that that last characteristic

tends to be especially problematic for projects that due to climate conditions can only be executed after the end of winter in late September, only three months prior to the end of the fiscal year.

As shown in Table 18, DIPRES carries out a comprehensive evaluation of budgetary execution during the first half of the year<sup>26</sup>. DIPRES internal process starts in January with the compilation of budget execution data from the previous year; continues with further analyses of that information during the months between February and April; and ends in the month of June, when they send a report to Congress and establish initial projections for the upcoming year. The evaluation process provides the information needed to determine budgetary ceilings, which is the cornerstone of budget formulation.

## **7.2. Characteristics of the Performance Budgeting System**

### ***7.2.1. Strategic Definitions and Performance Indicators***

As explained in the previous chapter, performance indicators were the first component of Chile's performance budgeting system, initially introduced in only five institutions through the Pilot Plan for the Modernization of Management in Government Agencies of 1993. Since then, the use of performance indicators has been through several stages. First, performance indicators were quickly expanded to most of Chile's government agencies, reaching 80% of them by the year 1997

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<sup>26</sup> Other reports of budget execution are made available before the comprehensive evaluation ends.



(Arenas de Mesa & Berner Herrera, 2010). From 1998 to 2000 performance indicators were used to determine whether or not institutions would be awarded economic bonuses through the Management Improvement Program (PMG). Because of their linkage to the PMG, performance indicators were excluded from budgetary appendices during the years 1999 and 2000. Performance indicators were removed from the PMG in 2001 and, since then, reintroduced as budgetary appendices and complemented with strategic definitions<sup>27</sup>. Finally, since the year 2011 performance indicators were reintroduced as the basis to determine PMG's variable remunerations, while also kept as part of the budgetary appendices that are presented to Congress.

The methodologies for the elaboration of performance indicators place special attention on two aspects. The first differentiates indicators that focus on processes, outputs, intermediate outcomes, and final outcomes. Currently, 75% of indicators relate to outputs, 17% to outcomes (both intermediate and final), and 8% to processes (DIPRES, 2015). The second distinguishes indicators related to efficiency, effectiveness, economy, and quality of service. Among these dimensions, effectiveness is the focus of 67% of indicators, followed by quality, economy, and efficiency with 25, 5, and 3%, respectively. All performance indicators are publicly available in DIPRES website and are presented to Congress during budget approval.

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<sup>27</sup> Strategic definitions and performance indicators are colloquially known in Chile as 'form A1' and 'form H', respectively, in reference to the budgetary forms where line ministries send them to DIPRES.

For the case of strategic definitions, government agencies are required to submit a form that includes seven aspects that should be interrelated (see Table 19). For example, the strategic products of the government agency (the goods and services it provides) must be directly linked to its strategic objectives, which in turn must be linked to the strategic objectives of the line ministry to which the government agency belongs.

***Table 19: Contents of Strategic Definitions (Form A1)***

1. List of organic laws or decrees that regulate the line ministry.
2. Institutional mission of the government agency.
3. Strategic objectives of the line ministry.
4. Strategic objectives of the government agency. This section includes boxes that allows linking the strategic objectives of the government agency with its own strategic products and with the strategic objectives of the line ministry.
5. Strategic products (goods and services). This section includes boxes that allows linking the strategic products of the government agency with its clients, and to specify if they have geographic and gender focus.
6. List of clients and an estimated quantification of each of them.
7. Amount of resources in the budget divided per each strategic product.

Note: from Form-A1 – DIPRES.

The process of developing performance indicators and strategic definitions occurs every year between the months of July and September. The following is a summary of the process as described in (DIPRES, 2015). First, government agencies submit their proposals online as instructed in budgetary form A1 (strategic definitions) and budgetary form H (performance indicators). Each performance indicator must be submitted together with its “calculation algorithm, explanatory technical notes, verification sources, and its committed goal for the next period” (DIPRES, 2015, p. 12). This stage ends when the budget proposal is submitted to Congress. Then, performance indicators and strategic definitions are updated based on the observations made in Congress. The final versions are defined in the month of December and published in the website of DIPRES. Lastly, as one interviewee confirmed, performance indicators are not monitored by DIPRES throughout the fiscal year; instead, there are revised only during the first trimester of the following year (MH1, 2016).

There are several working meetings between the DIPRES and each government agency during the process described in the previous paragraph. From the perspective of government agencies, these meetings in particular, and the process of elaborating indicators in general, are not positive instances for performance improvement. A general theme mentioned by interviewees is that they have no ownership over the indicators, i.e. they are seen as a tool by and for DIPRES. For that reason, government agencies tend to see the process as a bureaucratic hurdle that they just need to get through (SES1, 2016; MS2, 2016; MS3, 2016; ME6, 2016).

Furthermore, some interviewees explained that DIPRES commonly imposes indicators and/or targets (ME7, 2016; MOP3, 2016; SSS5, 2016) which may, in some cases contradict the objective of a program and/or be more stringent than what international good-practices recommend<sup>28</sup>. There was only one interviewee who, despite acknowledging a somewhat authoritarian position from DIPRES, described the process of elaborating performance indicators as a positive one (MS2, 2016).

If one analyzes the process from the perspective of DIPRES, one may find reasonable causes why they want to push line ministries to improve their goals. As a current official explained, the process is subject to asymmetries of information where only government agencies know what are their key strategic objectives and the goals that should be set (MH1, 2016). In fact, one former DIPRES official suggested that DIPRES needs to push stronger for line ministries to define challenging and relevant targets (OI7, 2016). Section 7.2.2. explains that this particular issue has been exacerbated since performance indicators were reintroduced in the PMG. Under these circumstances, it is reasonable for DIPRES to try and push government agencies to commit to more challenging goals.

The lack of legal framework is another source of concern from the perspective of DIPRES. As explained by one interviewee, the lack of a legal framework prevents

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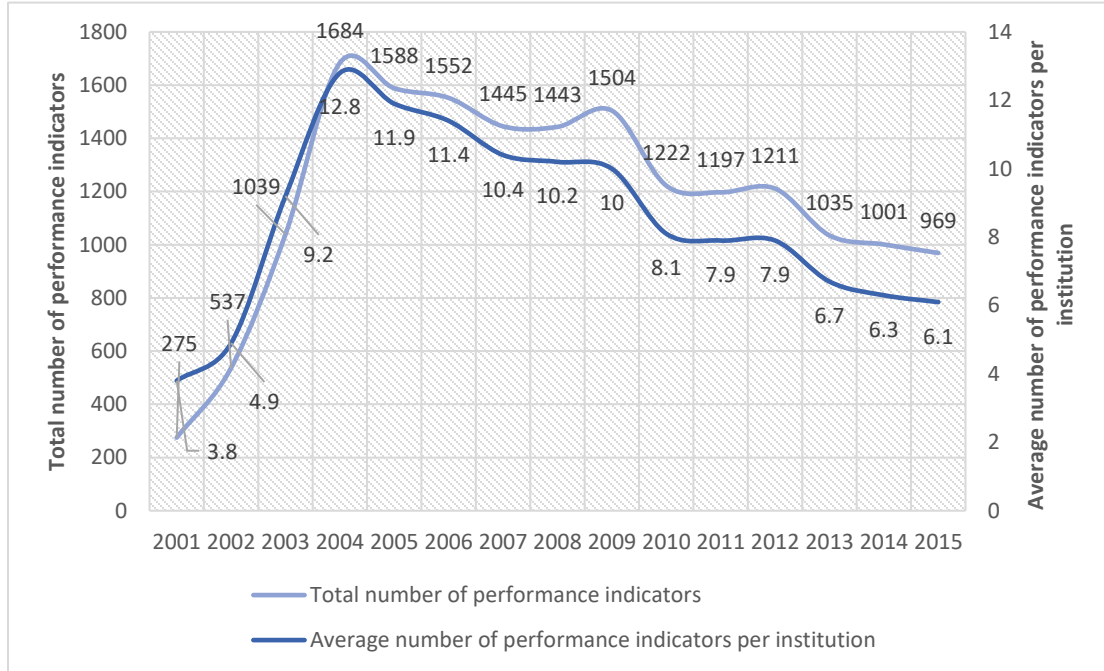
<sup>28</sup> For example, DIPRES may require a government agency to lower the difference between original and actual costs of a public investment project even when the government agency is already meeting international good practice benchmarks for that indicator. In another case, DIPRES pushed a program to increase its coverage even when the goal of the program is to reduce the number of people who require their services.

DIPRES from accessing already existent administrative data that would improve the quality of performance indicators (MH1, 2016). As explained in the previous chapter, the introduction of performance indicators was not accompanied by an updated legal framework.

In the past fifteen years, the coverage level of performance indicators has increased, reaching a higher number of public sector institutions. From the year 2001 to the year 2015, the number of institutions that submit performance indicators to DIPRES has increased from 72 to 158 (DIPRES, 2015). However, there is still room for increasing coverage as 25% of institutions that formulate budgets with DIPRES still do not use performance indicators (DIPRES, 2015).

While the number of institutions that report performance indicators has risen, the total number of indicators and the average number of indicators per institution has declined in the last ten years. Figure 15 shows that from 2001 to 2004 the total number of performance indicators, as well as the average number of indicators per institution, rose significantly. However, those two numbers have declined for over a decade, reaching in 2015 a level that is below that for 2003.

**Figure 15: Performance Indicators in Chile, Years 2001-2015**



Note: based on (DIPRES, 2015).

The decrease in the number of indicators has been at least partly intentional, as some authors have reported that having too many indicators resulted in too much work for line ministries (Guzmán, Irrarrázaval, & de los Ríos, 2014). However, having an average of only six indicators per institutions means that it is unlikely that performance indicators are currently capturing all the key programs of each institution. This has been confirmed by multiple interviewees who stated that their programs do not have any performance indicators with DIPRES, and, even when they do, the indicator tends not to be a sufficient and/or a desirable metric to analyze the program's performance (SES1, 2016; ME1, 2016; ME4, 2016; MS1, 2016; MS3, 2016; MS4, 2016; SSS4, 2016; SSS5, 2016; SSS6, 2016).

Besides what was stated by the interviewees, there is an additional measure that suggests that performance indicators cover less relevant topics today than they did some years ago. A recent publication by DIPRES shows that the percentage of strategic products that are directly associated to a performance indicator has dropped from 69 to 49% in the years 2010 to 2014, respectively. The lack of linkage between products and indicators was been pointed out as an issue more than a decade ago (Blöndal & Curristine, 2004), and had been partially solved in the period 2006-2010 (Arenas de Mesa & Berner Herrera, 2010); but has reemerged in recent years.

#### ***7.2.2. Management Improvement Program (PMG) and Collective Performance Agreement (CDC)***

The PMG is without a doubt the most complex component of Chile's performance budgeting system. To explain it thoroughly, this section goes through what have been the three versions of the PMG. The original version was active from the years 1998 to 2000. The second version lasted ten years, from 2001 to 2010. The current version was introduced in the year 2011. The current version has been particularly criticized; the main arguments of its critics are included at the end of this section.

The original version of the incentive system, as introduced by the Law No. 19.553 of 1998, included institutional-level incentive, known as the PMG, and an individual-level incentive that accounted for up to 3 and 4% of public employees'

salaries, respectively<sup>29</sup>. From its introduction in 1998, and up until the year 2000, the PMG was linked to performance indicators which in most cases were linked to processes and inputs (DIPRES, 2014). Article 6 of the law stated that the 3% institutional-level bonus was to be received if the indicator was met to a rate of 90% or more; that half of the bonus will be due to those institutions with a success rate between 75 and 90%; and that no bonus was awarded to those institutions with a lower success rate. Article 7 referred to individual-level incentives which would depend on individual evaluations carried-out by a *Junta Calificadora* (Qualifying Board). The top third of employees were to receive the complete 4% bonus; the second third would get half of the bonus; and the final third no bonus.

The second version of the PMG was introduced in 2001. The main change was that performance indicators were replaced by management systems, referred to as the *Programa Marco Básico* (Basic Framework Program). The Basic Framework Program was subject to small modifications in the following years until a final version was defined in 2005. The final version included eleven management systems divided in five management areas<sup>30</sup> (see Table 20). In the year 2005 the scale was expanded for those institutions who had reached the highest level on a management system. The expansion involved the creation of an *Programa Marco Avanzado* (Advanced Framework Program) which was linked to International Organization for Standardization (ISO) certifications. A final expansion was added in the year 2009

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<sup>29</sup> When it was adopted, the PMG also included a fixed salary increase which is not addressed in this paper.

<sup>30</sup> Of the ten original management systems, nine remained in 2005.



with the *Programa Marco de la Calidad* (Quality Framework Program) which focuses on the provision of goods and services (Arenas de Mesa & Berner Herrera, 2010).

**Table 20: Basic Framework Program of the PMG for the Year 2005**

<b>Management Area</b>	<b>Management System</b>
<b>1. Human Resources</b>	1. Training 2. Hygiene, Security & Workplace Conditions 3. Performance Evaluation
<b>2. Service Quality</b>	4. Information, Suggestions and Complaints Offices 5. Electronic Government
<b>3. Planning / Control / Geographic Management</b>	6. Management Control and Planning 7. Internal Audit 8. Territorial Management
<b>4. Financial Administration</b>	9. Procurement & Recruitment 10. Financial and Accounting Administration
<b>5. Gender</b>	11. Gender Focus

Note: from (Arenas de Mesa & Berner Herrera, 2010, p. 38).

Each of the eleven management systems was composed by a set of four to six levels. That way, as each institution improved each its management system, it would move forward to the next level. The design of the levels and the evaluation of accomplishments was the responsibility of the so-called *Red de Expertos* (Experts

Network), which was composed by a group of public sector institutions specialized in each management system (Arenas de Mesa & Berner Herrera, 2010).

As explained in (Arenas de Mesa & Berner Herrera, 2010), each institution had some decision-making power on how to advance on each of the eleven management systems. First, institutions assigned priority levels to each system. High-priority meant that that specific system would represent 15% of their total PMG score, while medium- and low-priority meant a 10 and a 5% of the score, respectively<sup>31</sup>. Second, some management systems could be eliminated or modified if they were found not to be applicable to the nature of the institution.

The incentive systems were subject to further modification in the period from 2001 to 2010. In the year 2003 the individual-level incentives were eliminated in favor of team-based incentives known as the Collective Performance Agreement (CDC). The CDC are intended for small teams inside government agencies that can define performance indicators with the head of their agency (Arenas de Mesa & Berner Herrera, 2010). The idea of this modification was to allow government agencies to set realistic goals internally (Centro de Sistemas Públicos, 2016). Another modification was the introduction of the Institutional Efficiency Goals (MEI), a system almost identical to the PMG, for a handful of public sector institutions that were not eligible for the PMG incentives<sup>32</sup>. Finally, the last modification during the

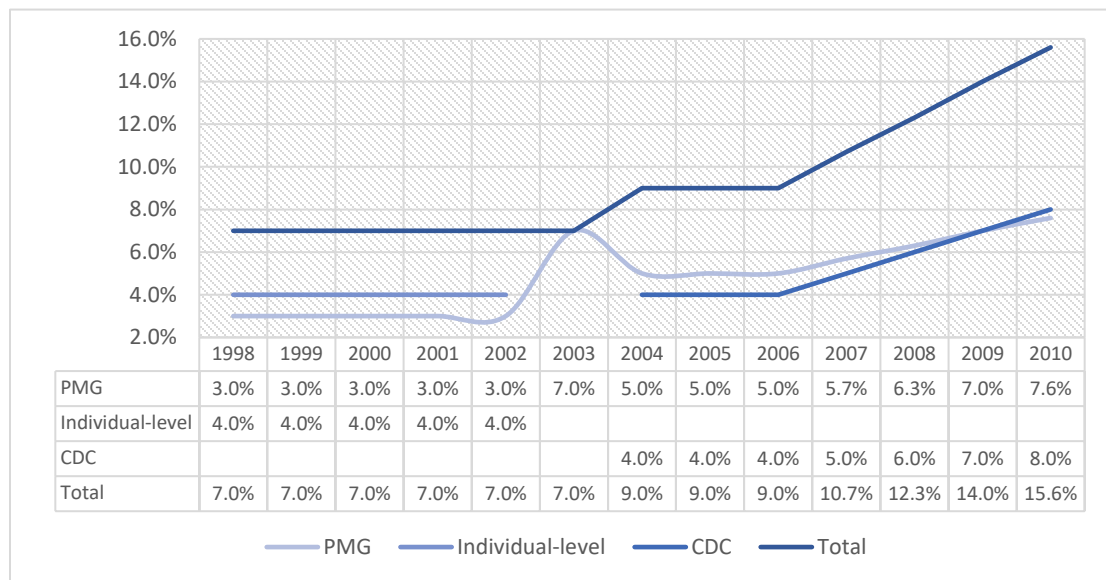
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<sup>31</sup> The sum of the eleven systems had to be 100%.

<sup>32</sup> Those institutions are out of the scope of this study.

2001-2010 period relates to the size of the PMG and CDC bonuses. As Figure 16 shows, the PMG incentive increased from 3 to 7.6% of the base salary, while the CDC was doubled from 2004 to 2010.

**Figure 16: PMG and CDC Variable Monetary Incentives, as a Percentage of Base Salary**



Note: based on (The World Bank, 2008).

The current version of the PMG has been in place since the year 2011<sup>33</sup>. It differs from the previous version in the following aspects, as described in (DIPRES, 2014). The most significant difference is that management systems were phased out and performance indicators were set as the only determinant of PMG bonuses<sup>34</sup>.

<sup>33</sup> Early in the year 2017 after the completion of this study, but before its publication, there have been new modifications to the PMG.

<sup>34</sup> This process took four years where the weight of performance indicators was increased to 50, 60, 80, and 100% annually from the years 2011 to 2014, respectively.

However, these internal management indicators had fixed formulas for all institutions that used them; for example, one indicator is the percentage of public bidding processes that result in no offers. A second difference is that the Experts Network was complemented with external reviewers for the elaboration of indicators, and replaced by the latter for the evaluation of results. A third difference is that the achievement level needed to access the bonus was restructured into a scale with more grades. For instance, institutions could now receive 0, 50, 75, or 100% of the incentive.

As explained in the previous chapter, the 2010-2011 reforms of the PMG were at least partially motivated by technical deficiencies that had been noted in previous years. A World Bank assessment of the PMG was published in the year 2008 and it was later referenced as a key diagnostic in an official DIPRES document prepared at the end of the Piñera administration (DIPRES, 2014). The assessment from the World Bank presented four general recommendations summarized here:

- Adjust later stages of the PMG to make them more flexible and less complex. The lack of flexibility is highlighted, as it is stated that the PMG uses the same standards for different types of line ministries, which may be limiting their ownership and participation.
- Redirect PMG indicators more towards citizen satisfaction and less to processes. It was recommended to address this recommendation, while also increasing the PMG's flexibility, by using multiple agency-based management systems that had been applied in other OECD countries.

- Keep the management systems approach with yearly improvement processes, while focusing later stages more closely to *front office* systems, i.e. those linked to citizen satisfaction.
- Strengthen the linkage between the PMG, other performance-based systems, and the budget cycle. It was recommended to do this by working on the program structure of the budget and by selecting the programs that would benefit the most from a stronger linkage to performance-based systems.

The reforms made to the PMG do not fully address the recommendations made by the World Bank. On the first recommendation, the reforms have failed to increase flexibility or participation. While the current system is less complex, almost two thirds of interviewees at line ministries who commented on the PMG said that indicators are either not relevant/appropriate to measure program success, or not challenging enough to work as an incentive (MS1, 2016; MS3, 2016; MS4, 2016; MOP3, 2016; MOP6, 2016; SSS4, 2016; SSS5, 2016; SSS7, 2016; ME1, 2016; ME3, 2016; ME4, 2016; ME6, 2016; ME8, 2016) This finding is consistent with that of other recent studies (Centro de Sistemas Públicos, 2016).

The second and third recommendations were not met either. The reforms changed the PMG management systems to performance indicators, and while the latter are less process-oriented than the former, they are not citizen centered as recommended by the World Bank. In addition, the World Bank recommended

keeping the management systems approach: “with regards to the group of basic systems, management systems, and systems of strategic activities, which constitute the backbone of the current functioning of the PMG, there is no doubt of the need to keep them within the PMG, continuing the policy of improving year by year.” (The World Bank, 2008, p. 22).

On the final recommendation of improving the linkage with the budget cycle and other performance-based systems the reforms show mixed, but mostly negative, results. On the one hand, the PMG is now closely linked to performance indicators (which in turn should be linked to strategic definitions). However, the way of establishing such linkage does not seem ideal. As one interviewee explained, linking performance indicators to monetary incentive increases the likelihood of gaming behavior, so the reforms repeated a mistake that had already occurred in the first version of the PMG (years 1998-2000) (OI7, 2016). On the other hand, as explained earlier in this chapter, the key issue of budgetary programs has not changed.

There is one additional issue that was, at best, only superficially mentioned in the assessment by the World Bank but that has been widely discussed in other studies and internally in the Chilean government. The issue is that throughout the years the percentage of institutions that get the maximum incentive has become astonishingly high. For example, in the year 2014 a total of 99,5% of institutions got the maximum reward level, while the other 0,5% still got half of the reward (Centro de Sistemas Públicos, 2016). According to a recent study, “over the last 5 years virtually 100% of

public sector officials have earned the entire incentive reward” (Centro de Sistemas Públicos, 2016, p. 9). Because of this phenomenon, some interviewees argued that nowadays most public sector employees see the PMG incentive as a fixed part of their salaries, rather than as a variable pay that they need to earn (OI1, 2016; OI4, 2016; MH1, 2016).

Finally, the situation described in the previous paragraphs for the PMG appears to be equally applicable for the CDC. There was not a single interviewee that argued that the CDC system works any differently than the PMG. In fact, a publication by DIPRES explains that “while the minimum size of a team for the CDC is 5 people, in practice the average team size is 40, with some teams surpassing 500 members” (DIPRES, 2014, p. 7).

### ***7.2.3. Ex-Post Evaluation System***

Chile’s ex-post evaluation system consists of four different lines of evaluations that differ on their objectives, scope, and methodologies. As detailed in Chapter 6, the evaluation system started in the year 1997 with Government Program Evaluations (EPG); was expanded in the years 2001 and 2002 with Impact Evaluations (EI) and Institutional Expenditure Evaluation (EGI); and in 2009 with the Evaluation of New Programs (EPN). A fifth line of evaluation, Evaluation with Focused Scope (EFA) was added in 2016 and at the time of this writing no EFA had been published. On average, about 30 evaluations are carried-out each year, about

two-thirds of which are EPG (Guzmán, Irarrázaval, & de los Ríos, 2014). Table 21 lists some of the main differences between the four evaluation lines.

**Table 21: Main Differences Between Chile’s Ex-Post Evaluation Lines**

	<b>Program (EPG)</b>	<b>Impact (EI)</b>	<b>Institutional Expenditure (EGI)</b>	<b>New Programs (EPN)</b>
<b><i>Focus</i></b>	Consistency between program’s objectives and design. Organization, management and results for each component.	Impact of government intervention on its beneficiaries.	Strategic consistency between institutional and sectorial objectives, institutional design, managerial and production processes, financial management, delivery of goods and services.	Contrast proposed and actual program design.
<b><i>Methodology</i></b>	Logical Framework.	Quasi-Experiments.	No fixed methodology. Commonly uses matrix analysis.	Defined ad-hoc for each case.
<b><i>Duration</i></b>	6 months.	18 months.	12 months.	Not specified.

Note: based on (Arenas de Mesa & Berner Herrera, 2010; DIPRES, 2015).



All DIPRES evaluation lines have some aspects in common. One of the most prominent features is that evaluations are carried-out through external evaluators hired by DIPRES under consultation with the counterpart that will be subject to the evaluation. Other aspects are that they are planned around the budget cycle, and that their results are made public and sent to Congress.

**Table 22: Chile’s Monitoring and Evaluation as Compared to Other Latin American and Caribbean Countries**

Chile is one of the few Latin American and Caribbean (LAC) countries that have implemented a Monitoring and Evaluation (M&E) system. A recent survey of 25 LAC countries by the Inter-American Development Bank (IDB) found that only Chile, Colombia and Mexico have implemented M&E systems, and that Chile is the most advanced country among those three (Feinstein & García Moreno, 2015). Similarly, a publication by the World Bank argues that “the M&E systems in Chile have a long history that dates back as far as the 1970s, with the first steps taken by the National Investment System. In the 1990s, DIPRES led the implementation of a collection of M&E mechanisms that support the budget cycle. During the 2000-09 period, DIPRES was able to consolidate its M&E systems and install a culture of evaluation within government. (...) At present, there are procedures that define different instances of evaluation and monitoring mechanisms throughout the public policy cycle. There is also a level of experience that government organizations have acquired with respect to M&E issues, given the evolution of monitoring tools

and the large number of ex-ante and ex-post evaluations that have been carried out to date” (Guzmán, Irarrázaval, & de los Ríos, 2014, pp. 36-37).

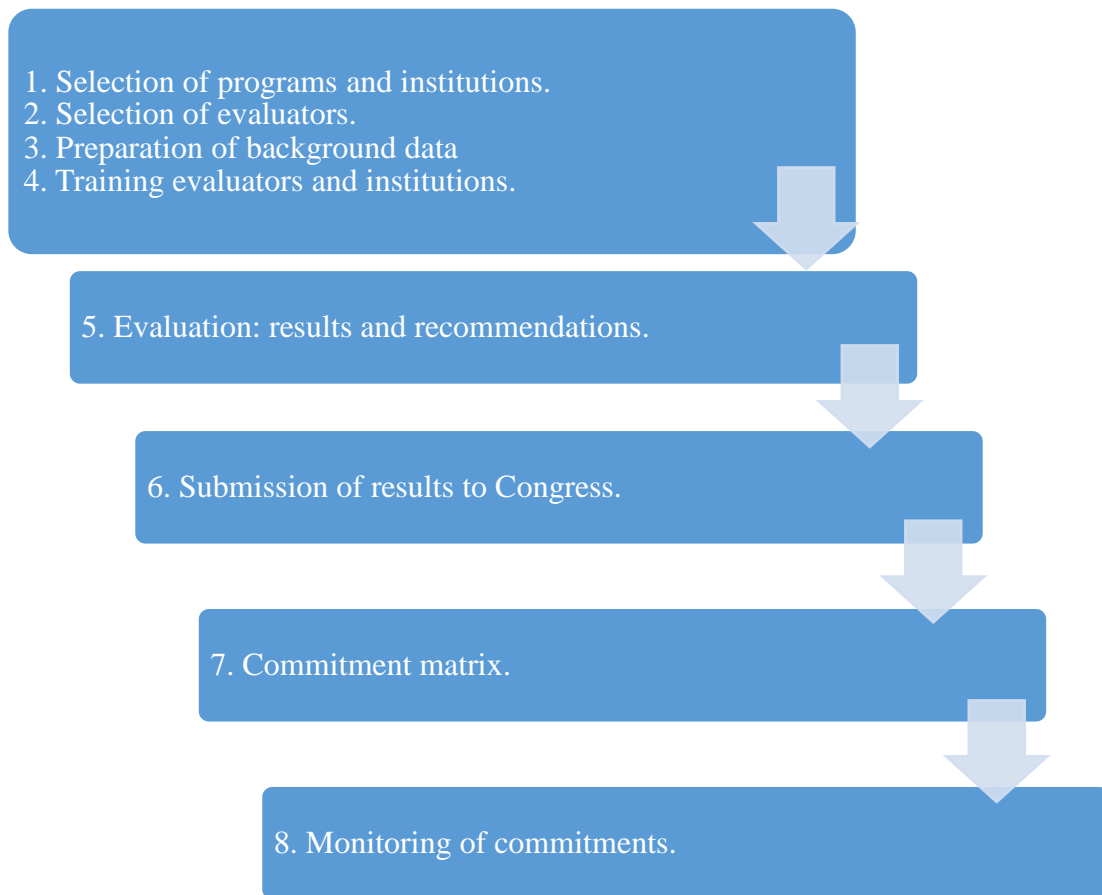
Note: author’s elaboration.

The evaluation processes and the stakeholders involved are similar for most evaluations, as summarized in Figure 17. The first step is deciding which programs and institutions will be evaluated. This decision is taken together by the DIPRES and Congress based on several aspects that include political importance, financial and performance indicators, last time that the program or institution was evaluated, suggestions from other central institutions like MINSEGPRES, among other criteria (Guzmán, Irarrázaval, & de los Ríos, 2014).

The second and third steps occur concurrently, as DIPRES initiates an open process to hire evaluators and asks institutions to prepare background information for the evaluators (Guzmán, 2005). While there are no official criteria for selecting programs or institutions; there are criteria for selecting evaluators: prior experience, academic reputation, and, for the case of EI, quality of the proposed methodology (Rojas, et al., 2005). Then, DIPRES works together with evaluators and institutions to provide methodological training and, when needed, to prepare an initial logical framework of the program to be evaluated (Guzmán, 2005). After the evaluation concludes, results are sent to Congress and published online (together with a letter from the government agency commenting on the evaluation), and a *Matriz de*

*Compromisos* (Commitment Matrix) is signed between DIPRES and the program or institution evaluated.

**Figure 17: Generic DIPRES Ex-Post Evaluation Process**



Note: from (Guzmán, 2005, p. 55).

Similar to what happens with performance indicators and the PMG, the ex-post evaluation process is over-centralized by DIPRES, reducing ownership by government agencies (Rojas, et al., 2005; Guzmán, Irrázaval, & de los Ríos, 2014). However, this centralization may have helped ensure the technical quality of the evaluations (Rojas, et al., 2005). The perception of ex-post evaluations being

centralized and time-consuming was confirmed by some interviewees at government agencies that have participated in ex-post evaluations (MS3, 2016; MOP6, 2016).

There is a particularity about Chile's ex-post evaluations that receives lots of praise: its commitment matrix. The commitment matrix is a document signed by the government agency and the DIPRES that outlines specific actions to be taken in response to findings from the evaluation. These commitments are published on the website of DIPRES after their first revision, commonly a year after the end of the evaluation<sup>35</sup>. From 1999 to June 2015 there were a total of 5,170 commitments divided among 262 programs and 38 institutions; a very high proportion of those commitments – 97% – are eventually met, although not necessarily within the initially agreed timeline (DIPRES, 2015).

This study analyzed four programs that had been recently evaluated. Interviewees from two of those programs were highly critical of their evaluations, while interviewees from the other two programs were very satisfied with their evaluations (ME2, 2016; ME3, 2016; MS3, 2016; MOP6, 2016; SSS1, 2016; SSS5, 2016; SSS7, 2016). In the cases of the two programs that complained about the evaluation, the main argument was that evaluators did not make enough of an effort to understand the more complex details of their programs; therefore, they arrived at incorrect conclusions. This finding is consistent with an assessment by the World

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<sup>35</sup> For example, as of October, 2016 the most recent commitment matrix published on DIPRES website corresponds to evaluations carried-out in the year 2014, with revisions dated December, 2015.

Bank which concluded that Chile's ex-post evaluation system is "robust and has impressive results", but that the quality of some evaluations was found not to meet international standards (Rojas, et al., 2005, p. 85). The reason behind the weak quality of some evaluations, as it is argued in that assessment, is not methodological but instead linked to weaknesses and complexities in the structure of some programs, as well as lack of information.

#### ***7.2.4. Ex-Ante Evaluation System***

There are three categories of ex-ante evaluations in Chile: public investment projects, social programs, and non-social programs. The ex-ante evaluation of investment projects, which was instituted in the 1980s as a responsibility of the Ministry of Planning & Cooperation (MIDEPLAN), is the longest standing tradition of evaluation in the Chilean government. The rules and processes for the ex-ante evaluation of investment projects have changed over time; for example, in the year 2011, as the former MIDEPLAN was closed, they became a responsibility of the newly instituted Ministry of Social Development (MDS).

The first step for an investment project to take place involves someone identifying and communicating the need for a project. While this is sometimes initiated directly by line ministries, in most cases it is done by community members and municipalities (SES2, 2016). Then, the need for a project must be translated into a proposal that line ministries present to the MDS, which must include: definition of the issue to be resolved, supply and demand analysis, analysis of potential alternative

ways to address the issue, economic evaluation, terms of reference, and detailed budget (Ministerio de Desarrollo Social - Ministerio de Hacienda, 2015, p. 11). After a series of interactions between the MDS and line ministries, the process ends when the MDS assigns the project a score (Table 23). For all the types of ex-ante evaluations described in this section, the final score is non-binding, i.e. it is not guaranteed that a project with a positive score will be funded in the budget, and it is not unlawful to fund a project with a negative score.

**Table 23: Result Categories for the Ex-Ante Evaluation of Investment Projects**

<i>Score Categories</i>	<b>Brief Description</b>
<i>Favorably recommended</i>	The project is expected to be beneficial.
<i>Lack of information</i>	The information provided is not enough to determine if the project would be beneficial.
<i>Technically objected</i>	It is not convenient to implement this project.
<i>Reevaluation</i>	The project must be reevaluated due to significant changes to the initially favorably recommended proposal.
<i>Failure to comply with regulations</i>	The project had been previously funded without an ex-ante evaluation, or its funding increased by more than 10% of the amount stipulated in the evaluation without a proper reevaluation.

Note: based on (Ministerio de Desarrollo Social - Ministerio de Hacienda, 2015).

Most of those interviewed at government agencies had positive remarks about the ex-ante evaluation of investment projects. Among those who reported issues, the most common statement was that there is a lack of coordination between MDS evaluators in Santiago and MDS evaluators in regional offices (ME1, 2016; ME9, 2016; MOP6, 2016; MOP7, 2016; SSS4, 2016). Less mentioned issues are that evaluations focus too much on the short and medium-term, and that they favor financially measurable aspects (MOP2, 2016; MOP6, 2016).

A study recently published by the Inter-American Development Bank (IDB) states that Chile's ex-ante evaluation of investment projects "has been praised by international financial institutions as a transparent mechanism to appraise investments. The uniformity of the evaluation system has prevented rent-seeking in investment decisions" (Ahmad & Viscarra, 2016, p. 27). However, that same study found that the evaluation system is biased towards projects in metropolitan areas, and does not place enough attention to environmental issues.

An official at the MDS explained that they are aware of the complaints from government agencies and that they are taking actions to address them (SES2, 2016). For example, they have changed the financial criteria for projects that provide basic services. Given the fact that those services must be provided, they are not rejecting them for being too costly, but instead they now focus on getting the least possible costs for that type of project. An additional example of recent measures to facilitate the process for government agencies is providing more flexibility to carry-out small

project expansions without the need for additional evaluations. An interviewee at the MDS admitted that they might have failed to properly communicate these changes to all government agencies (SES2, 2016).

The ex-ante evaluation of social programs is the first evaluation process in many years to be assigned to a central institution other than DIPRES. It was included as part of the legal reforms introduced by the Piñera administration in 2010, and it was assigned to the newly created MDS. The focus of these evaluations is to assess if the program's design is appropriate to meet its objectives, if its components are coherent with its goals, and if the execution plan is consistent with its design (SES1, 2016). Ex-ante evaluations are used only for new, reformulated or expanded programs, and they are processed through an online platform where government agencies submit information about their programs and the MDS replies with feedback. Officials at government agencies that have been through ex-ante social program evaluations generally suggested that the evaluations have a positive influence and allow them to structure their programs in a better way, but there were also complaints about miscommunication and lack of coordination with the MDS (MS4, 2016; SSS1, 2016; SSS5, 2016; MS3, 2016). While this is one of the few systems that have been institutionalized through a legal reform, the bases for its implementation were not clear as the law did not provide enough guidance on how to judge if a program is social or non-social (SES1, 2016).



The ex-ante evaluation of social programs was introduced together with a monitoring system for those same programs. The monitoring system called Integrated Repository of Social Programs (BIPS), can be publicly accessed online and includes a program description, information for the last three years on its coverage, performance indicators, and budgetary resources. The MDS monitors programs twice a year looking for abnormal or inconsistent information to verify with government agencies (SES1, 2016).

The final category of ex-ante evaluation is for non-social programs and it is carried-out by DIPRES. Similarly to the ex-ante evaluation of social programs done by the MDS, these evaluations focus on the consistency of the design of new, reformulated or expanded programs, and consists of an online platform where government agencies submit information about their programs. One difference is that the DIPRES ex-ante evaluations are not entirely new as they simply replaced the bidding fund system that had been in place since the year 2001 (Guzmán, Irrarázaval, & de los Ríos, 2014; MH1, 2016). There was only one interviewee who had had a program eligible for this evaluation, and stated that the process was simple and that the most important aspect is to have good communication with the evaluator (ME1, 2016).

#### ***7.2.5. Integral Management Report (BGI)***

The BGI is a very simple instrument that is used to increase performance and budgetary accountability of government agencies. The BGI, which is prepared every

fiscal year, is submitted to Congress and made public online. However, its timeline does not match budget discussions in Congress as it is submitted in April and the budget is discussed in October and November. Its current format includes, but is not limited to, the following information:

- Summary letter by the Minister and by the head of the government agency.
- Main results for the year.
- Challenges for the next year (which is the actual fiscal year at the time the BGI is published).
- Strategic definitions.
- Organizational chart.
- Performance indicators.
- Evaluation results and commitments.
- Results of the institutional and team-level incentives mechanisms.
- Enacted laws, and laws proposals being discussed by Congress.
- Institutional awards or recognitions.

#### ***7.2.6. Public Sector Senior Executive Service System (ADP)***

The ADP, established in the year 2004, is a merit-based system for hiring and evaluating public sector managers (Deloitte LLP, 2014; Ministerio de Hacienda, 2015; Guzmán, Irarrázaval, & de los Ríos, 2014). Figure 18 shows the process used for the ADP. The main features of the process are that independent actors carry-out the search for adequate candidates for the position and then present a shortlist from

which the political authority (Minister or head of government agency) chooses who to hire; and that the political authority has autonomy to define the agreement, performance criteria, and to ask for the resignation of the senior executive (Ministerio de Hacienda, 2015).

**Figure 18: The ADP Process**



Note: from (Ministerio de Hacienda, 2015, p. 17).

The ADP system is currently used in 115 government agencies for a total of 1,318 senior executives; it has increased the participation of women in executive positions, and has brought a transparent and merit-based process for hiring (Dirección Nacional del Servicio Civil, 2016; Egaña, 2014). Despite these accomplishments, the ADP system has not yet met expectations. The main weakness of the system is that a

high proportion of senior executives are being asked to resign for political reasons; resulting in an overwhelming number of senior executives being replaced at the start of each administration (OI11, 2016; OI12, 2016; OI9, 2016). For example, it was reported that the Bachelet administration laid off 45% of the executives hired through the ADP system during her first year in office (Galaz, 2015). The ADP statistics show that senior executives entering through the ADP system stay in their posts only for an average of 2.2 years (Egaña, 2014).

Several attempts to reform the ADP system have failed to get congressional approval. The most recent attempt in 2016 finally succeeded, probably due to added pressure to reform the government after a series of corruption scandals (OI12, 2016). One of the key features of the reform is that it adds restrictions on how to replace an executive that has been laid-off, which is expected to reduce the incentive to fire them at the start of each administration (OI12, 2016).

#### ***7.2.7. Discontinued Reforms***

This section provides a brief overview of two reforms that were short-lived, as they were introduced during the Piñera administration and eliminated 3 years later as Bachelet took office. These reforms are ChileManages and the Presidential Delivery Unit.

A document published by the Ministry of Finance argues that ChileManages was implemented due to the following three issues found in an internal diagnostic

(Ministerio de Hacienda, 2014). First, that senior executives (heads of government agencies) were not discussing managerial issues with the Minister or Vice-Minister because the topic was of no interest to the latter. Second, that the lack of interest in management from ministers and vice ministers was because (1) they have political, instead of managerial, backgrounds; (2) and that they do not have a strong relationship with the heads of their government agencies because they do not get to choose them and are in many cases members of rival political parties. Third, they found that there was ample room for managerial improvement in many government agencies.

To address those weaknesses, ChileManages instituted two new positions. One was to be a high-level official that monitored the results of line ministers and government agencies. The other one was a managerial director placed in several line ministries to work as a link between the Minister and the head of the government agency. This system was complemented with a set of indicators: internal management indicators in 2011, outcome indicators for core activities in 2012, and transversal indicators in 2013 (Ministerio de Hacienda, 2014; Guzmán, Irrázaval, & de los Ríos, 2014). While they differed on the reasons why ChileManages failed, interviewees from both sides agree that it responded to an actual weakness that needs to be addressed (OI7, 2016; OI9, 2016; OI10, 2016; OI11, 2016; OI1, 2016).

Finally, the Presidential Delivery Unit was created based on a diagnostic result that Chile had no institutionalized process to monitor presidential priorities

(OI10, 2016; OI8, 2016). This unit was instituted inside MINSEGPRES, and its goal was to translate presidential priorities into measurable indicators that could serve as a strategic plan for management and for the allocation of resources (Dumas, Lafuente, & Parrado, 2013). The results from the presidential goals monitored by the delivery unit were made public in at least two official reports<sup>36</sup>. No replacement was instituted neither for ChileManages, nor for the Presidential Delivery Unit.

**Table 24: Chile’s Strategic Planning as Compared to Other Latin American and Caribbean Countries**

Unlike many other Latin American and Caribbean (LAC) countries (see Chapter 3), Chile does not have a national development plan or a strategic planning system. For instance, a survey by the Inter-American Development Bank (IDB) ranks 25 LAC countries in five different areas: strategic planning, performance budgeting, financial management, program management, and monitoring and evaluation; Chile ranks first or second in all those areas except for strategic planning, where it is ranked ninth behind countries like Haiti and Ecuador (Kaufmann, Sanginés, & García Moreno, 2015).

In addition, the most recent attempt to institutionalize strategic planning was abandoned three years after it was launched. The reform created the Presidential Compliance Management Unit which intended to establish ministerial

<sup>36</sup> See (Ministerio Secretaría General de la Presidencia, 2014; Ministerio Secretaría General de la Presidencia, 2012).

goals and to align them with government priorities (Armijo & Sanginés, 2015).  
The reform was introduced during the Piñera administration and abandoned as Bachelet took office. No replacement was proposed, but instead the new administration published a Presidential Agenda that outlined its political priorities.

Note: author's elaboration

### **7.3. Summary**

This chapter analyzed the main characteristics of Chile's budgetary process and performance budgeting system. Some of the most striking characteristics are the fact that almost all systems and processes are governed by the same institution – DIPRES -, and that the system is composed by many tools that generate large amounts of performance information. The following is a summary of some of the key takeaways from this chapter, starting with some aspects that are general for most of the system, and ending with others that are particular to certain components.

**Chile has a robust and institutionalized performance budgeting system that generates different types of performance information.** The components of Chile's performance budgeting system complement each other well. Each of them provides different types of information that are useful for different purposes; for example, the ex-ante evaluation of investment projects facilitates the objective of not funding undesirable initiatives, the ex-post evaluation system provides practical information to improve current initiatives, the performance indicator system allows authorities to detect potential issues and to decide which programs to evaluate, and so

on. In addition to complementing each other, all systems have very high coverage, reaching almost all government institutions.

**DIPRES dominates the budgetary cycle as well as most performance budgeting systems, providing few instances for government agencies to participate and resulting in lack of ownership.** Almost all the systems and processes described in this chapter are dominated by DIPRES. The budgetary cycle evidences an institutionally weak and powerless Congress, and highly submissive government agencies. Aware of the fact that they have little voice, officials from all the government agencies interviewed in this study have repeatedly expressed lack of ownership for the systems operated by DIPRES. While this top-down approach might have been positive in getting the systems institutionalized with good technical conditions, it has been taken too far, and has resulted in a lack of ownership by key stakeholders.

**Over the last few decades Chile has maintained a record of fiscal responsibility and a credible budget cycle.** The credibility of budgetary commitments, and the relative stability of Chile's fiscal management provides a fertile scenario for performance-related reforms to be introduced and institutionalized. A key aspect here has been Chile's fiscal responsibility law, which has been lauded internationally for its structural balance rule.



**The budget lacks an appropriate program-based structure, which may be affecting the integration of performance information to budgetary discussions.**

The lack of a program-based structure has had a negative effect on multiple performance-based systems. For the case of performance indicators and the PMG, not having a program structure makes it impossible to know whether the indicators are covering the main outputs of each government agency (both in terms of relative importance as well as in financial terms). For the case of evaluations, many areas do not have a proper program delimitation (including objectives, processes, and results) making them harder to evaluate. Finally, not having an appropriate program structure is forcing the use of weaker ad-hoc programs for budgetary formulation and approval.

**Reforms aimed at raising the interest of high-level officials in performance information have not been successful.** In the past fifteen years, there have been three reforms that instituted some form of linkage between high-level officials and performance information. Of those three reforms, two were eliminated without any replacement being introduced. The remaining one, the ADP, appears to be having limited impact in tying the career of executives with the results they achieve.

**Ex-post evaluations appear to be the strongest component of the performance budgeting system, especially due to the matrix of commitments signed between the DIPRES and government agencies.** One characteristic of Chile's ex-post evaluations is that government agencies sign a list of detailed steps to

be taken in response to the recommendations of the evaluators. This characteristic has transformed evaluations into a practical tool with attributable impact. One line of caution must remain as evidence suggests that the quality of ex-post evaluations is not homogeneous and the success rate of commitments is suspiciously high.

**The quality and relevance of performance indicators and of the PMG has been deteriorating over the past few years.** The decision taken in the year 2010 to fully integrate performance indicators with the PMG is having negative consequences on both systems. Gaming behavior by government agencies who do not want to risk their PMG bonuses is leading them set inappropriate goals in their performance indicators. In the next chapter we show that this situation leads DIPRES to push for more demanding targets, making them appear more arbitrary to government agencies and further reducing any potential sense of ownership that they might have had over the PMG. One factor that is driving this deterioration is the continuous increase in size of the PMG monetary incentive, which may have become “too big to miss” for government agencies.

## Chapter 8: Characteristics of the Line Ministries

Chile's government structure is built around two types of institutions: line ministries and *servicios públicos* (public services, referred to in this document as government agencies). There is a total of 22 line ministries, and each of them supervises one or more government agency. The Organic Constitutional Law of the General Foundations of Public Administration of 1986 explains that line ministries are administrative and policymaking entities, while the agencies are the ones that execute policies and provide goods and services (see Table 25)<sup>37</sup>. In sum, Chilean line ministries do not implement programs, but instead they set policies and regulate administrative protocols; in contrast, agencies are the entities that run government programs and provide goods and services to the population.

**Table 25: Selected Articles from the Organic Constitutional Law of the General Foundations of Public Administration of the Year 1986**

### **Article 19**

Line Ministries are the governing bodies of cooperation the President of the Republic in the functions of governing and administering their respective sectors, which correspond to specific fields of activities on which these functions should be performed.

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<sup>37</sup> The law also determines that the heads of line ministries and of government agencies are to be chosen directly by the President, i.e. ministers do not get to choose who directs the government agencies that are under their supervision.

For this purpose, they must propose and evaluate policies and plans, study and propose rules applicable to the sectors responsible, ensure compliance with the rules dictated, allocate resources and monitor the activities of their respective sector.

In exceptional circumstances, the law may delegate some of the functions mentioned in the preceding paragraph to government agencies. Also, in special cases determined by law, a ministry may act as administrative executive body.

### **Article 25**

Government agencies are administrative bodies responsible for regularly and continuously meeting collective needs. They shall be subject to dependence or supervision of the President of the Republic through the respective Ministries, whose policies, plans and programs they shall apply, without prejudice to the provisions of Articles 19, third paragraph, and 27.

The law may, exceptionally, create government agencies under the direct supervision of the President of the Republic.

Note: from the Organic Constitutional Law of the General Foundations of Public Administration of 1986.

As explained in Chapter 5, this study focuses on the cases of four line ministries, comparing programs within each of them. The selection of the four line ministries was based on their size, choosing a very large, a large, a small, and a very

small ministry<sup>38</sup>. While each of these line ministries might supervise several government agencies, the two programs analyzed in each line ministry were selected from the same government agency<sup>39</sup>. The two programs within each line ministry differ on the fact that one was subject to a Government Program Evaluation (EPG) within the last five years, while the other was not.

Based on the research framework, this chapter analyzes the main factors and characteristics of each government agency and program. These include the informational systems and other resources used for performance information; the most salient organizational factors, such as their size; their ability to link their activities with their budget and strategic plans; and various characteristics of their employees and managers, such as their support and interest on the government's performance-based reforms.

### **8.1. Ministry of Health - Subsecretariat of Health Care Networks**

The Ministry of Health dates to the year 1924 when the *Ministerio de Higiene, Asistencia y Previsión Social* (Ministry of Hygiene, Assistance and Social Welfare) was created. The current version of the Ministry of Health was instituted in the year 1952 following the split of the *Ministerio de Salud Pública y Previsión Social* (Ministry of Public Health and Social Welfare) into the Ministry of Health and the *Ministerio del Trabajo y Previsión Social* (Ministry of Labor and Social Welfare).

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<sup>38</sup> Measurement based on a cluster analysis of their budgetary resources. See Chapter 5.

<sup>39</sup> The advantage of choosing two programs from the same government agency is that they are more likely to be similar in some unobservable or unmeasurable characteristics; thus, enhancing their comparability.

The Ministry of Health is Chile's largest line ministry with budget of over 11 trillion Pesos for the year 2016. About 90% of those resources are distributed between the public insurance company, FONASA, and decentralized public health centers, known as *Servicios de Salud* (Health Care Services). Most of the remaining funds are split between two government agencies: the *Subsecretaría de Redes Asistenciales* (Subsecretariat of Health Care Networks) and the *Subsecretaría de Redes Asistenciales* (Subsecretariat of Health Care Networks). The former is further analyzed in this study.

#### ***8.1.1. Organizational Structure***

The provision of public health care in Chile is decentralized into 29 local service centers, each of them managing several health care centers. The Subsecretariat of Health Care Networks is the institution in charge of supervising the entire network. It was established in 2005 and its official mission is to “regulate and supervise the functioning of health care networks through the design of policies, norms, plans and programs for their coordination and articulation; with a focus on rights in health, equity and gender, within the framework of health objectives; and taking into account the epidemiology, chronicity and multi-morbidity of the Chilean population, during the life cycle, implementing preventive and promotional actions, that allow to anticipate the damage and to satisfy the health needs of the user

population”<sup>40</sup> (Subsecretaría de Redes Asistenciales, 2015). Table 26 lists the strategic objectives and the strategic products of the Subsecretariat of Health Care Networks as reported to DIPRES.

**Table 26: Strategic Definitions of the Subsecretariat of Health Care Networks for the Years 2015-2018**

Strategic Objectives
1. Improve the management of health care services and their establishments, optimizing their clinical processes and results, within the framework of the integrated management of health care networks, to achieve a health management centered on continuous improvement and quality of care, which accounts for the <i>Determinantes Sociales de Salud</i> (Social Determinants of Health) approach, equity in access, incorporation of the gender approach, respect for diversity and decent treatment in solving the health problems of the population in charge.
2. Progressively optimize the operation of the <i>Garantías Explícitas de Salud</i> (GES, or Explicit Health Warranties) with a health rights approach by managing the operational gaps needed to generate the required supply to meet the demand for benefits, derived from guaranteed health problems, strengthening the integration of the health care network under the <i>Red Integrada de Servicios de Salud</i> (RISS, or Integrated Health Services Network) model based on <i>Atención Primaria de Salud</i> (Primary Health Care Service).

<sup>40</sup> This and subsequent translations of large text resemble the original versions as closely as possible, even when that requires keeping inconsistencies and wordiness.

3. Strengthen the management of the human resource belonging to our health care network, through the generation of a policy associated with the development of current and future human talent, to account for their working conditions, sufficiency, training and retention to meet the health care problems of the population.
4. Optimize the financing model by recognizing the factors that result in higher health expenditures (geographic dispersion, burden of disease, complexity, etc.), explaining the sector's structural deficit, in order to achieve financial equilibrium and advance equity.
5. Invest in strengthening the infrastructure of health care networks, the equipment and technology, the primary and hospital level of health services, by managing the national investment plan in a way that allows the incorporation of new hospitals, family health care centers and services of high resolution primary care, in order to improve the quality of care and the satisfaction of our users.
<b>Strategic Products</b>
1. Monitoring and evaluation of the health care networks.
2. Planning, development and management of people working in the health care sector.
3. Management of the sector's budgetary resources.
4. Monitoring, supervision and management of the health sector investment program.
5. Strengthening the resoluteness of the health care network.

Note: from (Subsecretaría de Redes Asistenciales, 2015).



Besides the strategic definitions, there is an additional planning document referred to in the website of the Ministry of Health: the National Health Strategy 2011-2020. This document was prepared in 2010 during the Piñera administration, but it builds from work done in 2009 when the previous National Health Strategy, for the years 2000-2010, was evaluated. The National Health Strategy 2011-2020 is divided into nine objectives, each with explicit goals for the years 2015 and 2019. Most of those interviewed argued that they use President Bachelet's government plan as their main strategic document, instead of the National Health Strategy (MS1, 2016; MS2, 2016; MS6, 2016). Interviewees explained that the National Health Strategy is not used for yearly monitoring, but instead for a broad justification of program's objectives (MS6, 2016; MS3, 2016; MS4, 2016).

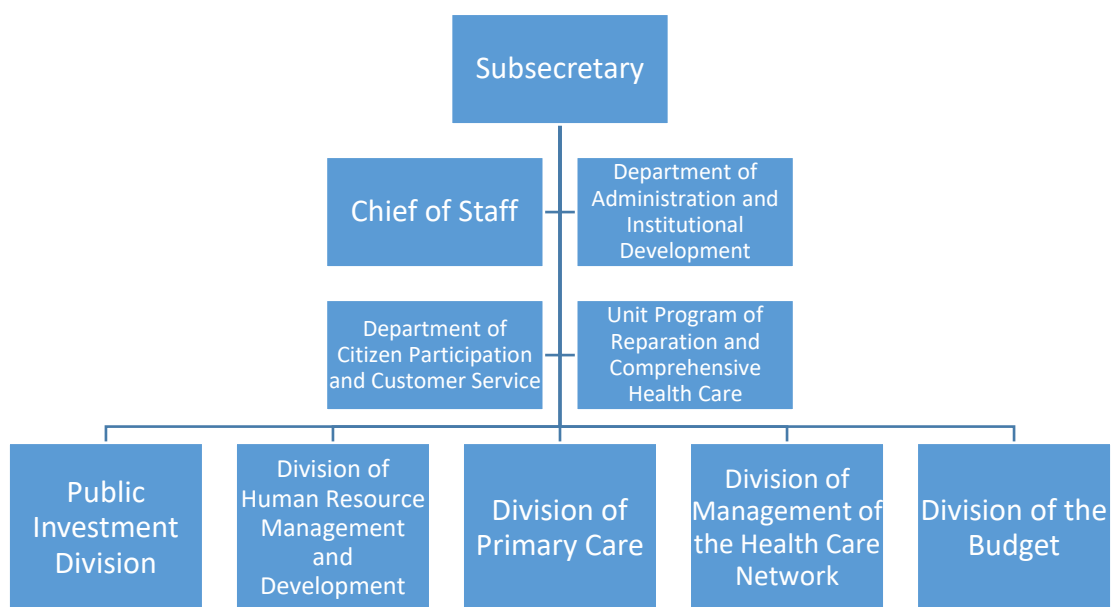
The Subsecretariat of Health Care Networks has five divisions (see Figure 19)<sup>41</sup>. The *División de Inversiones* (Public Investment Division) carries-out health-related public investment projects. The *División de Gestión y Desarrollo de las Personas* (Division of Human Resource Management and Development) seeks to improve the availability, distribution, and competency of health care personnel. Its programs are based on training medical professionals and on providing incentives for them to join the public care network. The *División de Atención Primaria* (Division of Primary Care) runs primary care programs that have very specific targets; for

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<sup>41</sup> A total of eight current officials of the Ministry of Health were interviewed for this study. Two of them monitor the budget and/or performance and report directly to the Subsecretary. The remaining six are from the Primary Care Division. Two interviewees were interviewed together; therefore, they are cited as a single interview.

example, one program provides the equipment needed for certain laboratory and image-based medical exams, and another program aims to timely provide prescription drugs for diseases such as high-blood pressure and diabetes. The *División de Gestión de la Red Asistencial* (Division of Management of the Health Care Network) focuses on improving the coordination of decentralized service and health care centers. The *División de Presupuesto* (Budget Division) runs the budgetary process. Finally, there is a Chief of Staff and four internal management departments that report directly to the Subsecretary.

**Figure 19: Organizational Chart of the Subsecretariat of Health Care Networks**



Note: from Exempt Resolution N° 1103 of 09/29/2016

For the year 2015, the Subsecretariat of Health Care Networks had a total of 394 employees<sup>42</sup> (Subsecretaría de Redes Asistenciales, 2016). Among some of those interviewed there was a perception that the staff capacity is not fully adequate to meet challenging deadlines and/or that there is not enough clarity about their strategic priorities (MS1, 2016; MS2, 2016; MS3, 2016). In addition, some interviewees expressed that the constant rotation of high-level executives makes management activities more difficult, as they set new priorities based on personal preferences (MS1, 2016; MS2, 2016; MS4, 2016).

**Table 27: Chile’s Civil Service as Compared to Other Latin American and Caribbean Countries**

A recent survey by the Inter-American Development Bank (IDB) analyzed the civil service systems of sixteen Latin American and Caribbean (LAC) countries. The results show that Chile and Brazil have civil service systems that are far more developed than those of other countries within the same region (for more information see Chapter 3). Furthermore, these two countries have been regional leaders for at least a decade, as they were ranked at the top in the 2004 and the 20011/2013 versions of the same survey.

Brazil and Chile are “characterized by solid strategic coherence and greater acceptance of the merit principle, as well as flexibility (...). Both have civil service

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<sup>42</sup> In this and future cases the number of employees includes ‘*dotación*’ and ‘*honorarios*’.

agencies with the political capacity to place professionalization high on the agenda, the technical capacity to design and implement effective policies, and the coordinating capacity to efficiently organize, orient, and supervise the work of the human resource management offices. In contrast to the other groups, these regulatory and technical instruments govern the policies that are applied throughout the entire public administration, and they enjoy a level of institutionalization that makes them more stable over time” (Iacoviello & Strazza, 2014, p. 21).

Note: author’s elaboration

The two programs analyzed in this study are both within the Division of Primary Care. The programs managed by this division focus on a wide range of health care interventions under the framework of the *Programa de Reforzamiento de la Atención Primaria de Salud* (PRAPS, or Primary Health Care Reinforcement Program). Programs are planned and coordinated by a specialist at the Division of Primary Care in Santiago, and the funds are transferred to local governments who are in charge of using the resources to provide the agreed services . These programs focus on certain health care issues that require special attention, and serve as a complement to the broader public health care system provided at local service centers<sup>43</sup>. The two specific programs included in this study are the *Programa Más Adultos Mayores*

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<sup>43</sup> The broader set of public health care is not managed nor financed through a program structure. Instead, it is financed through transfers based on variables such as population, their socioeconomic characteristics, their epidemiologic characteristics, among others.

*Autovalentes* (More Self-Sufficient Seniors Program) and the *Programa Vida Sana* (Healthy Life Program).

The More Self-Sufficient Seniors Program started in the year 2015 due, at least partly, to the fact that President Bachelet's government plan included an entire section on the importance of addressing the needs of seniors (MS4, 2016). The program is based on a medical exam that measures the functionality of senior citizens and determines if they are self-sufficient, in risk of non-self-sufficiency, and non-self-sufficient. The program then assists the first two groups with the objective of helping them remain self-sufficient. The assistance includes a series of workshops, activities, and the professional guidance of a kinesiologist and an occupational therapist. The program is not yet available in all communities but only in those that have at least a certain number of people registered in the public health care system. An interviewee explained that this is the first preventive program focused exclusively on seniors, and because it is a new program in a new field it will take four to five years to improve its strategy and scope (MS4, 2016).

The Healthy Life Program focuses on the prevention of chronic noncommunicable diseases, an issue that is also highlighted in President Bachelet's government plan. The program concentrates on improving nutrition and increasing physical activity to prevent two specific diseases: type 2 diabetes and cardiovascular disease. The beneficiaries of this program must commit for twelve-months, including trimestral check-ups, and participate in workshops and activities directed by

psychologists, nutritionists, and physical education professors. One of the most-challenging aspects of the program is to retain beneficiaries for the entire twelve months so that they complete the intervention (MS3, 2016).

### ***8.1.2. Budgetary Structure***

As it is the case for every government agency, the approved budget of the Subsecretariat of Health Care Networks is highly aggregated into revenue and expenditure categories (see Table 28). The budget documents do not detail the amount assigned to each division or program. The budget documents do separate public investment projects from other types of expenditure, so it can be inferred that the Division of Public Investment receives over 80% of the resources of this government agency.

**Table 28: Subsecretariat of Health Care Networks Approved Budget, Year 2016**

(thousands of Pesos)

<b>REVENUE</b>	<b>\$ 606,330,775</b>
<b>CURRENT TRANSFERS</b>	<b>\$ 13,916,103</b>
From the Central Government	\$ 13,916,103
<b>OTHER CURRENT REVENUE</b>	<b>\$ 60,594</b>
Recoveries and Reimbursements for Medical Licenses	\$ 32,618
Others	\$ 27,976
<b>FISCAL TRANSFER</b>	<b>\$ 568,286,788</b>
Unassigned	\$ 568,286,788
<b>TRANSFERS FOR CAPITAL EXPENDITURE</b>	<b>\$ 24,065,290</b>
From the Central Government	\$ 22,379,042
External Debt Service	\$ 1,686,248
<b>INITIAL CASH BALANCE</b>	<b>\$ 2,000</b>
<b>EXPENDITURES</b>	<b>\$ 606,330,775</b>
<b>PERSONNEL</b>	<b>\$ 11,354,492</b>
<b>CONSUMER GOODS AND SERVICES</b>	<b>\$ 16,724,405</b>
<b>CURRENT TRANSFERS</b>	<b>\$ 26,187,445</b>
To the Private Sector	\$ 13,916,103
To Other Public Entities	\$ 12,271,342
<b>ACQUISITION OF NON-FINANCIAL ASSETS</b>	<b>\$ 1,265,135</b>
Furniture and Others	\$ 20,047
Machinery and Equipment	\$ 8,024
Computer equipment	\$ 29,109
Software	\$ 1,207,955
<b>INVESTMENT INITIATIVES</b>	<b>\$ 497,824,800</b>
Projects	\$ 497,824,800
<b>CAPITAL TRANSFERS</b>	<b>\$ 51,285,250</b>
To the Private Sector	\$ 51,285,250
<b>DEBT SERVICE</b>	<b>\$ 1,687,248</b>
Floating Debt	\$ 1,000
Amortization External Debt	\$ 1,456,712
Interests External Debt	\$ 229,536
<b>ENDING BALANCE CASH</b>	<b>\$ 2,000</b>

Note: for some categories, there is one additional level of disaggregation. That level is typically used to identify the organization or program that is getting a transfer.

Internal budgetary documents, to which the author was granted temporary access, disaggregate expenditures between programs and regions, and include costing calculations for each program. That level of disaggregation is used in internal discussions prior to sending a budget proposal to DIPRES (MS6, 2016; MS7, 2016). The Subsecretariat of Health Care Networks has recently started working to standardize costing practices (MS2, 2016).

There were no specific complaints of lack of funds for performance-related activities for the programs included in this study. Those interviewed only recalled making one budgetary request to DIPRES for improving information systems in recent years (MS3, 2016; MS4, 2016). The request was for an information system exclusive for the Healthy Life Program and it was approved.

### ***8.1.3. Performance Indicators and Evaluations***

For the year 2016 the Subsecretariat of Health Care Networks had five performance indicators included in DIPRES system (see Table 29). The indicators do not measure specific outputs or outcomes; instead, they measure general processes that are not specific to any program. For example, one indicator measures financial transfers to local governments, and another one measures the percentage of public investment projects that started execution. The list of indicators has remained the same for 2016 and 2015. There were two changes from 2014 to 2015 as two process-



based indicators were substituted by one process-based indicator and one coverage indicator<sup>44</sup>.

**Table 29: Subsecretariat of Health Care Networks Performance Indicators, Year 2016**

<b>Indicator</b>	<b>Calculation method</b>	<b>Dimension</b>	<b>2016 Goal</b>
<i>1. Percentage of GES met</i>	(Number of GES met / Number of GES generated) * 100	Efficacy / Intermediate Result	100%
<i>2. Percentage of transfers made to the health care services based on the valid budgetary framework of state contributions to municipal health</i>	(Amount of the transfers made / Total amount included in the supreme decree for state contributions to municipal health) * 100	Efficacy / Process	100%
<i>3. Percentage of projects from the public investment portfolio that started execution</i>	(Number of projects from the public investment portfolio that started execution / Number of projects from the public investment portfolio planned to start execution) * 100	Efficiency / Product	54.8%

<sup>44</sup> The third and fifth indicator in Table 29 were added in 2015.

<i>4. Average number of hospitalization bed days in the extra system, derived from the Unidad de Gestión Centralizada de Camas (UGCC, or Unit of Centralized Beds Administration)</i>	(Number of hospitalization bed days of patients derived from the UGCC system in the extra-system / Total number of patients derived from the UGCC system) * 100	Efficacy / Intermediate Result	8.8 days
<i>5. Percentage of patients with completed dental treatment of the beneficiary population that is 20 years old or less</i>	(Number of patients with completed dental treatment of the beneficiary population that is 20 years old or less / Population registered in the primary health care system and validated by FONASA that is 20 years old or less) * 100	Efficacy / Intermediate Result	25.7%

Note: from (Subsecretaría de Redes Asistenciales, 2015).

The performance indicators shown in Table 29 are the basis of determining whether employees receive their Management Improvement Program (PMG) salary bonus. The Subsecretariat of Health Care Networks achieved 100 and 94.6% of the PMG score for the years 2014 and 2015, respectively. For the year 2014, performance indicators measured up to 85% of their PMG score while the other 15% was based on the implementation of a norm from the International Organization for Standardization (ISO). For the year 2015, performance indicators determined 80% of the score, while new ‘cross-sectional indicators’ accounted for the remaining 20%. These percentages

changed to 70% and 30% in the year 2016. The cross-sectional indicators include aspects such as workplace accidents, gender equality, transparency, among others. To receive the maximum score on the cross-sectional indicators, the government agency is only required to measure, inform and publish them.

None of the programs analyzed in this study had a PMG indicator directly related to them. This is a consequence of a fact mentioned in the previous paragraphs: the performance indicators of the Subsecretariat of Health Care Networks measure general processes that are not exclusive to any program. A total of five interviewees commented on PMG indicators: the three interviewees who had responsibilities linked to program management argued that PMG indicators had no impact on their work, while the two interviewees with higher-level managerial positions described them as relevant and helpful (MS1, 2016; MS2, 2016; MS3, 2016; MS4, 2016; MS5, 2016).

The programs and projects of the Subsecretariat of Health Care Networks are subject to two types of ex-ante evaluations from the MDS. First, ex-ante public investment evaluations are used for the projects of the Public Investment Division, which was not analyzed in this study. Second, ex-ante evaluation of social programs is applied for new, reformulated or expanded programs at the Primary Care Division. Only one of those interviewed has been through these evaluations and found it to be time consuming and not well coordinated (MS4, 2016).

In the last fifteen years, the Subsecretariat of Health Care Networks has been subject to several ex-post evaluations. One of the two programs included in this study was recently evaluated: The Healthy Life Program. The evaluation was published in 2016, and it covers the period 2012-2015. The evaluation concluded that the program is not performing satisfactorily, but that it addresses a real social issue so it should not be eliminated. The evaluators recommended shifting the program focus from individuals to communities, improving the selection criteria, building a strategy to increase male participation, further analyzing and addressing the reasons why beneficiaries do not stay for the entire twelve-months, and improving financial and performance monitoring.

An interviewee who has worked with the evaluators stated that it has been a very helpful process that has provided important insights about the program, which include highlighting the importance of creating a performance information system (MS3, 2016). In the official institutional response, the Subsecretary agreed with the evaluators and included a list of specific actions that will be taken to address their recommendations. The commitment matrix for this evaluation has not yet been made public.

#### ***8.1.4. Information Systems***

The Subsecretariat of Health Care Networks has several centralized information systems that focus on specific topics. The most general system is known as *Departamento de Estadísticas e Información de Salud* (DEIS, or Department of

Health Information and Statistics), which includes basic health indicators like mortality and malnutrition rates, as well as service coverage and the prevalence of certain diseases, among other indicators.

The other three systems provide the information needed to trigger financial transfers and/or monetary incentives. First, the *Compromisos de Gestión* (COMGES, or Managerial Commitments), includes a set of managerial commitments expressed in one or more indicators each. The information for the COMGES is inputted by decentralized offices three times a year, verified in workshops led by technical referees, and linked to the monetary incentives that the managers of individual service centers get through the Public Sector Senior Executive Service System (ADP) (MS5, 2016). The second system is the *Índice de Actividad de la Atención Primaria de Salud* (IAAPS, or Primary Health Care Index) and it consists almost entirely of coverage indicators that local service centers must meet in order for their employees to get a monetary incentive. The third system is known as *Bono Trato Usuario* (Customer Service Bonus) and it is based on the results from customer service surveys carried out in each local service center. The results of those survey are used to determine whether employees from each center receive a monetary bonus.

The centralized systems, manages their own information system. Interviewees from each of the two programs analyzed in this study expressed the need for performance information not included in any of the centralized systems. For that reason, both programs manage their own ad-hoc systems: one program manager uses

Excel files to request additional data from local services, while the other is planning to introduce the use of the free software Dropbox (MS3, 2016; MS4, 2016). One of those program managers has received funds to build a new system.

There is no centralized system to manage financial information. Each program provides information to the budget department in different Excel worksheets which are then consolidated into a new worksheet (MS6, 2016; MS7, 2016). Those same interviewees explained that, despite the lack of a centralized system, they work fluently with program managers in gathering information.

## **8.2. Ministry of Public Works - Directorate of Waterworks**

The Ministry of Public Works, originally constituted in 1887 as the *Ministerio de Industria y Obras Públicas* (Ministry of Industry and Public Works), is the 6<sup>th</sup> oldest line ministry in Chile (Ministerio de Obras Públicas, n.d.). The first article in its current legal framework, the decree with force of law No. 850 of 1998, states that this institution is “in charge of planning, studying, designing, constructing, expanding, repairing, maintaining and operating public works, and (that) it is the coordinating entity for the implementation plans of the public works executed by the government agencies that constitute it.”

The Ministry of Public Works’ 2016 budget totaled over 2.3 trillion Pesos, making it the fifth largest ministry in Chile and placing it in the cluster of large ministries (see Chapter 5). Despite being one of the largest ministries, it amounts to

only 20% of the budgetary size of the Ministry of Health. Most of the resources budgeted for the Ministry of Public Works (over 97% of them) are channeled to six government agencies coordinated by the *Dirección General de Obras Públicas* (General Directorate of Public Works). One of those government agencies, the *Dirección de Obras Hidráulicas* (Directorate of Waterworks), is further analyzed in this study.

#### ***8.2.1. Organizational Structure***

The Directorate of Waterworks was established in 1914 and its official mission is to “provide and manage water infrastructure works and services that contribute to the provision of water resources and to the protection of the land and people, doing so through an efficient use of resources and with the participation of citizens in the various stages of the projects, to contribute to sustainable development” (Dirección de Obras Hidráulicas, 2015). Table 30 lists the strategic objectives and the strategic products of the Directorate of Waterworks, as reported to DIPRES.

**Table 30: Strategic Definitions of the Directorate of Waterworks for the Years  
2015-2018**

<b>Strategic Objectives</b>
1. Contribute to economic development through the provision of water infrastructure, considering the effects of climate change, responding to the needs in a timely, reliable and cost-competitive manner.
2. Contribute to social development by improving the welfare of the population through the provision of water infrastructure and by strengthening the community organizations who receive services.
3. Promote sustainable environmental development of the country through the provision of water infrastructure that meets environmental policies and regulations.
4. Achieve efficiency standards in the use of investment resources and in the operation of water infrastructure services, through the development and continuous improvement of the key processes of the Directorate of Waterworks.
<b>Strategic Products</b>
1. Irrigation infrastructure services.
2. Infrastructure services for the evacuation and drainage of rainwater.
3. Infrastructure services for alluvial water control and waterbed management.
4. Infrastructure services for rural drinking water in ‘concentrated’ and ‘semi concentrated’ locations.

Note: from (Dirección de Obras Hidráulicas, 2015).



Besides the strategic definitions, there is an additional planning document in the website of the Ministry of Public Works: the long-term Vision 2025. None of the officials interviewed in this study could mention any instance for which they have used that plan; instead, they argued that the plan that they consider for strategic decisions is President Bachelet's government plan (MOP1, 2016; MOP3, 2016; MOP2, 2016; MOP7, 2016). One interviewee argued that the Vision 2025 is linked to President Bachelet's government plan, but that it has not been properly communicated internally (MOP4, 2016).

The Directorate of Waterworks' organizational chart is divided into three subject areas that cover its four strategic products, plus a fourth area that manages administrative issues such as budgeting and human resources (see Figure 20)<sup>45</sup>. Of the three subject areas, one focuses on rural drinking water, one on irrigation, and one on drainage and waterbeds. Finally, there are six independent units that oversee subjects such as internal audits, citizen participation, among others.

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<sup>45</sup> A total of nine current officials of the Ministry of Public Works were interviewed for this study. Two of them are from the General Directorate of Public Works and report to the Minister. Of the remaining six officials, two work in the Subdirectorate of Rural Drinking Water; two work in the Division of Urban Waterbeds and Drainage; and three work in the Subdirectorate of Management and Development. Two interviewees were interviewed together; therefore, they are cited as a single interview.

**Figure 20: Organizational Chart of the Directorate of Waterworks**



Note: from (Dirección de Obras Hidráulicas, 2016).

For the year 2015, the Directorate of Waterworks had a total of 728 employees (Dirección de Obras Hidráulicas, 2016). Many interviewees argued that the staff is highly qualified and motivated, due in part to low turnover rates for mid- and low-level officials (MOP1, 2016; MOP2, 2016; MOP5, 2016). In addition, some interviewees argued that the staff has developed an embedded quality-oriented culture, that they strive for maintaining a low number of technical errors, and aim to meet their commitments (MOP5, 2016; MOP6, 2016; MOP7, 2016).

Some interviewees explained that leadership changes tend to have a significant impact on performance-based processes in the Ministry of Public Works (MOP4, 2016; MOP5, 2016). Those interviewed argued that current high- and mid-level officials, particularly the Minister, are interested in ensuring high-levels of financial execution and low occurrence of technical errors (MOP1, 2016; MOP3, 2016; MOP4, 2016; MOP5, 2016; MOP6, 2016). The current Minister of Public Works, Alberto Undurraga, has been in office for more than two and a half years, which at the time of this writing makes him the longest serving Minister of Public Works in more than a decade. The heads of the subject areas interviewed for this study have been in office for a similar or an even lengthier term than the Minister. It remains to be seen if the current monitoring practices would survive periods of higher turnover rates of high- and mid-level officials.

Finally, there is one characteristic of the Ministry of Public Works that was mentioned by many interviewees as an enabler for their monitoring practices: the visibility of their outputs. This characteristic helps by making transparency a given, as managers have no way of hiding how much their projects are advancing (MOP1, 2016; MOP2, 2016; MOP5, 2016; MOP7, 2016).

The Directorate of Waterworks does not have a program-based organizational structure. Each of its three subject areas works exclusively with public investment projects and determines internally its preferred way to distribute the work associated with those projects. For example, individual investment projects may move from one

internal department to another depending on whether it is on its design or execution phase (MOP3, 2016; MOP6, 2016). This structure differs from the program management structure commonly used in the other three government agencies included in this study, where each individual initiative (which is more often not an investment project) is managed by the same program manager through all its phases.

The first area included in this study is the *Conservación de las Riberas de los Ríos* (CRR, or Riverbank Conservation) which is part of the Division of Urban Waterbeds and Drainage. The CRR carries-out public investment projects to protect riverbanks from erosion and to correct damage after natural emergencies. The area follows the same protocol explained in Chapter 7 for public investment projects, i.e. it reacts to requests made by individual communities, normally through their municipalities, by sending out an expert to analyze the situation and to recommend a course of action. This process continues with an ex-ante public investment evaluation at the MDS. While communities are commonly proactive in pressuring their municipalities to request a project, in less frequent occasions they might oppose a technically desirable project (MOP3, 2016).

The second area is the *Programa de Agua Potable Rural* (APR, or Rural Drinking Water Program) which belongs to the Subdirectorate of Rural Drinking Water. The APR was created in 1964 and its objective is to increase the availability of drinking water in rural areas. Its structure is similar to that of the CRR, where the community demands services, an expert travels to the area, and a project is sent to the

MDS for ex-ante evaluation. One particularity of the APR is that, after constructed, the drinking water system is managed by an autonomous local community. The APR provides technical assistance to the community, but it does not have the authority to force the community to accept such assistance and/or to take actions to properly care for the system. As an interviewee explained, a community may choose an illiterate person as the system's administrator, or even a person that decides not to take advantage of the multiple instances of technical assistance (MOP6, 2016). Those who work at APR agree that its structure is highly complex and that it does not allow them to hold communities accountable, and for that reason they have proposed a new legal framework that can potentially improve the program (MOP6, 2016).

### ***8.2.2. Budgetary Structure***

The budget documents do not facilitate any linkage between programs, goals, and activities with resource allocation. As it is the case for every government agency, the approved budget of the Directorate of Waterworks is highly aggregated into revenue and expenditure categories (see Table 31). For that reason, it is impossible to provide an accurate distribution of number of projects and/or amount of resources among the programs described above.

**Table 31: Directorate of Waterworks Approved Budget, Year 2016 (thousands of Pesos)**

<b>REVENUE</b>	<b>\$ 142,874,639</b>
<b>INCOME FROM PROPERTIES</b>	<b>\$ 14,532</b>
<b>OPERATIONAL REVENUE</b>	<b>\$ 12,456</b>
<b>OTHER CURRENT REVENUE</b>	<b>\$ 193,587</b>
Recoveries and Reimbursements for Medical Licenses	\$ 44,115
Fines and penalties	\$ 145,320
Others	\$ 4,152
<b>FISCAL TRANSFER</b>	<b>\$ 142,626,107</b>
Unassigned	\$ 142,626,107
<b>SALE OF NON-FINANCIAL ASSETS</b>	<b>\$ 17,957</b>
Vehicles	\$ 17,127
Furniture and Others	\$ 519
Computer equipment	\$ 311
<b>INITIAL CASH BALANCE</b>	<b>\$ 10,000</b>
<b>EXPENDITURES</b>	<b>\$ 142,874,639</b>
<b>PERSONNEL</b>	<b>\$ 13,937,154</b>
<b>CONSUMER GOODS AND SERVICES</b>	<b>\$ 1,159,748</b>
<b>SOCIAL SECURITY BENEFITS</b>	<b>\$ 146,671</b>
Pension payments	\$ 146,671
<b>ACQUISITION OF NON-FINANCIAL ASSETS</b>	<b>\$ 327,142</b>
Vehicles	\$ 176,460
Furniture and Others	\$ 3,114
Machinery and Equipment	\$ 100,198
Computer equipment	\$ 43,752
Software	\$ 3,618
<b>INVESTMENT INITIATIVES</b>	<b>\$ 127,292,924</b>
Basic studies	\$ 15,248,027
Projects	\$ 112,044,897
<b>DEBT SERVICE</b>	<b>\$ 1,000</b>
Floating Debt	\$ 1,000
<b>ENDING BALANCE CASH</b>	<b>\$ 10,000</b>

Note: for some categories, there is one additional level of disaggregation. That level is typically used to identify the organization or program that is getting a transfer.

Despite the level of aggregation in official DIPRES documents, internal budgetary work at the Directorate of Waterworks is done at the project-level. The internal monitoring document, to which the author was granted temporary access, shows each project of the government agency and includes monthly financial information further disaggregated by civil works, administrative expenses, consultancies, among others. Finally, an interviewee explained that DIPRES sets specific budgetary ceilings for each of the three budgetary areas of the Directorate of Waterworks: irrigation, urban waterbeds and sewers, and rural drinking water (MOP7, 2016).

One budgetary complaint is that DIPRES does not provide additional funds for performance management initiatives. This issue was raised in all the areas of the government agency where interviews were held (MOP3, 2016; MOP4, 2016; MOP5, 2016; MOP6, 2016; MOP7, 2016).

### ***8.2.3. Performance Indicators and Evaluations***

For the year 2016 the Directorate of Waterworks had nine performance indicators included in DIPRES system (see Table 32). Of those nine indicators: two refer to processes that are common for all areas, four refer to the APR, one to irrigation, one to rainfall drainage, and one to CRR. These indicators have remained almost unchanged since 2014, as only one indicator was dropped in 2015 and one added in 2016.

**Table 32: Directorate of Waterworks Performance Indicators, Year 2016**

<b>Indicator</b>	<b>Calculation method</b>	<b>Dimension</b>	<b>2016 Goal</b>
<i>1. Percentage deviation from original execution deadlines</i>	(Sum of final deadlines - Sum of original deadlines / Sum of original deadlines) * 100	Quality / Product	13%
<i>2. Percentage of construction contracts with final costs 20% higher than original costs</i>	(Number of contracts with final costs 20% higher than original costs / Total number of contracts) * 100	Economy / Product	7.8%
<i>3. Advance in the installation of “Basic Progressive Systems” in locations without APR</i>	(Number of “Basic Progressive Systems” with Phase II finalized / Number of “Basic Progressive Systems” with Phase I initiated) * 100	Efficacy / Product	10%
<i>4. Percentage of milestones achieved for irrigation projects under execution</i>	(Total number of milestones achieved / Total number of milestones established) * 100	Efficacy / Product	66.7%
<i>5. Urban surface drained of rainwater</i>	(Total urban surface drained of rainwater through works delivered in that year / Total urban surface estimated to be drained of rainwater through works delivered in that year) * 100	Efficacy / Intermediate Result	80%



<i>6. Riverside population protected</i>	(Total population protected through works delivered in that year / Total population estimated to be protected through works delivered in that year) * 100	Efficacy / Intermediate Result	80%
<i>7. Percentage of APR works from the Plan Chiloé completed</i>	(Number of APR works from the Plan Chiloé completed / Total number of APR works from the Plan Chiloé) * 100	Efficacy / Product	95.8%
<i>8. Percentage of APR works that do not have outages</i>	(Number of APR works that do not have outages / Total number of APR works) * 100	Efficacy / Intermediate Result	86%
<i>9. Percentage reduction in the number of 'semi concentrated' locations without APR systems</i>	(Number of APR systems installed in 'semi concentrated' locations without prior systems / Total number of 'semi concentrated' locations without prior systems) * 100	Efficacy / Product	22.9%

Note: from (Dirección de Obras Hidráulicas, 2015).

Most of the indicators of the Directorate of Waterworks are said to focus on efficacy; however, many of them are not actually measuring efficacy but instead the completion of scheduled activities. That situation also applies to the only indicator that is supposed to measure quality, but instead it measures the timely completion of contracts. Another salient fact is that most areas, apart from APR, have a single indicator to measure all their work.

The performance indicators shown in Table 32 are also the basis of determining whether employees receive their PMG salary bonus. Seven of those nine indicators have been included in the Directorate of Waterworks PMG agreement in each of the last three years<sup>46</sup>. The Directorate of Waterworks has achieved a 100% of the PMG score for 2014 and 2015. For the year 2014, performance indicators measured up to 90% of their PMG score while the other 10% was based on the implementation of ISO norms. For the year 2015, performance indicators moved up to a 100% of the score. For the year 2016, performance indicators were lowered to 70% of the score, while new ‘cross-sectional indicators’ accounted for the remaining 30%. These indicators include aspects such as workplace accidents, gender equality, transparency, among others. To receive the maximum score on the cross-sectional indicators, the government agency is only required to measure, inform and publish them.

Overall, there is a positive perception about the PMG performance indicators within the Directorate of Waterworks. All five interviewees who commented on the PMG indicators explained that the indicators are part of the organizational culture and that meeting the targets requires attention and corrective actions (MOP1, 2016; MOP3, 2016; MOP4, 2016; MOP5, 2016; MOP6, 2016). However, three of those interviewees added critiques including that DIPRES tends to impose inadequate targets, and that the impact of the PMG varies across areas.

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<sup>46</sup> The third and the eight indicators in Table 32 are not part of the PMG.

Because the Directorate of Waterworks works only through investment projects, the only type of ex-ante evaluation they are subject to is the one for public investment projects. General comments about these evaluations are positive, although it was also mentioned that they are time consuming, that there is a lack of coordination between MDS evaluators in Santiago and MDS evaluators in regional offices, and that evaluations favor financially measurable aspects (MOP2, 2016; MOP6, 2016; MOP7, 2016).

The APR is the only area of the Directorate of Waterworks that has been subject to ex-post evaluations by DIPRES. The APG has been evaluated three times, in 1997, 2007, and 2015, all of them with the EPG methodology.

The evaluation published in 2007 concluded that the APR needed to improve its design and processes. Some of the recommendations related to the lack of administrative and performance information. The list of information that the evaluators recommended collecting included details of the target population, a database of the rural water systems that require improvements, the administrative capabilities of the local units, and performance indicators. The reports on the commitment matrix say that the APR now collects all the recommended information except for performance indicators. Strangely, the commitment to collect performance indicators and to improve the logical framework of the program was never marked as unmet, but instead it was cancelled by DIPRES in 2011 because “given the current

situation of the program the recommendation was not valid anymore” (DIPRES, 2015, p. 21).

The most recent evaluation of the APR was published in 2015 and covers the period from 2011 to 2014. The evaluation concluded that APR is a well-performing program that has been effective in reducing the number of people without access to drinking water. Most of the recommendations for improvement were linked to the way that APR works with local communities, and to infrastructure maintenance. In addition, the evaluators noted that the APR still lacks adequate administrative and performance information.

The institutional response from the Directorate of Waterworks was not positive. In it they criticize, among other things, that the evaluators used methodologically flawed studies as their source of information, did not properly explain the reasons why many service outages have occurred, used a biased measure for the quality of the infrastructure, and did not effectively consider the legal limitations that APR has when dealing with local communities. Those interviewed at APR said that the evaluation had no value for them, that evaluators failed to understand key aspects of the program, and that the continued lack of information is at least partly because DIPRES does not fund their requests to fix that issue (MOP6, 2016; MOP7, 2016). Except for one case, all interviewees from budgetary and administrative offices that supervise APR could not point to any instance where the

evaluation was used for decision-making (MOP1, 2016; MOP4, 2016; MOP5, 2016; MOP7, 2016).

#### ***8.2.4. Information Systems***

Out of seven interviewees, three argued that the availability and the quality of the information they use for internal monitoring is appropriate, while the other four said that the information systems need to be improved (MOP1, 2016; MOP2, 2016; MOP3, 2016; MOP4, 2016; MOP5, 2016; MOP6, 2016; MOP7, 2016). The information system that is most widely used is the *Sistema de Administración Financiera Integrado* (SAFI, or Integrated Financial Information System) which is an Excel-based platform that has project-level information of financial and physical execution. This system is used at all levels of the institution, from high-level managers to project administrators; however, each organizational area complements the SAFI with additional systems. Of the two areas covered in this study, one said that their system is appropriate, while the other argued that they have not been able to improve their system due to lack of funds (MOP2, 2016; MOP3, 2016; MOP6, 2016).

### **8.3. Ministry of Social Development – Subsecretariat of Social Services**

The Ministry of Social Development (MSD) was officially established in the year 2011 as part of a set of public administration reforms introduced by the Piñera administration. The third article of the law No. 20530 of 2011 defines its functions as to “study, design and propose social policies, plans, and programs (...); establish evaluation criteria and evaluate social programs (...); and evaluate and provide

recommendations for new and for reformulated social programs.” Most of these functions previously corresponded to the Ministry of Planning and Cooperation (MIDEPLAN) which was abolished as part of the same reform that created the MDS.

The MDS received a budgetary allocation of 651 billion Pesos for the year 2016, which represents 6 and 28% of that of the Ministry of Health and the Ministry of Public Works, respectively. Almost 50% of those resources are then distributed among six institutions that assist specific groups of people, such as seniors, disabled, and indigenous people. The remainder is allocated between the two government agencies that formally constitute the MDS: the *Subsecretaría de Evaluación Social* (Subsecretariat of Social Evaluation) and the *Subsecretaría de Servicios Sociales* (Subsecretariat of Social Services). The former is a small government agency that accounts for around 3% of the ministry’s budget and that manages the ex-ante evaluation of social programs, the ex-ante evaluation of public investment projects, the monitoring of social programs, and coordinates social initiatives throughout the government. Most of the functions of that government agency are analyzed in Chapter 7 of this document. The latter, which is analyzed in this section, is a larger government agency that executes several programs that address multiple social issues.

### ***8.3.1. Organizational Structure***

The Subsecretariat of Social Services was created to be the executing government agency within the MDS. Its official mission is to “execute and implement the ministry's social policies, plans and programs, articulating and coordinating in an

integrated way the actions of public agencies and institutions in order to eradicate poverty and provide social protection to vulnerable individuals and groups, promoting their integration and social development over time” (Subsecretaría de Servicios Sociales, 2015). Table 33 lists the strategic objectives and the strategic products of the Subsecretariat of Social Services as reported to DIPRES.

**Table 33: Strategic Definitions of the Subsecretariat of Social Services for the Years 2015-2018**

<b>Strategic Objectives</b>
1. Strengthen the security network provided by the <i>Sistema Intersectorial de Protección Social</i> (Intersectoral Social Protection System), improving the coordination of the programs and government agencies that integrate it, in order to achieve the governmental objectives in the area of social protection.
2. Implement a new model of allocation of social benefits, based on a Universal Social Protection system that excludes higher income sectors, complemented by a social diagnosis framework that allows the re-evaluation of excluded cases.
3. Establish policies, plans and programs for the provision of social benefits to which the agencies dependent on the Ministry of Social Development must embrace, as well as carry out monitoring and evaluation of its administration.
<b>Strategic Products</b>
1. Intersectoral Social Protection System.
2. Instrument for socioeconomic characterization of the national population.

Note: from (Subsecretaría de Servicios Sociales, 2015).

The MDS does not have any additional strategic planning documents. Some interviewees stated that President Bachelet's government plan is their main strategic guide (SSS1, 2016; SSS5, 2016; SSS6, 2016; SSS2, 2016).

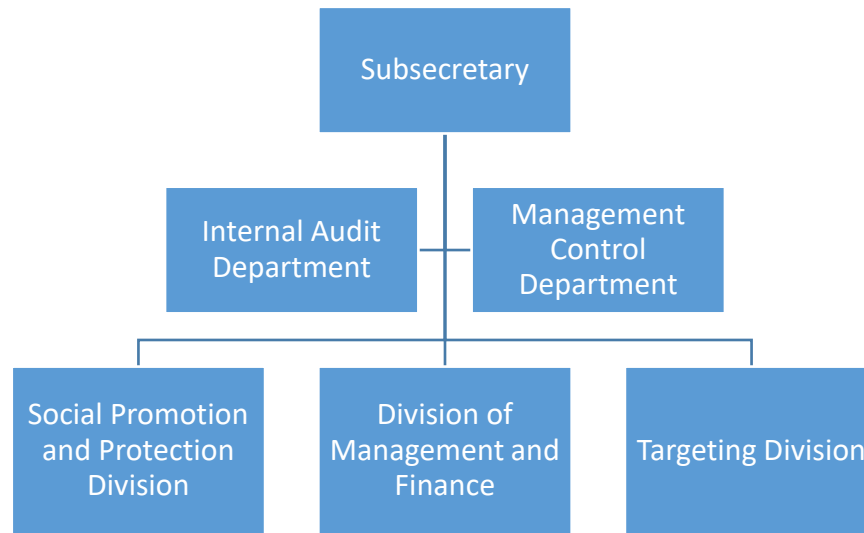
The Subsecretariat of Social Services' is organized into three divisions (see Figure 21)<sup>47</sup>. The *División de Promoción y Protección Social* (Social Promotion and Protection Division) runs the social programs of this government agency. The *División de Administración y Finanzas* (Division of Management and Finance) manages budgetary and payroll processes. The *División de Focalización* (Targeting Division) administers the *Registro Social de Hogares* (Social Registry of Households): a database used to classify households based on their socioeconomic condition and to determine their eligibility for social programs. Finally, there are two independent departments that report directly to the Subsecretary, one for internal audit and one for managerial practices.

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<sup>47</sup> A total of seven current officials of the Subsecretariat of Social Services were interviewed for this study. Five of them work in the Social Promotion and Protection Division. One of them works on in the Division of Management and Finance. The final interviewee works in the Management Control Department.



**Figure 21: Organizational Chart of the Subsecretariat of Social Services**



Note: from (Subsecretaría de Servicios Sociales, 2016).

For the year 2015, the Subsecretariat of Social Services had a total of 1160 employees (Subsecretaría de Servicios Sociales, 2016). Some of those interviewed said that the staff does not have adequate technical capacity, with some describing it as a major issue while other as a manageable issue (SSS1, 2016; SSS3, 2016; SSS4, 2016; SSS6, 2016). Most of the capacity problems were linked either to the 2011 reorganization, which introduced a high proportion of consultants that get replaced when managers rotate, or to low technical capacity in the regional offices. Some interviewees argued that high rotation of mid-level managers has become an obstacle for good performance (SSS1, 2016; SSS4, 2016; SSS6, 2016). For example, there have been managers who had little involvement with the programs and that blocked good initiatives.

The programs administered by the Subsecretariat of Social Services are part of what is known as the *Sistema Intersectorial de Protección Social* (Intersectoral Social Protection System). The main characteristic of the system is that many of its activities are carried-out in coordination with multiple line ministries. The Intersectoral Social Protection System is further disaggregated into subsystems and then into programs. The two programs analyzed in this study are the *Programa Noche Digna* (Decent Night Program) and the *Programa Vínculos* (Linkages Program), both of which are within the *Subsistema Seguridades y Oportunidades* (Security and Opportunities Subsystem).

The Decent Night Program, created in the year 2011, assists homeless adults. It works through two components. The first is the *Plan de Invierno* (Winter Plan) which provides shelter to homeless people during the coldest months of the year. The second component is called *Centros Temporales para la Superación* (Temporary Centers to Overcome [Homelessness]), and its objective is to provide a ladder system to help people avoid homelessness permanently. Both components are executed by municipalities and/or non-profit organizations that compete for the funds available in the program. Through its first and second components the Decent Night Program helps more than fourteen thousand and two thousand people per year, respectively (SSS5, 2016).

The Linkages Program assists senior citizens that are socioeconomically vulnerable by helping them access welfare services and remain engaged within their

communities. Program execution is decentralized through regional offices, and coordinated with the *Servicio Nacional del Adulto Mayor* (SENAMA, or National Service for Seniors) which acts as a technical counterpart to the Subsecretariat of Social Services (SSS4, 2016). The program works through personalized psychosocial support that is provided in the residence of the beneficiary.

### ***8.3.2. Budgetary Structure***

While in general terms the approved budget of the Subsecretariat of Social Services is highly aggregated into revenue and expenditure categories, for the context of Chile it is less aggregated than usual (see Table 34). As Table 34 shows, the budget allocation for the Subsecretariat of Social Services is divided in three portions: a general one, and two specific ones for their two subsystems.

**Table 34: Subsecretariat of Social Services Approved Budget, Year 2016 (thousands of Pesos)**

	TOTAL	Subsecretariat of Social Services	Ethical Income & Solidarity Chile	Integral Infant Protection
<b>REVENUE</b>	<b>\$ 320,426,194</b>	<b>\$ 46,648,962</b>	<b>\$ 227,828,976</b>	<b>\$ 45,948,256</b>
<b>OPERATIONAL REVENUE</b>	<b>\$ 1,502</b>	<b>\$ 1,502</b>	<b>\$ -</b>	<b>\$ -</b>
<b>OTHER CURRENT REVENUE</b>	<b>\$ 251,986</b>	<b>\$ 251,986</b>	<b>\$ -</b>	<b>\$ -</b>
Recoveries and Reimbursements for Medical Licenses	\$ 240,701	\$ 240,701	\$ -	\$ -
Others	\$ 11,285	\$ 11,285	\$ -	\$ -
<b>FISCAL TRANSFER</b>	<b>\$ 320,103,559</b>	<b>\$ 46,327,827</b>	<b>\$ 227,827,976</b>	<b>\$ 45,947,756</b>
Unassigned	\$ 318,815,820	\$ 45,040,088	\$ 227,827,976	\$ 45,947,756
Internal Debt Service	\$ 1,287,739	\$ 1,287,739	\$ -	\$ -
<b>SALE OF NON-FINANCIAL ASSETS</b>	<b>\$ 3,147</b>	<b>\$ 3,147</b>	<b>\$ -</b>	<b>\$ -</b>
Furniture and Others	\$ 3,147	\$ 3,147	\$ -	\$ -
<b>INITIAL CASH BALANCE</b>	<b>\$ 66,000</b>	<b>\$ 64,500</b>	<b>\$ 1,000</b>	<b>\$ 500</b>
<b>EXPENDITURES</b>	<b>\$ 320,426,194</b>	<b>\$ 46,648,962</b>	<b>\$ 227,828,976</b>	<b>\$ 45,948,256</b>
<b>PERSONNEL</b>	<b>\$ 16,811,973</b>	<b>\$ 16,811,973</b>	<b>\$ -</b>	<b>\$ -</b>
<b>CONSUMER GOODS AND SERVICES</b>	<b>\$ 3,272,766</b>	<b>\$ 3,272,766</b>	<b>\$ -</b>	<b>\$ -</b>
<b>SOCIAL SECURITY BENEFITS</b>	<b>\$ 11</b>	<b>\$ 11</b>	<b>\$ -</b>	<b>\$ -</b>
Social Benefits by the Employer	\$ 11	\$ 11	\$ -	\$ -
<b>CURRENT TRANSFERS</b>	<b>\$ 298,972,912</b>	<b>\$ 25,197,180</b>	<b>\$ 227,827,976</b>	<b>\$ 45,947,756</b>
To the Private Sector	\$ 486,847	\$ -	\$ 392,973	\$ 93,874
To the Central Government	\$ 147,692,365	\$ -	\$ 111,246,040	\$ 36,446,325
To Other Public Entities	\$ 150,793,700	\$ 25,197,180	\$ 116,188,963	\$ 9,407,557
<b>ACQUISITION OF NON-FINANCIAL ASSETS</b>	<b>\$ 76,793</b>	<b>\$ 76,793</b>	<b>\$ -</b>	<b>\$ -</b>
Furniture and Others	\$ 14,145	\$ 14,145	\$ -	\$ -
Machinery and Equipment	\$ 12,653	\$ 12,653	\$ -	\$ -
Software	\$ 49,995	\$ 49,995	\$ -	\$ -
<b>DEBT SERVICE</b>	<b>\$ 1,291,739</b>	<b>\$ 1,290,239</b>	<b>\$ 1,000</b>	<b>\$ 500</b>
Floating Debt	\$ 4,000	\$ 2,500	\$ 1,000	\$ 500
Amortization Internal Debt	\$ 481,040	\$ 481,040	\$ -	\$ -
Interests Internal Debt	\$ 806,699	\$ 806,699	\$ -	\$ -

Note: for some categories, there is one additional level of disaggregation. That level is typically used to identify the organization or program that is getting a transfer.

Although DIPRES documents are highly aggregated, internal discussions are held at the program level (SSS2, 2016). In a related issue, each program analyzed in this study has had different experiences when trying to get DIPRES to allocate resources for performance monitoring activities (SSS4, 2016; SSS5, 2016).

### ***8.3.3. Performance Indicators and Evaluations***

For the year 2016 the Subsecretariat of Social Services had five performance indicators included in DIPRES system (see Table 35). The first of the indicators refers to a general internal process, while the other four refer to services provided by four different programs. Both programs included in this study have a PMG indicator, and both argued that the indicator should be reformulated (SSS4, 2016; SSS5, 2016). The official documentation states that the last four indicators measure efficacy; however, that is true for only one indicator (the second one in the list) while the other three indicators measure coverage. The performance indicators have not varied much over the years as four of them remain unchanged since at least 2014.

**Table 35: Subsecretariat of Social Services Performance Indicators, Year 2016**

<b>Indicator</b>	<b>Calculation method</b>	<b>Dimension</b>	<b>2016 Goal</b>
<i>1. Percentage of electronic requests linked to strategic products made by citizens in year t which are answered in up to 10 business days</i>	(Number of electronic requests linked to strategic products made by citizens in year t which are answered in up to 10 business days / Number of electronic requests linked to strategic products made by citizens in year t through the System for Registry of Citizen Service) * 100	Quality / Product	99%
<i>2. Percentage of children with risk, lag or biopsychosocial risk admitted to the program who recover during year t</i>	(Number of children with risk, lag or biopsychosocial risk admitted to the program who recover during year t / Number of children who present risk, lag or biopsychosocial risk admitted to the program during the convocation initiated in year t -1) * 100	Efficacy / Final Result	68%
<i>3. Percentage of seniors with an intervention plan drawn up in year t</i>	(Number of seniors with an intervention plan drawn up in year t / Number of seniors who join the <i>Componente Eje</i> during the convocation initiated in year t -1) * 100	Efficacy / Product	90%

<i>4. Percentage of homeless people receiving benefits from the Winter Plan in year t</i>	(Number of homeless people receiving benefits from the Winter Plan in year t / Number of homeless people identified during the year t -1) * 100	Efficacy / Product	85%
<i>5. Percentage of housing solutions proposed by the executors in the community intervention projects implemented in year t</i>	(Number of housing solutions proposed by the executors in the community intervention projects implemented in year t / Number of housing solutions proposed by the executors in the community intervention projects during the convocation in year t -1) * 100	Efficacy / Product	89%

Note: from (Subsecretaría de Servicios Sociales, 2015).

The Subsecretariat of Social Services achieved between 98% and 99.7% of the PMG score during the last three years. The performance indicators shown in Table 35 are the basis of determining whether employees receive their PMG salary bonus. For the year 2014, performance indicators measured up to 95% of their PMG score while the other 5% was based on the improvement of their information security systems. For the year 2016, performance indicators were lowered to 70% of the score, while new ‘cross-sectional indicators’ accounted for the remaining 30%. These indicators include aspects such as workplace accidents, gender equality, and transparency, among others. To receive the maximum score on the cross-sectional indicators, the government agency is only required to measure, inform and publish them.

Three of the four interviewees who commented about PMG performance indicators argued that the targets are inappropriate (SSS4, 2016; SSS5, 2016; SSS7, 2016; SSS6, 2016). The reason why the target is considered inappropriate varies: two cases reported that DIPRES pushed for higher goals without appropriate knowledge of the field, and the other one said that the target does not appropriately measure program success. However, three of the four interviewees explained that while the targets might not be appropriate, they are challenging to meet and they are used internally when monitoring programs. An extraordinary situation happened in 2015 as the Subsecretariat of Social Services originally did not meet the full PMG salary bonus, but eventually they were successful in proving that the lower score was due to external circumstances and consequently got their score increased through the appeal process (SSS7, 2016). That same interviewee emphasized that not all government agencies are successful when appealing for a score change.

The new, reformulated or expanded programs are subject to ex-ante evaluations of social programs. There were opposing views among interviewees about these evaluations, with two of them describing them as helpful and well-coordinated, and other two saying the exact opposite (SSS1, 2016; SSS4, 2016; SSS5, 2016; SSS6, 2016).

The Decent Night Program was the subject of an EPG ex-post evaluation in the year 2015. The evaluation concluded that the program showed insufficient performance but that it addresses a real social issue so that it should not necessarily



be eliminated. The evaluators recommended reformulating their component ‘Temporary Centers to Overcome [Homelessness]’ to make it more likely to meet its objectives, improving data collection, providing differentiated services depending on the characteristics of the beneficiary, and improving coordination with other programs. In the official institutional response, the Minister agreed with the recommendations. The commitment matrix for this evaluation has not yet been made public.

Those interviewed at the Subsecretariat of Social Services stated that the evaluation was positive for them as it pointed to important issues that need to be addressed (SSS1, 2016; SSS5, 2016; SSS7, 2016). One of those interviewees also explained specific actions that they are taking to address the recommendations.

#### ***8.3.4. Information Systems***

The main performance-based system is called de *Cuadro de Mando Integral* (CMI, or Comprehensive Command Chart) and focuses on the indicators from the PMG (SSS3, 2016; SSS7, 2016). The information in this system is extracted from individual programs’ datasets by using a software tool (SSS3, 2016). The CMI administrators are continuously looking for inconsistencies to ensure the veracity of the data, and every three months they request that program managers submit a set of pre-established data verification mechanisms (SSS3, 2016; SSS7, 2016).

As it can be inferred from the previous paragraph, program managers tend to manage their own information systems. Besides using their individual datasets, most program managers also rely on two transversal datasets. One of those datasets, the *Sistema de Gestión de Convenios* (SIGEC, or Agreement Management System), has information on the agreements with decentralized executing units, and the other, the Cognos, consists mostly of service provision data. While they perceive that their informational systems have improved in the last few years, all the program officers interviewed for this study said that their informational systems are not appropriate and that they do not have as much information about their program execution as they would like (SSS4, 2016; SSS5, 2016; SSS6, 2016). In addition, the fact that each program uses a separate system is challenging for centralized monitoring (SSS7, 2016).

Like other government agencies in this study, budget consolidation is done in a Microsoft Excel file. The Excel-based platform is considered sufficient for their needs (SSS2, 2016).

#### **8.4. Ministry of Energy – Subsecretariat of Energy**

The Ministry of Energy, created in the year 2010, is a relatively new institution that took over some responsibilities that originally belonged to the still existent *Ministerio de Minería* (Ministry of Mining). The third article of the decree No. 2,224, which was modified in the year 2009, defines its competencies as “all activities of study, exploration, exploitation, generation, transmission, transport,

storage, distribution, consumption, efficient use, import and export, and any other concerning electricity, coal, gas, petroleum and derivatives, nuclear, geothermal, solar, and other energy sources.”

The Ministry of Energy is one of Chile’s smallest line ministries. About 20% of its resources are distributed between three related public sector institutions, while the remainder 80% is assigned to its only government agency: the *Subsecretaría de Energía* (Subsecretariat of Energy).

#### ***8.4.1. Organizational Structure***

The official mission of the Subsecretariat of Energy is “to have clean, reliable, sustainable and reasonably priced energy through a diversified energy matrix that guarantees the economic and social development of the country, respecting the environment and encouraging the participation of citizens in the local, regional and national levels” (Subsecretaría de Energía, 2015). Table 36 lists the strategic objectives and the strategic products of the Subsecretariat of Energy as reported to DIPRES.

**Table 36: Strategic Definitions of the Subsecretariat of Energy for the Years  
2015-2018**

<b>Strategic Objectives</b>
1. Build a common, long-term vision that will underpin an Energy Policy for the coming decades through initiatives based on social, political and technical dialogue.
2. Warrant the protection of users, effective competition in the market and ensure a dynamic development of the investments that the country requires.
3. Encourage the development of own energy resources in extreme and isolated areas, by using renewable energy sources and introducing better technologies, reducing their dependence on diesel fuel.
4. Minimize and manage the environmental impacts of the sector, seeking agreements and fostering new spaces for dialogue between the different actors in the country, increasing the involvement of local communities in the benefits of energy developments.
5. Develop a public energy institution in line with the challenges of having a reliable, sustainable, inclusive and reasonably priced energy matrix.
<b>Strategic Products</b>
1. Definitions, initiatives and information for the integral development of the energy sector.
2. Norms that rule and regulate the operation of the different energy segments, markets, sources, uses and consumption.
3. Promotion tools.

4. Environmental, social and economic sustainability of the Energy Matrix.
5. Institutional modernization.

Note: from (Subsecretaría de Energía, 2015).

The Ministry of Energy has a medium-term plan that guides its strategic decisions. The plan is the *Agenda de Energía* (Energy Agenda) which was elaborated early in 2014 following a mandate in President Bachelet's government plan. The agenda was mentioned by all of those interviewed in the Subsecretariat of Energy as their main strategic document. Some examples of its use are: for establishing a four-year budgetary agreement with DIPRES, and for elaborating the strategic definitions, PMG performance indicators, and internal monitoring systems (ME2, 2016; ME5, 2016; ME6, 2016; ME7, 2016; ME3, 2016). Finally, some interviewees argued that one reason why there is high internal ownership of the Energy Agenda is that it was elaborated through a participatory process that allowed employees to provide inputs (ME2, 2016; ME6, 2016). Those same interviewees highlighted that the Energy Agenda involved a large-scale effort to gather the opinions of many political leaders from different political parties and the strategies defined in all previous planning documents.

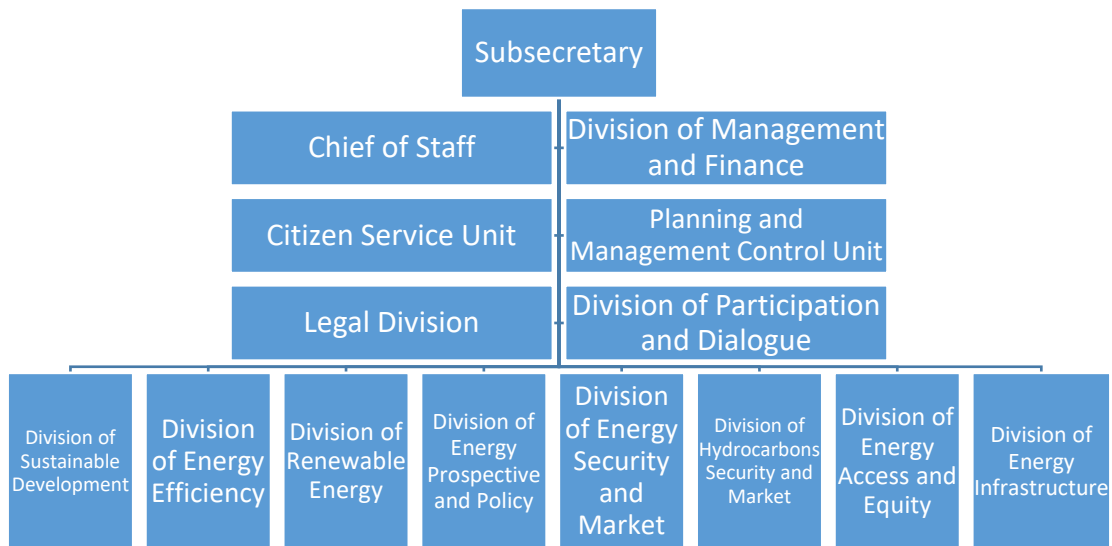
The Subsecretariat of Energy' organizational chart is divided into seven subject areas and six administrative divisions (see Figure 22)<sup>48</sup>. The subject areas

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<sup>48</sup> A total of nine current officials of the Ministry of Energy were interviewed for this study. Two of them are from the Division of Management and Finance, three are from the Division of Energy

cover topics that include sustainable development, energy efficiency, and renewable energy, among others.

**Figure 22: Organizational Chart of the Subsecretariat of Energy**



Note: based on (Subsecretaría de Energía, 2016) and Exempt Resolution N° 410 of 09/01/2016.

For the year 2015, the Subsecretariat of Energy had a total of 333 employees (Subsecretaría de Energía, 2016). Many of those interviewed argued that the staff is highly qualified, which some attribute to the fact that this is a new institution that was able to attract young and qualified people (ME1, 2016; ME5, 2016; ME7, 2016). On

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Efficiency, two are from the Division of Energy Access and Equity, and the final two interviewees monitor performance and report directly to the Subsecretary.

the negative side, also because they are new, some of their decentralized offices have yet to establish adequate capacity (ME9, 2016).

Many of those interviewed said that the fact that both the Minister and the Subsecretary show their interest in performance and financial monitoring has been a critical success factor (ME1, 2016; ME5, 2016; ME6, 2016; ME7, 2016; ME8, 2016). One reason why those two authorities have worked well together is that right from the beginning they agreed that the former was to be the spokesman while the latter was to focus on management (ME6, 2016). In contrast, some interviewees explained that working at the Subsecretariat of Energy between 2010 and 2014 was difficult as there were too many leadership changes that affected their focus (ME3, 2016; ME7, 2016).

Two characteristics of the Subsecretariat of Energy often mentioned as helpful are that it is a new and a small institution. These characteristics have been said to result in making participatory activities easier, recruiting younger and open-minded people, and having less bureaucratic processes (ME1, 2016; ME2, 2016; ME4, 2016; ME5, 2016; ME6, 2016).

The first program included in this study is the *Programa de Alumbrado Público* (Public Lights Program). This is the main program of the Division of Energy Efficiency, accounting for about 90% of its resources (ME3, 2016). This program was part of the functions of the *Agencia Chilena de Eficiencia Energética* (AChEE, or Chilean Agency of Energy Efficiency), a non-profit foundation that was created to act

as an executing body for the Division of Energy Efficiency. The AChEE and the division work very closely together, which is exemplified by the fact that the same person heads both organizations. Under the current arrangement, the Division of Energy Efficiency decides where to implement the program and the AChEE executes it by replacing inefficient public lights with LED technology (ME8, 2016). The program received requests from 95 municipalities, out of which 85 were selected based on how much they depend on central government funds, on their administrative capacity, on their electricity tariffs, on the number of crimes that were attributable to bad illumination, and on their level of energy efficiency (ME8, 2016).

The second program is the *Programa de Acceso y Suministro Eléctrico en Zonas Rurales y Aisladas* (Electric Access and Supply in Rural and Isolated Areas) of the Division of Energy Access and Equity. One of the main lines of action of this program is providing electricity in remote islands that cannot access conventional energy sources (ME1, 2016). This program follows the same protocol explained in Chapter 7 for public investment projects, i.e. it reacts to requests made by individual communities, normally through their municipalities, by sending out an expert to analyze the situation and to recommend a course of action. This process continues with an ex-ante public investment evaluation at the MDS. The role of the Subsecretariat of Energy is to analyze alternatives, offer guidance when sending a proposal to the MDS and to provide advice and coordinate technical details during implementation (ME9, 2016).



#### **8.4.2. Budgetary Structure**

As it is the case for every government agency, the approved budget of the Subsecretariat of Energy is highly aggregated into revenue and expenditure categories (see Table 37). The budget documents differentiate between general funds of the Subsecretariat and four subject areas; however, this structure is at odds with the seven subject areas of the organizational chart. One particularity that is detailed in the budget documents is that the Subsecretariat of Energy transfers a large portion of its budget to other public entity: the *Empresa Nacional del Petróleo* (National Petroleum Enterprise).

**Table 37: Subsecretariat of Energy Approved Budget, Year 2016 (thousands of Pesos)**

	TOTAL	Subsecretariat of Energy	Energy Efficiency Action Plan	Rural and Social Energy	Renewable Non-Conventional
REVENUE	\$ 117,835,797	\$ 80,517,889	\$ 19,423,098	\$ 7,869,938	\$ 10,024,872
<b>CURRENT TRANSFERS</b>	\$ 371,632	\$ -	\$ 371,632	\$ -	\$ -
From the Central Government	\$ 371,632	\$ -	\$ 371,632	\$ -	\$ -
<b>OTHER CURRENT REVENUE</b>	\$ 110	\$ 30	\$ 30	\$ 30	\$ 20
Recoveries and Reimbursements for Medical Licenses	\$ 30	\$ 10	\$ 10	\$ 10	\$ -
Fines and penalties	\$ 40	\$ 10	\$ 10	\$ 10	\$ 10
Others	\$ 40	\$ 10	\$ 10	\$ 10	\$ 10
<b>FISCAL TRANSFER</b>	\$ 117,464,015	\$ 80,517,849	\$ 19,051,426	\$ 7,869,898	\$ 10,024,842
Unassigned	\$ 117,082,529	\$ 80,136,363	\$ 19,051,426	\$ 7,869,898	\$ 10,024,842
Debt Service	\$ 381,486	\$ 381,486	\$ -	\$ -	\$ -
<b>INITIAL CASH BALANCE</b>	\$ 40	\$ 10	\$ 10	\$ 10	\$ 10
<b>EXPENDITURES</b>	\$ 117,835,797	\$ 80,517,889	\$ 19,423,098	\$ 7,869,938	\$ 10,024,872
<b>PERSONNEL</b>	\$ 11,598,869	\$ 9,693,005	\$ 1,332,318	\$ 194,177	\$ 379,369
<b>CONSUMER GOODS AND SERVICES</b>	\$ 7,255,395	\$ 4,776,663	\$ 2,174,112	\$ 234,329	\$ 70,291
<b>CURRENT TRANSFERS</b>	\$ 84,035,658	\$ 65,355,262	\$ 11,049,141	\$ 1,754,220	\$ 5,877,035
To the Private Sector	\$ 2,262,868	\$ -	\$ 2,262,868	\$ -	\$ -
To the Central Government	\$ 1,448,402	\$ 155,700	\$ -	\$ -	\$ 1,292,702
To Other Public Entities	\$ 80,268,388	\$ 65,143,562	\$ 8,786,273	\$ 1,754,220	\$ 4,584,333
To International Organizations	\$ 56,000	\$ 56,000	\$ -	\$ -	\$ -
<b>ACQUISITION OF NON-FINANCIAL ASSETS</b>	\$ 3,036,860	\$ 311,463	\$ 82,668	\$ 2,076	\$ 2,640,653
Vehicles	\$ 25,950	\$ 25,950	\$ -	\$ -	\$ -
Furniture and Others	\$ 50,505	\$ 42,106	\$ 8,399	\$ -	\$ -
Machinery and Equipment	\$ 2,676,723	\$ 16,556	\$ 17,438	\$ 2,076	\$ 2,640,653
Computer equipment	\$ 103,022	\$ 80,964	\$ 22,058	\$ -	\$ -
Software	\$ 180,660	\$ 145,887	\$ 34,773	\$ -	\$ -
<b>CAPITAL TRANSFERS</b>	\$ 11,527,489	\$ -	\$ 4,784,849	\$ 5,685,126	\$ 1,057,514
To the Private Sector	\$ 4,151,669	\$ -	\$ 4,151,669	\$ -	\$ -
To the Central Government	\$ 1,057,514	\$ -	\$ -	\$ -	\$ 1,057,514
To Other Public Entities	\$ 6,318,306	\$ -	\$ 633,180	\$ 5,685,126	\$ -
<b>DEBT SERVICE</b>	\$ 381,526	\$ 381,496	\$ 10	\$ 10	\$ 10

Author's translation.

Note: for some categories, there is one additional level of disaggregation. That level is typically used to identify the organization or program that is getting a transfer.

The budget structure used by DIPRES is not generally used within the Subsecretariat of Energy. Instead, they focus on their organizational divisions and programs (ME2, 2016). Unlike the case reported in other line ministries, the Subsecretariat of Energy has had no major problems securing funds for performance enhancing initiatives (such as expanding personnel and systems) because these funds were agreed upon with DIPRES as part of the Energy Agenda (ME5, 2016; ME7, 2016).

#### ***8.4.3. Performance Indicators and Evaluations***

For the year 2016 the Subsecretariat of Energy had seven performance indicators included in DIPRES system (see Table 38). Three of the seven indicators relate to internal processes; for example, sending projects for evaluation, properly analyzing projects, and the time spent on evaluations. The other four indicators relate to the coverage of some programs from three of the subject areas shown in their organizational chart, which means that most subject areas do not have a performance indicators included in the PMG.

**Table 38: Subsecretariat of Energy Performance Indicators, Year 2016**

<b>Indicator</b>	<b>Calculation method</b>	<b>Dimension</b>	<b>2016 Goal</b>
<i>1. Percentage of quotas of the Plan for Strengthening Human Capital in Energy that are covered with scholarships from the collaboration agreement between the Ministry of Energy and the CONICYT.</i>	(Number of quotas of the Plan for Strengthening Human Capital in Energy that are covered with scholarships / Number of quotas of the Plan for Strengthening Human Capital in Energy assigned for scholarships from the collaboration agreement between the Ministry of Energy and the CONICYT) * 100	Efficacy / Product	100%
<i>2. Percentage of Node Price Decrees published in year t, modified by causes attributable to the revision made by the Subsecretariat of Energy to the Technical Report prepared by the CNE</i>	(Number of Node Price Decrees published in year t, modified by causes attributable to the revision made by the Subsecretariat of Energy to the Technical Report prepared by the CNE / Number of Node Price Decrees planned to be published in the year t) * 100	Quality / Product	0%
<i>3. Cumulative percentage of public buildings benefited in year t with the Public Solar Ceiling Program</i>	(Number of public buildings benefited in year t with the Public Solar Ceiling Program / Number of public buildings selected as eligible to benefit) * 100	Efficacy / Product	80.8%

<i>4. Cumulative percentage of islands with electricity supply improvement projects delivered in year t</i>	(Number of islands with electricity supply improvement projects delivered in year t / Number of islands that require electricity supply improvement projects as defined in the Plan for Electricity Supply Improvement 2014-2018) * 100	Efficacy / Product	70%
<i>5. Cumulative percentage of hospitals assisted through the Public Buildings Energy Efficiency Program</i>	(Number of hospitals assisted through the Public Buildings Energy Efficiency Program / Number of hospitals considered as more complex to assist) * 100	Efficacy / Product	64.1%

<i>6. Percentage of Environmental Technical Assessments of Environmental Impact Studies of energy projects entered under literal c) art. 10 of the Environmental Bases Law, delivered to the Sector Authority at least 3 days before the legal deadline</i>	(Number of Environmental Technical Assessments of Environmental Impact Studies of energy projects entered under literal c) art. 10 of the Environmental Bases Law, delivered to the Sector Authority at least 3 days before the legal deadline / Number of Environmental Technical Assessments of Environmental Impact Studies of energy projects entered under literal c) art. 10 of the Environmental Bases Law requested by the Sector Authority) * 100	Quality / Product	100%
<i>7. Percentage of projects evaluated prior to the Empresa Nacional del Petróleo (ENAP, or National Petroleum Enterprise) budget process</i>	(Number of projects evaluated prior to the ENAP's budget process / Number of projects submitted for evaluation in year t by ENAP) * 100	Efficacy / Product	100%

Note: from (Subsecretaría de Energía, 2015).

The list of indicators has been changing over the last few years. From 2014 to 2015 four indicators remained the same while other three were substituted. From 2015 to 2016 there were two additional substitutions. This means that only two of the

current performance indicators have been unchanged for the last three years. The full list of performance indicators has been used for calculating the PMG<sup>49</sup>.

As it was mentioned before, one interviewee argued that the PMG is aligned with the Energy Agenda (ME7, 2016). However, it is unclear whether the changes in PMG indicators in recent years represent a move towards the agenda. For example, two of the indicators that were eliminated in 2015 were linked to non-conventional energy sources, which is a key goal in the Energy Agenda.

The Subsecretariat of Energy achieved 98.5 and 100% of the PMG score for the years 2014 and 2015, respectively. The performance indicators reported to DIPRES are the basis of determining whether employees receive their PMG salary bonus. For the years 2014 and 2015, performance indicators measured up to 100% of the PMG score. For the year 2016, performance indicators were lowered to 80% of the score, while new ‘cross-sectional indicators’ accounted for the remaining 20%. These indicators include aspects such as workplace accidents, gender equality, transparency, among others. To receive the maximum score on the cross-sectional indicators, the government agency is only required to measure, inform and publish them.

Five of the seven interviewees who commented about PMG performance indicators had issues with them (ME1, 2016; ME3, 2016; ME4, 2016; ME6, 2016;

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<sup>49</sup> The only exception is the first indicator in Table 38 which is not part of the 2016 PMG.

ME7, 2016; ME8, 2016; ME9, 2016). The most common complaint was that PMG indicators end up being easy to meet and do not serve as an incentive. Two interviewees said that the salary incentive is ‘too big to miss’; therefore, they set easy indicators. Another complaint was that there is no ownership over any of DIPRES systems. There were two interviewees who disagreed and argued that there is constant work to meet the PMG goals.

Some of those interviewed at the Subsecretariat of Energy have been subject to ex-ante evaluation of investment programs by the MDS, or to ex-ante program evaluations by DIPRES. General comments about both types of evaluations are positive, and the communication with the evaluator was always ranked as they key factor (ME1, 2016; ME9, 2016).

Since it was established in 2010, the Ministry of Energy has only been subject to one ex-post evaluation. The evaluation was published in 2013, it used the EPG methodology, and it focused on the work done by the AChEE during the years 2011-2012. The main conclusions were that the results from most of AChEE’s projects cannot be verified due to lack of proper evaluations and/or because the Ministry of Energy and the AChEE have not set verifiable goals. Other conclusions were that the AChEE should work more closely with a larger number of institutions instead of just the Ministry of Energy; and that the AChEE lacks adequate planning and evaluation capacity. Based on the evaluation results, the Subsecretariat of Energy and DIPRES agreed on a list of seven commitments that included elaborating a strategic plan,



collecting performance indicators, measuring results for their projects, finding new financing options, among others. Of the seven commitments, only one was fulfilled which involved presenting the results of a survey that they had already carried-out.

Of those interviewed at the Ministry of Energy, only one respondent argued that the evaluation has had some impact; it got the previous head of the AChEE to resign and generated a lack of trust from DIPRES towards energy efficiency activities, resulting in additional information request for that area during budgetary discussions (ME5, 2016). Other relevant interviewees answered either that they did not know about the existence of the evaluation, or that it provided no valuable insights but only superficial recommendations (ME3, 2016; ME6, 2016; ME7, 2016).

#### ***8.4.4. Information Systems***

Two thirds of those interviewed at the Subsecretariat of Energy said that they have access to quality and timely information for their decision-making processes, while the other third said that they have access to most, but not all, the information they need (ME1, 2016; ME2, 2016; ME3, 2016; ME4, 2016; ME5, 2016; ME6, 2016; ME7, 2016; ME8, 2016; ME9, 2016). This is partly a consequence of two systems that were created in recent years: the *Sistema de Gestión de Proyectos* (Project Management System) which includes execution information and project deadlines in a Gantt chart, and the *Cuadro de Mando Integral* (Comprehensive Command Chart) which has performance indicators. The program managers interviewed for this study

said that they have their own ad-hoc files to collect information from individual programs (ME8, 2016; ME9, 2016).

While the Project Management System is also used for financial monitoring, each division still works on their own Excel files which are then tabulated by the Division of Management and Finance. Most interviewees expressed no issues with the Excel-based system, except for one who argued that it should be improved (ME1, 2016).

### **8.5. Summary**

This chapter presents the main characteristics of the four Chilean line ministries included in this study. Table 39 summarizes the key takeaways from this chapter organized based on the variables included in the research framework.

***Table 39: Key Characteristics of Selected Chilean Line Ministries***

<b><i>Ability to link resources to organizational activities</i></b>
Resources and organizational activities are not explicitly linked. In all cases, there are two budgetary structures: a highly aggregated one used in DIPRES official documents, and a disaggregated one used internally at line ministries. The structure put forward by DIPRES does not match the organizational structure of any of the cases analyzed. The budgetary structure used internally is disconnected from performance monitoring.

### ***Ability to link strategic plans to organizational activities***

The main strategic guide for line ministries is President Bachelet's government plan. The plan was said to influence the prioritization of programs, but it is not used as an instrument to monitor measurable strategic targets.

The case of the Ministry of Energy stands out as the only one that has an influential strategic plan of their own. That plan, the Energy Agenda, was elaborated following a mandate included in President Bachelet's government plan. The plan was disaggregated into specific goals that are under constant monitoring.

The Ministry of Health and the Ministry of Public Works also have strategic plans of their own, but neither of those plans is actively used.

Every government agency prepares strategic definitions for DIPRES, which include mission, objectives, and products. The strategic definitions are sometimes incoherent and have no use within the line ministries included in this study.

### ***Fear of transparency***

Interviewees did not express any fear of transparency; instead, they want more performance information to be collected. Some interviewees from the Ministry of Public Works said that the fact that their products are tangible and visible takes away any possibility of hiding actual performance.

### *Informational system capacity*

In two of the four ministries, interviewees reported numerous issues with their information systems. Program managers from those organizations struggle to collect accurate and timely information on their programs.

The situation is different in the Ministry of Energy as they have implemented two performance monitoring systems, and in the Ministry of Public Works where they have a single system that serves most needs.

The information systems for financial reporting are weak in all line ministries. In most cases, there is an Excel file for each program, each one with a different structure, that get unified at the budget division. However, much less concerns were expressed about the financial information systems as compared to the performance information systems.

### ***Input- vs performance-oriented culture***

The evidence from all line ministries suggests that there is a mix of an input- and a performance-oriented culture.

The performance-oriented culture is stronger among program managers, as all of those interviewed demonstrated commitment towards making their programs work. This was the case even in organizations where they are not often held accountable for performance.

The input-oriented culture is more visible at budget divisions. This is likely a consequence of the fact that the main variable that DIPRES observes is financial execution.

The case of the Ministry of Public Works is particular as performance measures are not fully appropriate for the construction of infrastructure projects. Thus, while some interviewees said that the quality of the infrastructure is very important for them, their internal monitoring is heavily skewed toward financial execution.

### ***Management support***

The level of management support was highlighted in all cases as one of the most important factors for the implementation and success of performance-based reforms.

High turnover of mid- and high-level managers was reported in all cases as severely detrimental. Among the line ministries analyzed in this study, two have recently experienced high turnover and two have not. The former group argued that turnover has been an obstacle towards institutionalizing performance-based systems; while the latter group partly attributed their advances to low turnover in recent years. Some interviewees have experienced years of high and of low turnover, and they emphasized how different each of those are for internal administration.

The two cases with lower turnover have another aspect in common: The Ministers have a particularly good working relation with the heads of the government agencies.

***Organizational factors (e.g., size, reorganization)***

The size of the organization was explicitly mentioned as an important factor only in the smallest case: The Ministry of Energy. Being a small organization was said to facilitate the participatory process for the elaboration of the Energy Agenda.

The Ministry of Energy and the Ministry of Social Development had opposing experiences regarding their creation (they were created in 2010 and 2011, respectively). The Ministry of Energy had a positive experience as they hired young and qualified personnel. Interviewees in this ministry were also content with their remunerations. In contrast, the Ministry of Social Development, particularly the Subsecretariat of Social Services, ended up with a high proportion of posts filled by ‘consultants’, which resulted in high turnover rates and diminished career advancement opportunities.

***Resources for performance-based reforms***

The responses were mixed for this variable. In the Ministry of Energy and in the Ministry of Health they have recently received funds from DIPRES to invest in performance monitoring systems. While in the Ministry of Energy the funds were for broad systems that cover the entire organization, in the Ministry of Health the resources were specific for the Healthy Life Program.

In the other two ministries, there were numerous complaints from program managers who said that DIPRES denied them the resources needed to implement performance monitoring systems.

### *Self-interested motivation*

Self-interested motivation was not identified as a relevant factor.

### *Staff buy-in*

There are diverging results on the level of staff buy-in. On the one hand, there is not much buy-in on the PMG. Interviewees from the Ministry of Public Works were the only to describe PMG indicators areas as challenging and appropriate. On the other hand, there is buy-in for the internal performance monitoring systems, particularly those used at the Ministry of Public Works and the Ministry of Energy. Chapter 10 discusses internal performance monitoring systems.

### *Staff capacity*

Respondents in the Ministry of Energy and in the Ministry of Public Works spoke very highly about their peers, praising their technical knowledge and describing them as motivated individuals.

The situation in the Ministry of Health and in the Ministry of Social Development is different. Interviewees in these two cases said that they are understaffed, and lack many of the tools needed to carry-out their tasks properly.

The issues of inadequate staff capacity are exacerbated at each ministry's decentralized offices. This aspect is especially relevant as they all execute their programs through those decentralized offices. The only exception to this rule is the Ministry of Public Works.



### ***Time Investment***

In general, respondents say that the time they spend to comply with performance-based systems is reasonable. The only exceptions were caused by lack of coordination between evaluators within the MDS. In those cases, program managers found themselves having to redo projects to meet with the different criteria used by each evaluator.

Note: author's elaboration.

This chapter describes the most relevant factors about each of the four government agencies included in this study. This information is complemented with what was put forward in the previous two chapters: a description of Chile's external and political environment and a review of the main characteristics of the country's budgetary cycle and performance budgeting system. The remaining chapters build on this information to analyze the use of performance information.

## Chapter 9: The Use of Performance Information in Budget Formulation and Approval

The previous three chapters described the external and political environment around which performance-related reforms were introduced in Chile; the main characteristics of the country's budgetary cycle and performance budgeting system; and the most relevant factors about each of the four government agencies included in this study. This and the following two chapters move forward to analyze our main question: is performance information used by government agencies for decision-making purposes? The analysis is divided in the following way. This chapter focuses on the use of performance information for budget formulation and budget approval. The concluding section of this chapter incorporates elements from previous chapters to analyze the factors that led to the use (or lack of use) of performance information. Chapter 10 uses the same structure, but it analyzes budget execution and budget accountability. Chapter 11 discusses the key overarching issues, such as the impact of variables from each area of our research framework and the evidence linked to the hypotheses proposed for this study. The study ends with policy recommendations.

While, to this author's knowledge, there are no previous studies that focus on the use of performance information by Chilean government agencies, there are a handful of papers with evidence about the use of performance information during budget formulation and budget approval. For example, a study published more than a decade ago by the World Bank included the results of a survey that asked officials

from government agencies about their use of performance information from ex-post evaluations. The survey found that about 50-60% of program managers and division chiefs use the findings from ex-post evaluations to re-allocate resources within programs, defend their budget requests, and/or make other changes to program processes (Rojas, et al., 2005).

Other studies discussed the use of performance information during budget negotiations between DIPRES and government agencies. For example, a document published in 2004 by the Organization for Economic Co-Operation and Development (OECD) mentioned that “one-on-one technical committee bilateral meetings are held with the ministerial under-secretary, the head of each agency and the head(s) of the relevant budget sectoral division(s), in which staff from the Management Control Division (of DIPRES) also participate. In each meeting, the relevant agency’s budget proposal is discussed along with its past performance, proposed performance goals, and targets. There are several smaller meetings to examine the details of goals and targets” (Blöndal & Curristine, 2004, p. 40). That same study argued that DIPRES holds internal review sessions to discuss performance information prior to the one-on-one technical committee bilateral meetings. A similar depiction of the process was presented a year after in a document published by DIPRES (Guzmán, 2005).

A doctoral dissertation based on field research carried-out in the same timeframe as the studies mentioned in the previous paragraphs reached similar conclusions (Zaltsman, 2008). The dissertation lists some ways in which performance

information was used during negotiations between DIPRES and government agencies. The examples include use by government agencies to defend their request for resources, use by DIPRES to justify budget cuts, use by both of them to define the need to finance specific activities like training courses or consultancies, and use by DIPRES to determine whether a government agencies is likely to be efficient and effective in using additional resources.

All of the studies mentioned so far are based on information from 2003-2005. There are no assessments about the use of performance information by government agencies for budget formulation and approval after that period. A more recent publication by the OECD argued that “today there is a perception that performance information is not having a sufficient impact on resource allocation, (...) this impression is reinforced by advice from DIPRES sectoral budget analysts that they do not often discuss evaluation findings with the affected institutions during the negotiations with line ministries” (Hawkesworth, Huerta Melchor, & Robinson, 2013, p. 153). However, the authors do not analyze that claim further.

Finally, a document published in 2014 by the World Bank states that performance information is used during budget negotiations, but builds the claim exclusively on evidence from the 2003-2005 period (Guzmán, Irrázaval, & de los Ríos, 2014).

Two of the studies referenced above also comment on the use of performance information during congressional budget approval, although not from the point of view of government agencies. One study says that members of a congressional subcommittee ‘generally’ consider evaluation’ findings when discussing the budget (Rojas, et al., 2005). The other study argues that “Congress has proven largely uninterested in examining performance information and using it in decision making” (Blöndal & Curristine, 2004, p. 43).

### **9.1. Budget Formulation Within Government Agencies**

As described in Chapter 7, the formulation of the budget for any given year officially starts in the month of July as DIPRES communicates the budgetary ceilings for each line ministry and government agency. The budgetary ceilings, which are not publicly available, are aggregated financial limits imposed to line ministries and government agencies for the upcoming fiscal year. They are elaborated based on the political priorities and commitments from the President, and on the macroeconomic goals linked to fiscal responsibility rules (MH1, 2016; MH2, 2016). Individual line ministries are rarely able to negotiate their aggregate ceilings (Blöndal & Curristine, 2004; MH3, 2016).

Budgetary work within government agencies starts before DIPRES communicates the budgetary ceilings. In fact, it is common practice within government agencies to have a draft budget request ready by the end of June, just before they are informed of their budgetary ceilings. The draft budget is elaborated

using a bottom-up approach; i.e. DIPRES asks individual program managers to send their budget requests, and adds them up into aggregated categories. As it may be expected, the initial budget draft is always larger than the budgetary ceiling.

To have their draft request ready by June, program managers start preparing their draft budgets in May. In this process, they rely on two types of data: costs and coverage, with the latter being expressed as the number of people who will benefit from the program. The total amount of resources is always a function of those two variables following the simple equation:

$$\text{Total Program Budget} = \text{Number of Beneficiaries} * \text{Cost per Beneficiary}$$

In all the cases analyzed, the costing process is decentralized and informal<sup>50</sup> (ME1, 2016; ME2, 2016; MOP5, 2016; MS3, 2016; MS4, 2016; SSS6, 2016). One particular situation occurred recently at the Ministry of Energy in which the price of the main input for one program, which was costed based on 2014 information, dropped significantly. The program manager was allowed to keep the additional funds to expand the program coverage (ME8, 2016). Despite the suboptimal situation, none of those interviewed expressed any concerns about costing practices nor considered that public officials purposefully lie about their costs in order to get more funds.

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<sup>50</sup> By informal we refer to the fact that there are no systemic mechanisms to collect updated cost information.

If the total budget increases exclusively due to higher costs, while keeping coverage the same, then the increased budget is considered ‘continuity’ instead of ‘expansion’. In other words, a continuity budget is one that allows the program to maintain their current service level. The distinction is important as continuity increases tend to be approved easily, while expansion increases are analyzed in detail. Continuity requests with an abnormally large cost increase, or requests in years when the financial situation is too tight, might lead to added pressure for program managers to find alternative ways to cut costs.

While performance information is not used at this stage, program managers requesting expansions must make sure that they have the information available to ‘defend’ their request. The type of information changes between government agencies and includes: health indicators like malnutrition, satisfaction surveys of program beneficiaries, and percentage of beneficiaries that belong to minority or vulnerable groups (MOP3, 2016; MOP6, 2016; MS3, 2016; MS4, 2016; SSS4, 2016; SSS5, 2016). The case for expansion through new programs does not happen often.

Government agencies have one month to adjust their budget requests to the budgetary ceilings established by DIPRES. The adjustments tend to follow a two-step process. The first step involves general cuts and the second step includes a deeper review of programs that are candidates for budgetary expansion. Interviewees agreed that the cuts in the first stage are politically motivated, particularly linked to President

Bachelet's government plan and to political priorities from the Minister (MOP1, 2016; MOP7, 2016; MS2, 2016; SSS2, 2016).

The second step of budget formulation within government agencies is the one where performance information has a larger role. The discussions at this stage of the process comprise exclusively those programs that requested expansion (or that are totally new) and that passed through the political filter. In other words, these discussions concern those programs that were already determined to be directly aligned to the political priorities of the Minister (or other relevant high-level authority) and/or to the priorities established in President Bachelet's government plan. As it will be further detailed in the next section of this chapter, DIPRES is particularly meticulous in reviewing new and expanded programs; thus, government agencies work in advance on ensuring that they can provide a strong case when they meet with DIPRES. In sum, the key question for government agency's managers is: can we defend our case for program expansion against DIPRES?

Program managers and division chiefs can be called to the table to make their case for budget expansion. Even if they are not called personally, they will at least be required to submit performance information to defend their case. Interviewees gave various examples of indicators that they have submitted as evidence for budget expansion. At the Subsecretariat of Health Care Network the examples include health indicators like malnutrition, coverage data, financial execution, satisfaction surveys from program beneficiaries, and results from health care tests applied to program



beneficiaries (MS3, 2016; MS4, 2016). The examples are very similar for the Subsecretariat of Social Services: coverage data, financial execution, satisfaction surveys from program beneficiaries, and evidence of the impact of the program on its beneficiaries (SSS4, 2016; SSS5, 2016). The indicators at the Directorate of Waterworks only include coverage data and financial execution; however, they tend to prioritize cases where beneficiaries belong to minority or vulnerable groups (MOP3, 2016; MOP6, 2016). The most likely reason why impact information is less prominent in internal discussions at the Directorate of Waterworks is that it is harder to measure the impact of their projects.

There are important details about the performance information listed in the previous paragraph. First, the common denominator is coverage data and financial execution. Not surprisingly, in the next section of this chapter we explain that those are the two indicators that concern DIPRES the most. Second, the performance information from DIPRES systems is not considered at this point. The only partial exception is Government Program Evaluations (EPG) as interviewees in two cases argued that they had a role at this stage, albeit a very limited one (MS2, 2016; MS3, 2016; SSS5, 2016). Finally, some program managers said that while the results of ex-ante evaluations from the MDS might not be discussed, they are used internally to build and organize their case for budgetary expansion (MOP1, 2016; MS3, 2016; SSS6, 2016).

While the process described in this section in principle applies to all cases, the situation of the Ministry of Energy is somewhat different. As explained in the previous chapter, the Ministry of Energy defined a strategic plan, called the Energy Agenda, which was used to establish a four-year budgetary agreement with DIPRES. Interviewees at the Subsecretariat of Energy explained that budget formulation is easier in their institution because of their agreement with DIPRES (ME3, 2016; ME9, 2016).

The costing process in the Ministry of Energy is also decentralized and informal, but it meets with program priorities and coverage goals that were predefined as part of the multi-year agreement, making budget formulation smooth. Expansions beyond what was set in the agenda, or the inclusion of new programs, are rare. When they arise, they are decided (and commonly proposed) by the Minister and the Subsecretary based on political priorities (ME2, 2016; ME3, 2016; ME9, 2016). The type of information discussed appears to be similar to that of other cases.

There are only minor differences among the other three institutions. One difference is that program managers at the Subsecretariat of Health Care Networks work particularly close with an individual budget officer that is assigned to assist them in formulating their budgets. The main task of the budget officer is to make sure that numbers are consistent and calculations are correct. Another difference is that budget formulation for projects at the Directorate of Waterworks has a multi-annual horizon, typically until project completion. This is because, unlike the other

government agencies in this study, all projects within the Directorate of Waterworks are infrastructure initiatives which are inoperative unless completed; thus, when a project is funded for the first year it is done under the expectation that it will be funded until completion. This implicit financial commitment for future years is called the budgetary '*arrastre*'.

## **9.2. Budget Negotiations with DIPRES**

Government agencies submit their budget request to DIPRES about a month after being informed of their budgetary ceilings. Individual meetings between officials from DIPRES and each government agency start immediately after budgets are submitted. These meetings are shaped by some relevant factors. The first factor, which is common in public budgeting, is that there is asymmetry of information: it is very difficult for DIPRES officials to be certain that government agencies are telling the full story.

The second factor, which was mentioned in Chapter 7, is that DIPRES budget officials, known as sectorialists, have a particularly low turnover rate and specialize in specific line ministries and government agencies which they tend to cover for many years. Therefore, those officials are very experienced and knowledgeable about the budgetary history of the institutions that they analyze. Budget officials use their experience and knowledge to mitigate the issue of asymmetry of information.

The final factor is an internal disconnection between two organizational areas of DIPRES: the area that produces performance information and the one that negotiates the budget. The harmony between these two areas has changed over time. Extrapolating from the situation described by interviewees who worked at DIPRES during previous administrations, one could argue that there was good internal communication during the Lagos administration and that it has been deteriorating progressively in every government period since then<sup>51</sup>.

The negotiation process between DIPRES and government agencies lasts a month and moves progressively from discussing aggregate financial information to performance information of specific programs. The process starts with an analysis of the ‘continuity’ budget, i.e. the resources needed to maintain current service levels and meet existing commitments for the upcoming year; and it ends with a deeper analysis of the programs that are new or that are requesting budgetary expansion (MH3, 2016).

The program expansion analysis does consider different types of performance information, but it is strongly skewed towards three variables: coverage data, financial execution, and linkage with political priorities (MH2, 2016; MH3, 2016). DIPRES officials explained that the reason why financial execution is so important is because of the ‘opportunity cost’ of resources: for every expansion that they approve

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<sup>51</sup> This argument was built from what was stated in the following interviews: (OI4, 2016; OI7, 2016; OI8, 2016; OI11, 2016), but it was not explicitly argued by any of those interviewees.

they are rejecting an expansion to someone else. For that reason, DIPRES officials are highly reluctant to provide additional funding to programs and government agencies that have been unable to spend all their resources in the past as they are expected to be more likely to end up with idle resources again. Those idle resources could have been used to grant expansion to another government agencies.

Those same DIPRES officials admitted that the use of other performance information is ‘suboptimal’. That was corroborated by those interviewed at government agencies who also listed coverage data, political priorities, and financial execution as the type of information used at this stage (MS2, 2016; MS4, 2016; SSS2, 2016; ME2, 2016). As for performance information generated by DIPRES systems, some interviewees said that budget officials only ask about the commitments of the EPG, but that these are not key factors in budget negotiations (ME2, 2016; MS2, 2016). There were some who mentioned that ex-ante evaluations are requested and used as a filter to provide resources (ME2, 2016; MS2, 2016).

One additional factor that influences the use of performance information is the general economic situation of the country. One former and one current DIPRES officials said that in years of scarce resources most budget cuts have been decided based on political factors, while performance information has been disregarded (MH3, 2016; OI11, 2016). This finding is similar to what has been reported about OECD countries and state governments in the United States: budget cuts in economic

downturns do not focus on low-performing areas, but instead on across-the-board cuts and on political priorities (Hou, Lunsford, Side, & Jones, 2011; Schick, 2014).

As in the case of budget formulation within government agencies, budget negotiations with DIPRES are simpler for the Subsecretariat of Energy than for the other cases included in this study. Officials from Energy described the process as a ‘yearly confirmation’ of the multi-year agreement (ME2, 2016; ME3, 2016; ME9, 2016). The type of information discussed appears to be similar to that of other cases, but the process is more straightforward. One official from DIPRES said that these type of multi-year agreements are desirable, and that they have reached them with other government agencies as well (MH3, 2016).

As explained in Chapter 7, the budget is discussed at higher political levels after negotiations between government agencies and DIPRES come to an end. Officials from government agencies have little to no role in those discussions. First, the Budget Director presents his proposal to the Minister of Finance; then, the Minister of Finance does the same with the President. As this chain of discussions moves forward, the level of details discussed get reduced; for example, the President usually focuses only on particular programs that are being expanded (MH3, 2016). Some interviewees said that performance information is not used at that stage, and that changes tend to be marginal (MH1, 2016; MH2, 2016; MH3, 2016).

### **9.3. Budget Approval in Congress**

The budget proposal is sent to Congress by the end of September, right after getting the final approval by the President. As detailed in Chapter 7, the Chilean Congress is weak in budgetary terms, and the budget is barely changed at this stage. This fact contrasts with the high levels of expertise and authority of the DIPRES.

The strength of DIPRES does not only obscure the role of Congress in approving the budget, but also the role of government agencies in defending their allocations in front of Congress. Interviewees from all institutions included in this study argued that, as soon as the budget is sent to Congress, DIPRES and government agencies become allies in defending it, with the former taking the leadership role (MS2, 2016; ME2, 2016; SSS5, 2016; MH3, 2016). This means that government agencies have a very limited role during congressional budget approval, as the Minister of Finance and the Budget Director are the ones that more often testify in defense of the budget proposal.

A DIPRES official explained that becoming allies of government agencies during congressional approval helps mitigate potential issues of asymmetry of information (MH3, 2016). This is so because government agencies know that it is in their best interest to share all relevant information with DIPRES so that the latter can defend their agreement in front of Congress.

As this study focuses on government agencies, and government agencies have a limited role in Congress, interviewees had only limited knowledge about the information used during congressional approval. A DIPRES official argued that members of Congress might ask for a wide range of information, making the discussion somewhat unpredictable (MH2, 2016). Some interviewees at government agencies assured that there is one type of information in which members of Congress are particularly interested: ‘*Glosas Presupuestarias*’ (Budgetary Annotations) (ME2, 2016; MS1, 2016). The Budgetary Annotations are a list of footnotes included in the budget document of each government agency. They are added per request of members of Congress. Table 40 shows a list of selected Budgetary Annotations from the budget of the Subsecretariat of Energy. Annotations 1, 3 and 4 are examples of very specific restrictions on types of expenditure, such as vehicles and overtime wages. The Budgetary Annotations of all government agencies in this study start with a similar list of restrictions. Annotations 2, 9 and 11 are examples of informational requirements set by Congress for the upcoming fiscal year.

**Table 40: Selected Budgetary Annotations from the Budget of the Subsecretariat of Energy, Year 2016**

01. Maximum number of vehicles: 19
02. The Subsecretariat of Energy will inform the Joint Special Committee on Budgets annually regarding the expenses incurred by that entity for the functioning



of the Panel of Experts, established in article 212 of DFL N ° 4, 2006, of the Ministry of Economy, Promotion and Reconstruction.
03. The Special Mixed Budget Commission will be informed annually of the studies carried out to find alternative solutions to the energy problem of the Region of Magallanes and Chilean Antarctica.
<p>04. Includes:</p> <p>A) Maximum staffing: 256</p> <p>B) Overtime year: \$ 46,731 (thousands of Pesos)</p> <p>C) Maximum allowance for travel expenses in national territory: \$ 214,775 (thousands of Pesos)</p> <p>- Maximum allowance for travel expenses overseas: \$ 51,939 (thousands of Pesos)</p> <p>D) Agreements with natural persons</p> <p>- Number of people: 38</p> <p>- Amount: \$ 1,304,107 (thousands of Pesos)</p> <p>Up to 5 people may have the status of Public Agent for all legal purposes.</p> <p>E) Maximum authorization for compliance with article seventy-third of Law No. 19,882, Assignment by Critical Functions:</p> <p>- Number of people: 38</p> <p>- Amount: \$ 567,208 (thousands of Pesos)</p>
09. Before August 31, 2016, the Ministry of Energy must send to the Special Joint Budget Committee information on the financial situation of the ENAP, indicating its commitments of resources and guarantees, its own assets and the fiscal contributions received.

10. The institutions receiving resources must sign agreements with the Subsecretariat of Energy, which will set the objectives of each initiative. Resources may be transferred to the private sector, executed directly by the agency itself and / or by institutions of the public sector, which will not enter their budgets when dealing with institutions included in this law.
11. A detailed report on the use of these resources shall be submitted annually to the Special Joint Committee on Budgets.

Note: from Subsecretariat of Energy budget, Year 2016.

#### **9.4. Analytical Summary**

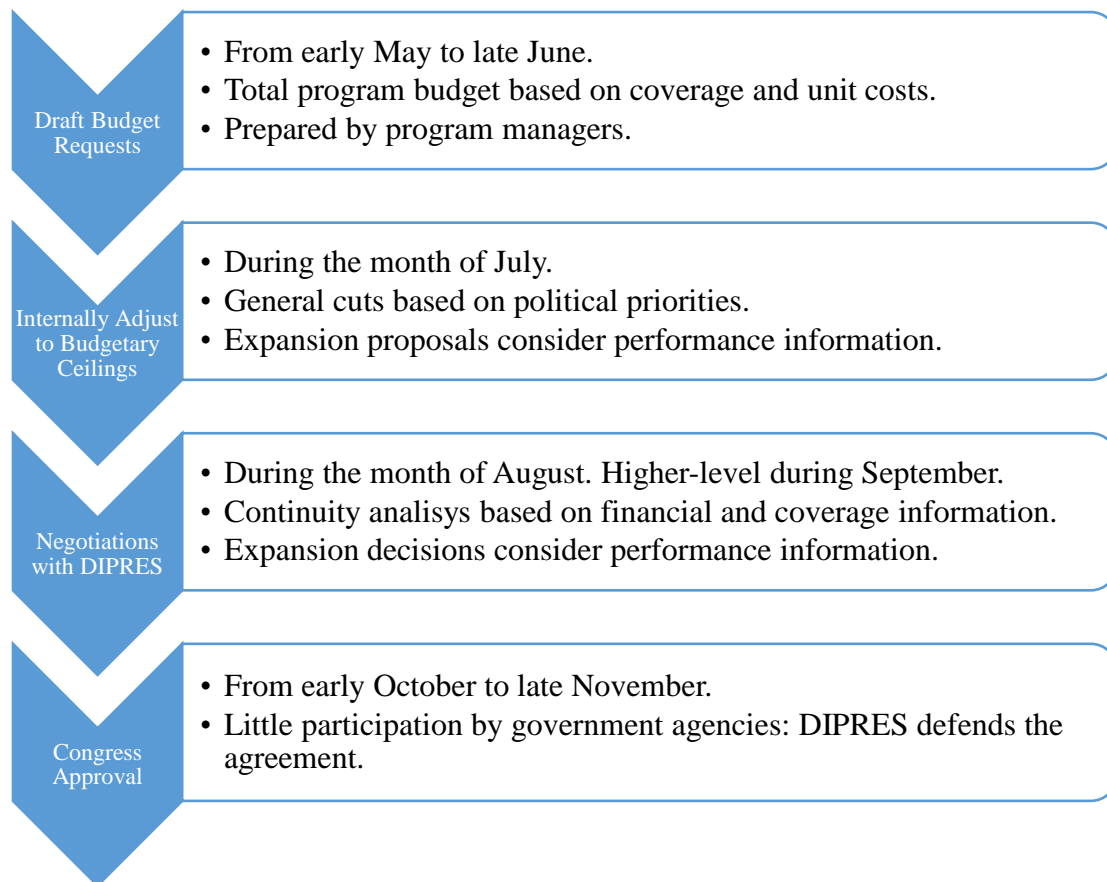
In this chapter, we detailed the use of performance information by government agencies for budget formulation and approval. The recount of the decision-making processes shows that performance information has a role, albeit not a key one, at these stages of the budget process. The two most widely used measures of performance are coverage data and financial execution, none of them is strongly related to the main goals of performance budgeting: technical efficiency, allocative efficiency and efficacy<sup>52</sup>. Other measures of performance that are related to those goals are used to inform decisions but only for cases of potential budgetary expansion, and have a secondary role behind political priorities, financial execution, and coverage data.

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<sup>52</sup> See Chapter 2 for more information on the goals of performance budgeting.

Figure 23 presents a summary of the main decision-making instances during budget formulation and approval. The first two instances occur internally within each government agency. Program managers are the key decision-makers during the first stage as they prepare their draft budgets based on coverage data and unitary costs. Requests that keep coverage rates similar are considered continuity and go faster through the budget process. Programs that request expansions are submitted to additional scrutiny. The second instance happens after government agencies are informed of their budgetary ceilings. Higher-level authorities, including the budget division (or similar), meet to decide cuts on draft budget request. The process is highly politicized, and only the programs that are deemed priorities might be chosen for budgetary expansion. The final decision to request budget expansions to DIPRES builds on performance information, with an emphasis on coverage data and financial execution.

**Figure 23: Main Decision-Making Instances During Budget Formulation and Approval for Chilean Government Agencies**



Note: author's elaboration.

Negotiations between DIPRES and government agencies commence with aggregate financial data and move towards the performance of individual programs. As in previous stages, the main types of information used are political priorities, coverage data and financial execution. The source of the performance information used in these negotiations is more likely to be internal information systems from government agencies than the one produced by DIPRES itself.

Finally, after sometimes difficult negotiations, DIPRES becomes the best ally of government agencies as they defend their budgetary agreement in front of Congress. As compared with the case of other countries around the world, where line ministries have an active role, Chilean line ministries and government agencies have very limited participation during congressional approval<sup>53</sup>.

The introduction of this chapter summarized the results of previous studies of Chilean budget formulation and approval. Some studies, based on observations from a little more than a decade ago, had a positive view on the use of performance information during budget negotiations with DIPRES. This includes the depiction of internal meetings between two areas of DIPRES, the area that produces performance information and the one that negotiates the budget, that served to prepare the latter area for their negotiations with government agencies. That structure led to a higher demand for performance when meeting with government agencies. A more recent publication suggested that the situation has deteriorated over time, something that was suggested by several interviewees in this study.

The analysis of congressional budget approval is limited in this study. This is because this study focuses on government agencies and they have almost no role during budget approval. In congruence with previous studies, interviewees from DIPRES suggested that performance information is seldom used in Congress.

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<sup>53</sup> See Chapters 1-3 for more information about budget approval in other countries.

The remainder of this chapter is dedicated to analyzing some of the main questions that arise from what has been presented.

#### ***9.4.1. Why are Decision-Making Processes So Similar in all Government Agencies?***

One fact that stands out from this chapter is that budget formulation and approval is almost identical in all the government agencies included in this study. The only two characteristics that led to some differences are the strategic planning done at the Subsecretariat of Energy and the fact that the Directorate of Waterworks carries-out only infrastructure projects. This suggests that many other characteristics, including staff capacity, leadership, informational systems, and others, have little to no impact in formulation and approval decision-making processes.

The most likely explanation is based on one of the characteristics of Chile's budgetary cycle that was introduced in Chapter 7: the cycle is heavily centralized and dominated by DIPRES, leaving almost no room for government agencies to maneuver. While DIPRES budget centralization has helped to institutionalize and strengthen processes, it also has pushed all government agencies to develop the same internal processes.

One piece of evidence that supports this argument is the fact that government agencies have adapted their internal discussions to base them on the same types of information that DIPRES asks from them: coverage data, financial execution, and

political priorities. All program managers interviewed for this study confirmed that coverage data, financial execution, and political priorities are key for internal decisions on program expansions (MS3, 2016; MS4, 2016; MOP3, 2016; MOP6, 2016; SSS4, 2016; SSS5, 2016). Similarly, interviewees at government agencies who have been involved in budget negotiations with DIPRES, and DIPRES officials themselves listed coverage data, political priorities, and financial execution as the type of information used at this stage (MS2, 2016; MS4, 2016; SSS2, 2016; MH2, 2016; ME2, 2016; MH3, 2016). The fact that all the government agencies focus on that same information, and that the information matches what is requested by DIPRES, suggests that they are all being influenced by the same phenomenon; therefore, it supports the argument that requirements set by DIPRES shape internal budget formulation processes.

The argument is further strengthened by the fact that decision-making processes vary widely during budget execution, which is a phase over which DIPRES does not have tight controls. This point allows comparison of processes with and without tight controls from DIPRES, and shows that when controls are looser government agencies can develop their own differentiated processes. This aspect will be further illustrated in the budget execution section of the next chapter.

***9.4.2. Why are Performance Indicators from Government Agency Systems  
More Relevant than that from DIPRES System?***

It is no surprise that government agencies officials prefer their own performance indicators to those of DIPRES. As mentioned in Chapters 7 & 8, many government agencies officials are not fond of DIPRES performance indicators. For example, almost two thirds of interviewees at line ministries who commented on the PMG said that indicators are either not relevant/appropriate to measure program success, or not challenging enough to work as an incentive (MS1, 2016; MS3, 2016; MS4, 2016; MOP3, 2016; MOP6, 2016; SSS4, 2016; SSS5, 2016; SSS7, 2016; ME1, 2016; ME3, 2016; ME4, 2016; ME6, 2016; ME8, 2016). But given that DIPRES has the power to determine what information is used in budget negotiations, why they are not pushing to use the indicators from their own system?

An argument can be made that DIPRES performance indicators are not being used because they are weaker in quality; thus, they are not reliable sources of information. However, this argument is weakened by the fact that respondents in two of the four government agencies complained not only about the quality of PMG indicators, but also about the quality and reliability of their own performance indicators (MS3, 2016; MS4, 2016; SSS4, 2016; SSS5, 2016). From this one may infer that it is unlikely that the technical quality of performance indicators from government agency systems is too much higher than that of DIPRES system.



An advantage of the indicators from government agencies is that they tend to be more comprehensive than those produced by DIPRES in terms of their coverage of the key aspects of each program. As shown in Chapter 8, each government agencies has only a handful of DIPRES performance indicators, leaving many programs (and even entire divisions) without a single indicator<sup>54</sup>. Even the programs that are included in DIPRES performance indicators are likely to have only a single indicator, which is not enough to judge a program's performance. For instance, six of the eight programs analyzed in this study have either zero or one PMG indicator. The exception is the Directorate of Waterworks where each program has three PMG indicators that are directly relevant to their work.

The lack of comprehensiveness of DIPRES performance indicators is reasonable as they would need an immense number of indicators to cover the entirety of government programs. In fact, in Chapter 7 we showed that if the last several years DIPRES has reduced the number of indicators as it was considered that they had too many. However, the decision to reduce the number of indicators might just be seen as additional evidence that the performance indicators system is not adapted for the needs of line ministries.

Finally, the DIPRES officials that negotiate the budget might not feel too much ownership of DIPRES performance indicators. This is because of an issue

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<sup>54</sup> The list of DIPRES performance indicators for each government agency are shown in sections 8.1.3, 8.2.3, 8.3.3, and 8.4.3.

explained in section 9.2: there is an internal disconnection between two organizational areas of DIPRES, as the area that produces performance information is not the same one that negotiates the budget. For this reason, it is reasonable to argue that the DIPRES officials that negotiate the budget are not necessarily invested in the performance information collected by other areas of their own organization.

In sum, the two strongest arguments to explain why DIPRES performance indicators are substituted by performance indicators from government agency systems during budget formulation are: lack of comprehensiveness and weak ownership. The combination of these arguments provides a solid case to explain the question at hand.

#### ***9.4.3. Why does Performance Information Has a Limited Role in Budget Negotiations with DIPRES?***

Before trying to answer this question, it is important to remember that it is incorrect to expect performance information to be the main driver of budgetary decisions. As argued in Chapter 2 of this document, performance information should be expected to affect decisions but only as an additional input that goes together with political priorities and other considerations.

While performance information is considered during budget negotiations, it barely meets the bar of affecting resource-allocation. This fact was confirmed by all interviewees at government agencies who have been involved in budget negotiations with DIPRES, who agree that performance information has only a limited role as

compared to coverage data, political priorities, and financial execution (MS2, 2016; MS4, 2016; SSS2, 2016; MH2, 2016; ME2, 2016). An additional and sufficient piece of evidence that confirms the limited role of performance information during budget negotiations is that DIPRES officials themselves admitted that the use of such information is ‘suboptimal’ (MH2, 2016; MH3, 2016).

While it is important that performance information still has some role in budget negotiations, the situation is hardly positive when one considers some aspects presented earlier in this chapter: (1) performance information is only prominent at the end of the process to analyze a handful of cases; (2) the two most widely used measures of performance are not strongly related to the main goals of performance budgeting; and that (3) even though Chile has worked for years in building a robust system that generates information, most of it is being disregarded by the same institution that manages those systems.

DIPRES officials decide the type of information that will be discussed during budget negotiations. So, why are they not using performance information any further? A first reason might be that it is not convenient for them to give too much weight to performance information. As mentioned earlier, the DIPRES officials that negotiate the budget are not from the same area as those that produce performance information. As one interviewee argued, DIPRES budget negotiators prefer to disregard performance information as it reduces their discretionary power in allocating resources

(OI7, 2016). This is consistent with the well-documented fact that it is easier to produce performance information than to get people to use it.

There are additional reasons, discussed in Sections 9.4.1 and 9.4.2, that may also explain the limited role of performance information in budget negotiations. One of those reasons is the internal disconnection between two organizational areas of DIPRES: the area that produces performance information and the one that negotiates the budget. In fact, some of the activities that were documented in years when there was better internal harmony within DIPRES were directly linked to increase the interest of budget negotiators in performance information. One example from more than a decade ago is that members from both organizational areas of DIPRES and the Budget Director used to meet to talk about each government agency and “discuss all financial and performance information including progress against targets, results of evaluations, and the PMG. These meetings set the foundation and framework for the next stage of the budget cycle” (Blöndal & Curristine, 2004, p. 39). These meeting are not held any longer.

Therefore, a reasonable explanation for the limited role of performance information during budget negotiations is that increasing the role of performance information reduces the discretionary power of DIPRES budget analysts, and that some internal practices that were conducive to increasing the use of performance information are no longer happening within DIPRES. One important caveat to this explanation is that this study focused primarily on the point of view and the internal

processes of government agencies, and not of DIPRES; therefore, there is only limited evidence substantiating the explanation provided in this section.

The next chapter continues our analysis of the use of performance information in the subsequent phases of the budgetary cycle: budget execution and budget accountability.

## Chapter 10: The Use of Performance Information for Budget Execution and Accountability

This chapter continues to analyze the use of performance information. The main question in this chapter: is performance information used by government agencies for budget execution and accountability?

Some authors have made brief mentions about the use of performance information in the internal decision-making processes of Chilean government agencies. Two studies published in 2005 argued that ex-post evaluations were relevant for managerial decisions during budget execution. The first of those studies uses three specific evaluations as examples of cases in which they result in sizeable changes at the program or institutional level (Rojas, et al., 2005). The second study, published by DIPRES, includes statistics on the impact of more than 100 evaluations, stating, for example, that 24% of them resulted in substantial program redesign, 38% in reforms of program components or processes, and 24% in minor adjustments (Guzmán, 2005). An updated report published five years later by DIPRES shows similar statistics (Arenas de Mesa & Berner Herrera, 2010). Finally, two recent studies briefly mention that the commitments signed after ex-post evaluations affect budget execution (Guzmán, Irarrázaval, & de los Ríos, 2014; Hawkesworth, Huerta Melchor, & Robinson, 2013)

To this author's knowledge, there is only one study that directly asked line ministries about their use of the performance information from DIPRES systems (Zaltsman, 2008). However, that study focused almost exclusively on resource allocation; therefore, its only interviewees in line ministries are officials from budget departments. That study found that performance information rarely guides resource allocation during budget execution.

Some of the studies referenced above have praised the fact that DIPRES information is publicly available (Guzmán, 2005; Rojas, et al., 2005; Blöndal & Curristine, 2004). However, those same studies mention that the information is not widely used by the Chilean Congress nor by the Chilean civil society. The perception of the Chilean civil society about DIPRES transparency is further analyzed later in this chapter.

The analysis in this chapter is divided as follows. Section 10.1. explains the institutional-level systems that government agencies use to monitor their own performance. Section 10.2. focuses on program-level monitoring systems. Section 10.3. includes other potential uses of performance information during budget execution, such as resource re-allocation. Section 10.4. discusses transparency and accountability from the point of view of the Chilean civil society. Section 10.5. incorporates elements from previous chapters to analyze the factors that led to the use (or lack of use) of performance information.

## **10.1. Performance Monitoring at the Institutional Level**

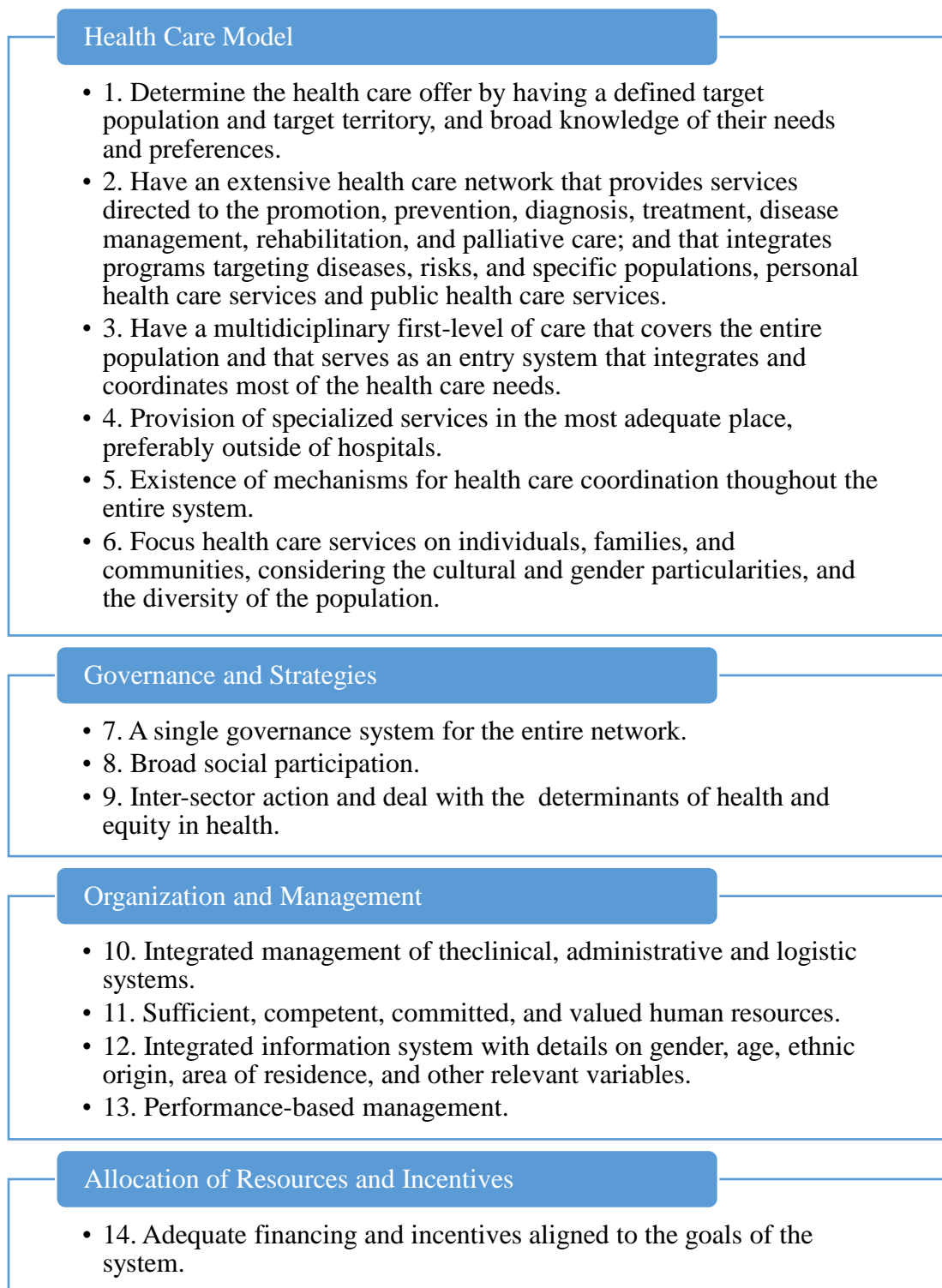
All the government agencies included in this study have an institutional-level performance monitoring system. These systems differ greatly from one institution to the next, so this section covers them separately.

### ***10.1.1. Subsecretariat of Health Care Networks***

The Subsecretariat of Health Care Networks has three performance monitoring systems at the institutional level. All these systems have a formulaic approach that is used to award financial transfers and/or monetary incentives. The first of those systems is known as Managerial Commitments (COMGES). The COMGES are a set of goals, each measured by one or more indicator, that were built from the Integrated Health Services Network (RISS). The current system includes four general subject areas that are disaggregated into 14 attributes and 23 indicators (see Figure 24).



**Figure 24: Subject Areas and Attributes Included in COMGES**



Note: based on (Subsecretaría de Redes Asistenciales, 2015).

As explained in Chapter 8, the provision of public health care in Chile is decentralized into local service centers, each of which manages several health care centers. The Subsecretariat of Health Care Networks is the institution in charge of supervising the entire network; therefore, it makes sense for the COMGES to focus on local service centers instead of individual programs. The other two systems discussed in this section also focus on local service centers. As shown in Figure 24, the subject areas and attributes focus on the functioning of the entire health care network and not in strategic results linked to the health of the beneficiaries. Each local service center must report their COMGES indicators three times a year: in June, September, and December. The results are verified through workshops led by technical referees and then used for decision-making at the office of the Subsecretariat (MS5, 2016). In addition, the Subsecretariat of Health Care Networks asks, but cannot force, local service centers' managers to link their Public Sector Senior Executive Service System (ADP) indicators directly with those of the COMGES.

The second system is the *Índice de Actividad de la Atención Primaria de Salud* (IAAPS, or Primary Health Care Index) which was established in the year 2002 and provides a monetary incentive linked to a set of goals for local service centers. The goals, normally referred to as *Metas Sanitarias* (Health Goals) are set each year by the Subsecretariat of Health Care Networks and are almost entirely composed by coverage indicators linked to certain priority areas based on the National Health

Strategy. For example, for 2017 there are seven goals linked to the following topics: psychomotor development, early detection of cervical cancer, dental care, type-II diabetes, arterial hypertension, breastfeeding, and social participation. The IAAPS provides a fixed incentive and a variable incentive, where the latter is linked to the coverage goals. When the IAAPS was created in 2002 the fixed and variable incentives were each determined to be 5.3% of employees' salary; however, in 2007 the incentives for the fixed and variable incentives were raised to 10.3 and 11.9% of employees' salary, respectively.

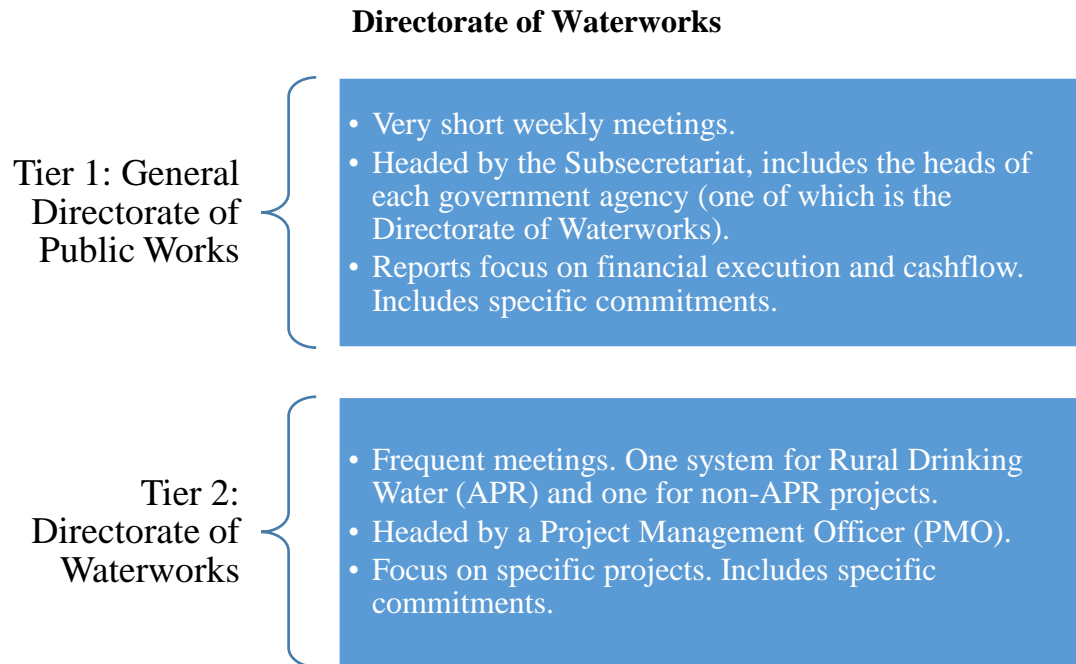
The third system is known as *Bono Trato Usuario* (Customer Service Bonus). This system was created in 2012 and provides a monetary incentive to personnel from the decentralized health centers. The monetary incentives are awarded based on the results of a customer satisfaction survey designed by the Subsecretariat of Health Care Networks. Health centers with a survey score of 65% or higher are eligible for the monetary incentive.

These systems appear to be less relevant for lower levels of the Subsecretariat of Health Care Networks. None of the three systems includes indicators specific to any of the programs analyzed in this study, and they were not mentioned by interviewees at the program level. Finally, while one interviewee argued that the Management Improvement Program (PMG) indicators are included in the COMGES system (MS5, 2016), the author could match only one indicator from the former with those of the latter.

### ***10.1.2. Directorate of Waterworks***

A two-tier institutional monitoring system has been institutionalized for the Directorate of Waterworks (Figure 25). The higher tier of this system involves the six executing government agencies coordinated by the General Directorate of Public Works, one of which is the Directorate of Waterworks. The head of the General Directorate of Public Works has the particularity of being chosen directly by the Minister, unlike the heads of each government agency that are selected by the President (MOP1, 2016). For that reason, the person in that office can be assumed to be a direct representative of the Minister of Public Works. The system involves weekly meetings that take place every Monday. The meetings are very short, are attended by the head of each executing government agency, and focus on the short and medium-term horizon of physical and financial execution (no more than three-months ahead) (MOP5, 2016). For each meeting, there is a report, prepared with information from the Integrated Financial Information System (SAFI) which is an Excel-based platform that has project-level information with comparative data of the physical and financial execution of the projects of each executing government agency. Those interviewees who attend these meetings consider them to be positive, and tend to highlight two aspects: that they generate competition among government agencies and that they emphasize explicit commitments that are followed-up on the next meeting (MOP1, 2016; MOP5, 2016).

**Figure 25: Institutional-level Performance Monitoring Systems at the**



Note: author's elaboration

The second tier of internal monitoring is exclusive for the Directorate of Waterworks and has one structure for Rural Drinking Water (APR) and another one for all other areas. The reason for this split is that APR's activities tend to be of a different nature than those of other areas (MOP7, 2016). These monitoring structures are headed by Project Management Officers (PMO), a position that has been instituted each government agency within the General Directorate of Public Works. There is one PMO for APR and one for non-APR projects, and they are responsible for getting updated information for these meetings and for preparing the reports. While there is no formal definition of the role of the PMO, an interviewee explained that whoever is in that position must "be on top of what is happening everywhere, all the time" (MOP7, 2016).

The monitoring structure for non-APR projects focuses on the largest projects (measured in money), the sum of which must be at least equivalent to 64% of the total project portfolio (MOP7, 2016). The projects included in that list are defined the year before. For the year of this study the list included 14 projects. There are five bi-monthly meetings between the months of February and November, known as Board Meetings, for each of these projects; thus, totaling 70 meetings during the year. Attendees for each board meeting include the PMO, other high-level authorities, the project manager, and other members explicitly designated in project initiation documents (MOP7, 2016). Finally, extraordinary meetings might be called for smaller projects, or if an urgent situation arises in one of the largest projects.

The APR meeting structure consists of weekly meetings attended by all area directors of the APR program (MOP8, 2017). The meetings are somewhat more informal than those of non-APR projects. For example, there is no written agenda but instead attendees are free to raise whatever concerns they think are appropriate (MOP8, 2017).

The topics discussed in both the APR and non-APR meetings include contractual obligations, requests from decentralized project members, milestones, physical and financial execution, and specific commitments that are monitored subsequently (MOP7, 2016; MOP8, 2017). The sources of this information are project managers and the SAFI system. Only the non-APR system has written

minutes of the meetings. The author was granted access to some of these minutes and they confirm that the first point of order is to monitor progress related to the commitments made in the last meeting. Some examples of those commitments are setting new timelines with the contractor and getting timely approval from high-level authorities to implement a change to the project that was determined at that same meeting.

Neither the APR nor the non-APR meetings explicitly include PMG indicators. Instead, indicators from the PMG, the ADP, the CDC, and other central government systems are monitored by the Management Control Unit within the Directorate of Waterworks. This Unit looks at the status of indicators and follows up with officers when they are lagging (MOP4, 2016; MOP7, 2016; MOP8, 2017). While it was not mentioned by any interviewee, it could be argued that some PMG indicators are being indirectly included in the internal monitoring meetings. For example, the first PMG indicator relates to financial execution which is the main topic in monitoring meetings.

### ***10.1.3. Subsecretariat of Social Services***

The Subsecretariat of Social Services uses a monitoring system based on monthly meetings (SSS1, 2016; SSS7, 2016). The meetings are organized by the Management Control Department and they include representatives from each division. One report used in these meetings, to which the author was granted access, includes one indicator per program (most of them measuring coverage) with data

disaggregated by regions and a ‘traffic light’ system that shows if the results are on-track. The database from which the monthly reports are extracted is called Comprehensive Command Chart, which focuses on the indicators from the PMG (SSS3, 2016; SSS7, 2016). That information is complemented with user satisfaction surveys, although these are not included in the reports (SSS7). None of the two interviewees from individual programs mentioned these monthly meetings as a relevant monitoring process.

#### ***10.1.4. Subsecretariat of Energy***

The Subsecretariat of Energy has a well-developed and fully institutionalized internal performance monitoring system. The system was created in 2014 based on their strategic plans, the Energy Agenda, and it introduced the position of a PMO. To guarantee independence, the PMO office reports directly to the Subsecretary (ME6, 2016; ME7, 2016). The first step to create the system was to analyze the projects within the institution, to define specific goals and deadlines, and to assign people responsible for each goal. This process involved analyzing activities with each project and division manager, and resulted in a total of 99 goals and 17 people responsible for those goals. While the goals are based on the Energy Agenda; to avoid duplication of efforts, they also included the goals from the PMG and the CDC (ME6, 2016; ME7, 2016).

The monitoring process of those goals is carried-out through weekly and monthly activities (see Table 41). The first step involves project managers doing their



own monitoring of program execution by decentralized offices and reporting information monthly on the Project Management System. There is one official counterpart in each division responsible for making sure that information is reported timely (ME6, 2016). There are also short weekly meetings where division chiefs can raise issues to the PMO (ME3, 2016). The main meeting happens once a month and includes division chiefs, the PMO, the Subsecretary and the Minister. These meetings start with an overview of all goals through a ‘traffic light’ system; continue with a detailed analysis of the 10 most delayed projects, establishing specific commitments to help put them back on track; followed by a brief presentation about each division; and end with a ten-minute overall presentation by the PMO. Finally, there is a parallel system of monthly meetings between the PMO and decentralized offices focusing on specific goals that were established for decentralized offices.

**Table 41: Institutional-level Performance Monitoring at the Subsecretariat of Energy**

	<b>Weekly</b>	<b>Monthly</b>
<b><i>Steering Committee</i></b>		<ul style="list-style-type: none"> <li>- Meetings using ‘traffic light’ system to identify progress.</li> </ul>
<b><i>Division Chiefs</i></b>	<ul style="list-style-type: none"> <li>- Short weekly meetings to discuss additional issues.</li> <li>- Meet with PMO, at least before each monthly meeting, to review what will be discussed.</li> </ul>	<ul style="list-style-type: none"> <li>- Definition of commitments for next meeting.</li> <li>- Establish action plans to meet commitments</li> </ul>

<b><i>Decentralized Offices</i></b>	- Provide information for project reporting.	- Monthly review of decentralized goals.
<b><i>Project Managers</i></b>	- Input project information to the management system.	

Note: author's elaboration based on internal documents.

The reports used in the monthly meetings are created through the information in the two systems that were created when the PMO office was instituted: the Project Management System, which includes execution and deadlines in a Gantt chart, and the Comprehensive Command Chart, which has indicators. While the PMG and CDC indicators are already part of these platforms, there is an officer whose exclusive responsibility is to monitor the PMG and CDC. That officer verifies PMG indicators monthly and CDC indicators quarterly, and reports directly to the PMO (ME7, 2016).

The five interviewees who were asked about the PMO monitoring system spoke positively about it (ME3, 2016; ME4, 2016; ME5, 2016; ME8, 2016; ME9, 2016). However, the two interviewees at the program level explained that they rarely take program-level decisions based on this system, but instead based on their own individual program monitoring (see next section). This situation is similar to what was reported in all institutions, making it clear that even well-developed institutional systems do not eliminate the need for individualized systems. One of them

complained that the PMO system lacks flexibility to adjust goals and deadlines that changed due to unforeseen problems.

## **10.2. Performance Monitoring at the Program Level**

The activities that program managers carry-out to monitor the performance of their programs are similar. Omitting some minor differences, the following are the core activities described by all program managers interviewed in this study (MS3, 2016; MS4, 2016; MOP3, 2016; MOP6, 2016; SSS3, 2016; SSS4, 2016; SSS5, 2016; ME8, 2016; ME9, 2016):

- Engage daily with decentralized offices to gather information about program execution;
- Tabulate the information into an information system that is exclusive for that program;
- Analyze the information in the system in search of anomalies; and,
- Request additional information to correct or react to those anomalies.

Instead of focusing on the common activities of program managers, this section analyzes the factors that differentiate program monitoring practices and that determine the availability and the use of performance information for decision-making.

The main difference in performance monitoring across programs is the informational system capacity. This capacity, which was briefly addressed in Chapter

8, affects what type of indicators are readily available, how much time program managers must spend in data revision, and how easily they can analyze larger sets of information. In the case of the programs analyzed at the Subsecretariat of Health Care Networks most of the information used for everyday managerial decisions comes from two systems into which local services input information: IAAPS and DEIS (MS1, 2016; MS4, 2016; MS5, 2016). The IAAPS consists mostly of coverage indicators. The Department of Health Information and Statistics (DEIS) includes basic health indicators like mortality and malnutrition, as well as service coverage and the prevalence of certain diseases, among other indicators. The IAAPS and DEIS systems are complemented with ad-hoc information that is gathered, for example, by visiting hospitals and other health care services and inputting relevant information into an Excel file (MS1, 2016; MS3, 2016; MS4, 2016).

Interviewees from both programs articulated the need for performance information not included neither in the IAAPS, nor in the DEIS systems (MS3, 2016; MS4, 2016). For that reason, both programs manage their own ad-hoc information systems, and in both cases program managers argued that these systems are weak and do not provide trustworthy information, forcing them to spend additional time checking the quality of the data. One of those program managers has recently received funds to get a new system and expects the quality of information to improve, while the other program manager is looking for alternatives such as introducing the use of the free software Dropbox.

The Directorate of Waterworks is the only case in this study where the same system is used for monitoring at the institutional and program levels: the SAFI. The reason for this is that the homogeneity of their projects allows them to use financial and physical execution as the main metrics for most of them. As mentioned in Chapter 8, three out of seven interviewees argued that the availability and the quality of the information they use for internal monitoring is appropriate, while the other four said that the information systems need to be improved (MOP1, 2016; MOP2, 2016; MOP3, 2016; MOP4, 2016; MOP5, 2016; MOP6, 2016; MOP7, 2016). Even though the SAFI is used at all levels of the institution, each organizational area complements the SAFI with additional systems. Of the two areas covered in this study, one said that their system is appropriate, while the other argued that they have not been able to improve their system due to lack of funds (MOP2, 2016; MOP3, 2016; MOP6, 2016).

The program with most diverse informational needs at the Directorate of Waterworks is the Rural Drinking Water program (APR). Monitoring documents to which the author was granted access show that APR officials are constantly collecting, analyzing, and reacting to information from autonomous local communities. As explained in Chapter 8, the APR program deals with the fact that autonomous local communities manage the drinking water systems that the program builds, and in some cases a community may choose an illiterate person, or a person that decides not to take advantage of the multiple instances of technical assistance (MOP6, 2016). The APR has a department within the program, called the

*Departamento de Gestión Comunitaria* (Community Management Department), to monitor autonomous local communities.

The situation at the Subsecretariat of Social Services is very similar to what was described for the Subsecretariat of Health Care Networks in that program managers use a mix of centralized and individual datasets, although the latter are not as good as program managers would like. The two centralized datasets that program managers use at the Subsecretariat of Social Services are the Agreement Management System (SIGEC), which has information on the agreements with decentralized executing units, and the Cognos, which consists mostly of service provision data. While they perceive that their information systems have improved in the last few years, all the program officers interviewed for this study said that their systems are still not appropriate (SSS4, 2016; SSS5, 2016; SSS6, 2016). A new system is currently under construction for one of those programs.

Although they also work on ad-hoc Excel files, none of the program managers interviewed at the Subsecretariat of Energy complained about their individual program systems (ME8, 2016; ME9, 2016). One of those program managers explained that monitoring is easier because of the small size of the program. That characteristic is likely true of the other program as evidenced by the monitoring documents to which the author was granted access. Another relevant factor is that both programs relate to small energy-related infrastructure, so monitoring focuses on physical and financial execution.

Besides differences in their informational system capacity, program monitoring differs in the frequency of internal reporting. Among those interviewed there were some who requested reports to decentralized units every two, three, six and/or twelve months (MS3, 2016; MS4, 2016; MOP6, 2016; SSS4, 2016). In all cases, the reports include more detailed performance information as compared to what they analyze in their everyday work. One of those cases combines the reports with bi-monthly meetings with decentralized units (MOP6, 2016).

Most of the program managers interviewed for this study consider PMG indicators as part of their regular monitoring activities. Program managers at the Directorate of Waterworks said that the PMG indicators are a priority and that they are very present in their monitoring duties; however, they acknowledged that the targets are not very challenging or not fully appropriate (MOP3, 2016; MOP6, 2016). Respondents at the Subsecretariat of Energy and at the Subsecretariat of Social Services said that they keep PMG indicators in mind to avoid unfortunate surprises, although two of the four program managers also said that the indicators are not appropriate and are easy to meet (ME8, 2016; ME9, 2016; SSS4, 2016; SSS5, 2016). The exception are program managers at the Subsecretariat of Health Care Networks because, as explained in Chapter 8, the PMG indicators for this government agency are not at the program level.

Finally, there was only one case in which an interviewee could mention some impact of a DIPRES evaluation in program monitoring<sup>55</sup>. That case related to establishing additional coordination meetings with other institutions that work on the program (SSS5, 2016). Those coordination meetings were one of the evaluation's recommendations. No interviewee mentioned monitoring of evaluation's commitments matrix as part of their activities.

### **10.3. Other Decisions During Budget Execution**

While the performance monitoring described in the previous sections leads to changes within programs, performance information is not a major factor in deciding budget re-allocations between programs. Interviewees from all the government agencies included in this study confirmed that financial execution is the key factor that determines the need for re-allocations (ME2, 2016; ME5, 2016; MS2, 2016; SSS2, 2016).

Every government agency analyzed in this study has a system to monitor the financial execution of their budget. In general terms, the financial monitoring in all of these government agencies is carried-out by members of an internal finance division who are in charge of aggregating a number of Excel-based documents that they receive from each area (MS6, 2016; MS7, 2016; ME5, 2016; MOP5, 2016; ME2, 2016; SSS2, 2016). The fact that the monitoring is done through ad-hoc Excel files

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<sup>55</sup> The Healthy Life program was getting its evaluation results when the interview was conducted. Therefore, it is possible that the evaluation had effects later that are not captured in this section.



was not highlighted as an issue by interviewees. Budget officials at DIPRES do their own monitoring of financial execution by contacting government agencies and discussing, at least twice a month, the potential need to re-allocate resources (MH2, 2016; MH3, 2016).

In Chapter 8 we explained that the Chilean budget is highly aggregated and that it does not include a program-based structure. This situation results in more flexibility to re-allocate funds internally, as moving funds from one program to another might not have any impact in the aggregated budget. If the aggregate allocation is to be changed, then government agencies need to get the approval of the Ministry of Finance and the Comptroller in a process that might take between three and five months (MOP3, 2016).

While financial monitoring is similar among the government agencies included in this study, there are two aspects that make the case of the Directorate of Waterworks a particular one. First, their financial and performance monitoring are intertwined because they are both based on financial execution. Second, their re-allocation process tends to be more time consuming as transfers between investment projects requires the approval of the Ministry of Finance and the Comptroller, and depending on the magnitude it might require re-doing the ex-ante evaluation (MOP2, 2016; MOP3, 2016).

The Directorate of Waterworks was also the only government agency where most interviewees argued that the PMG and CDC indicators are used to motivate personnel to improve performance. Those respondents said that these indicators are well distributed across divisions and that there is always someone monitoring the indicators and emphasizing their importance (MOP1, 2016; MOP2, 2016; MOP3, 2016; MOP4, 2016; MOP5, 2016; MOP6, 2016). Eleven out of sixteen interviewees from other government agencies who commented on the PMG downplayed its role as a motivator, while some of them highlighted other motivational techniques such as empowering through increased responsibilities, emphasizing the social impact of the program, working collaboratively, and using other internal indicators as source of motivation (MS1, 2016; MS3, 2016; MS4, 2016; SSS4, 2016; SSS5, 2016; SSS7, 2016; ME1, 2016; ME3, 2016; ME4, 2016; ME6, 2016; ME8, 2016).

Finally, some interviewees stated that at some point they have used performance information from DIPRES and MDS systems to change the internal structure of programs (SSS5, 2016; ME2, 2016; MS2, 2016; SSS6, 2016). The examples include four cases each based on one of the following sources of information: program ex-ante evaluations from DIPRES, program ex-post evaluations from DIPRES, program ex-ante evaluations from MDS, and performance indicators from DIPRES.

#### **10.4. Budget Transparency and Accountability**

The final set of interviews conducted for this study were with members of the Chilean civil society<sup>56</sup>. When asked about performance-related transparency and accountability, the members of the Chilean civil society interviewed for this study agreed on three major points. First, that DIPRES publishes large amounts of data including both financial and performance information. This information includes evaluations and performance indicators. Second, that some characteristics of the performance information published by DIPRES makes it of little use for public accountability. Third, that there are viable alternative ways of moving forward to improve the usefulness of publicly available performance information.

Lack of usefulness of DIPRES data is the most relevant issue identified through these interviews. Only one of those interviewed reported using DIPRES data for research endeavors (OI15, 2017). That interviewee used ex-post evaluations as a source of information when analyzing specific issues, such as particular subsidies. That same interviewee explained that not all ex-post evaluations are useful because some of them are of lower quality. Finally, the interviewee said that some PMG indicators are a good source of output information.

The other two interviewees explained that some of the main factors that hinder accountability are the absence of links between financial and performance

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<sup>56</sup> A total of three interviewees from three different civil society organizations were conducted. Some of the transparency-related studies cited in this section were published by those same organizations. Given this small sample, the opinions presented in this section might not be representative of those of the Chilean civil society.

information, and the lack of user-friendliness of the data (OI13, 2017; OI14, 2017).

For example, one of them has unsuccessfully tried to link performance indicators and strategic definitions with individual lines of the budget. Another difficulty comes up when tracking individual programs, both financially and performance wise.

Two publications by the *Observatorio del Gasto Fiscal en Chile* (Observatory of Chilean Fiscal Expenditure) provide some facts about the lack of linkage between strategic definitions, performance indicators, and financial resources. The first one is a short analytical note that shows that 25% of Chilean government agencies report spending more than 100% of their resources in their strategic products<sup>57</sup> (Mora, 2016). In contrast, some government agencies report spending zero or a very small percentage of their budget towards meeting their strategic products. Another important fact explained in that analytical note is that there is no relationship between performance indicators and strategic products. The other study by the Observatory of Chilean Fiscal Expenditure mentions some specific pieces of information that are currently lacking and that, if provided, would enhance accountability, including a program-based structure, financial information linked to strategic products, explicit objectives linked to strategic products, among others (von Wolfersdorff, 2015).

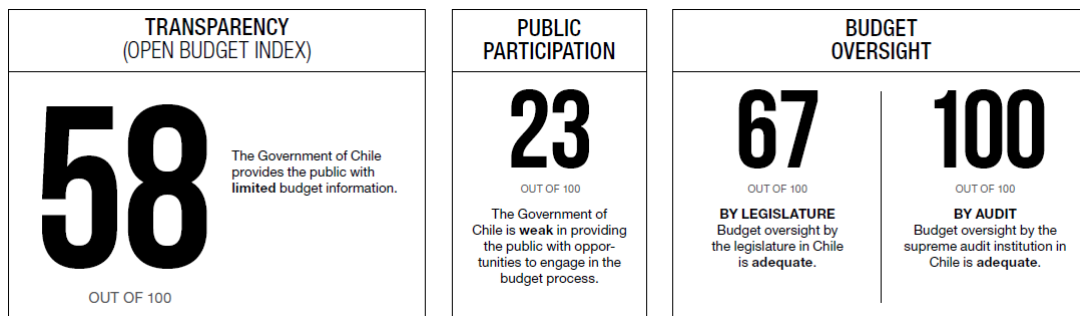
The situation described by the Chilean civil society matches the results of the 2015 Open Budget Survey, which is a frequent assessment carried-out by the

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<sup>57</sup> Strategic Products are reported as a section of the Strategic Definitions. For more information see Chapters 7 and 8.

International Budget Partnership in more than 100 countries (International Budget Partnership, 2016). The survey suggest that the Chilean government provides only limited budget information and that it does not facilitate public participation (see Figure 26).

**Figure 26: Chile’s 2015 Open Budget Survey Scores**



Note: from (International Budget Partnership, 2016).

Some of the reasons why Chile’s score in the Open Budget Index is not higher is the lack of program-level information, the non-disclosure of pre-budgetary information, the absence of public hearings and reports from Congress, and the fact that its budgetary information does not meet the standard of a *Citizens Budget* (International Budget Partnership, 2016). The International Budget Partnership defines a Citizens Budget as a budget “typically written in accessible language and incorporating visual elements to help non-specialist readers understand the information” (Citizens Budget, 2017). The fact that Chile scored low on the Citizens Budget category is consistent with the statement by members of the Chilean civil society on lack of user-friendliness of the information.

The analysis presented so far is almost exclusively about the information published by regulatory institutions like DIPRES. While the reports and interviewees had almost no experience with information from the MDS, they did mention individual government agencies as an alternative source of public information (OI13, 2017; OI15, 2017). For example, the Subsecretariat of Energy publishes monthly reports of their investment projects and annual summaries of their goals.

Information from government agencies is not limited to what is published in their websites. As mandated by the Transparency Law, all Chilean government institutions are required to share additional information by citizen request<sup>58</sup>. The process of requesting additional information is respected by government agencies and is commonly used by members of the Chilean civil society (OI13, 2017; OI15, 2017). A study published by *Chile Transparente* (Transparent Chile) tested the process of requesting information based on the Transparency Law. On the positive side, the study found that the Transparency Law has increased the volume and the diversity of the information available, and that government agencies tend to have good amounts of information publicly available on their websites (Cid Botteselle, Marileo Millán, & Moya Díaz, 2012). On the negative side, it found that the information is not user-friendly, that online requests tend to be less successful, that government agencies sometimes deny requests based on unfunded claims of secrecy, and that requests for

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<sup>58</sup> For more information see Law 20.285 of 2008.

more complex information (such as the dataset used to calculate performance indicators) tend to result in incomplete information.

All the reports and the interviewees from the Chilean civil society referenced in this section provided suggestions on how to improve performance-based accountability. The following is a non-comprehensive list of those suggestions:

- Publish performance indicators and strategic objectives at the institutional and program level for every government agency. This should include additional information on the elaboration of objectives, and strategies to meet them, among others (von Wolfersdorff, 2015).
- Improve the formats and the accessibility of information to make it more user-friendly (von Wolfersdorff, 2015; OI13, 2017; OI14, 2017; Cid Botteselle, Marileo Millán, & Moya Díaz, 2012).
- Provide performance information disaggregated by regions (von Wolfersdorff, 2015; OI15, 2017).
- Present explicit links between objectives reached and the financial resources used to reach them (Mora, 2016).
- Use open-data formats that allow user to browse and select information (Mora, 2016; OI13, 2017; OI15, 2017).
- Build a unified dataset with the information collected by individual government agencies (OI15, 2017).

- Provide training workshops to help citizens understand the information and to assist public officials in charge of delivering the information (Cid Botteselle, Marileo Millán, & Moya Díaz, 2012).

### **10.5. Analytical Summary**

In this chapter, we detailed the use of performance information for budget execution and accountability. Comparing the evidence from this and the previous chapter shows that performance information is used more often for budget execution than for budget formulation and approval. This finding is consistent with an argument introduced in Chapter 2, that budget-related performance information is not only valuable for resource-allocation, but instead it can be useful for managerial decisions during budget execution, and for budgetary and managerial accountability (Ho, 2011; Joyce, 2003; Smith & Cheng, 2006; Poister & Streib, 1999; Melkers & Willoughby, 2005; Wang X. , 1999; Schick, 2014).

All the government agencies analyzed in this study have some performance monitoring system at the institutional level. The systems from two government agencies, the Directorate of Waterworks and the Subsecretariat of Energy, are particularly developed and institutionalized among all levels of these institutions. Those two cases have some common characteristics that are analyzed later in this chapter when we discuss the main success factors.



One aspect that was common in all agencies is that having institutional-level performance monitoring systems does not eliminate the need for individualized systems at the program level. While all the program managers interviewed in this study described similar day-to-day monitoring activities, their performance monitoring capacity differed depending on the quality of their information systems. Once again, interviewees from the Directorate of Waterworks and the Subsecretariat of Energy reported fewer issues about the quality of their information system. However, this is most likely a consequence of some intrinsic characteristics of their programs, as there is no evidence of higher investment in the quality of program-level information system. These characteristics are analyzed later in this chapter when we discuss the main success factors.

While institutional- and program-level monitoring builds on performance information to determine managerial changes within programs, there is not much evidence of performance information affecting budget re-allocations between programs. Instead, budget re-allocations are decided based on two of the factors used for the original budget allocations: physical and financial execution.

Opinions and reports from representatives of the Chilean civil society suggest that while the government is transparent enough to provide information, most of the information it provides has little value for budget accountability. On the one hand, the DIPRES and individual government agencies do publish a significant amount of financial and performance information. This includes public access, although with

some delay, to ex-post evaluations, PMG indicators, Integral Management Reports (BGI), and strategic definitions. However, the information is not accessible in user-friendly formats, and it does not allow establishing linkages between each other. The main examples of the lack of linkages are that the strategic objectives and products are not related to the performance indicators; and that there is no explicit link between financial and performance information.

There is scant prior research on the use of performance information for budget execution and accountability in Chile. The few studies mentioned at the start of this chapter suggested that the results of ex-post evaluations affect budget execution, that budget re-allocations within government agencies are not influenced by performance information, and that the performance information published by the government is not widely used for public accountability. The last two of those findings are consistent with this study. However, little evidence was found to sustain the claim that the results of ex-post evaluations affect budget execution. There are some potential explanations for this, including the fact that this study analyzed a limited number of cases. The impact of ex-post evaluation is analyzed in Chapter 11.

The remainder of this chapter is dedicated to analyzing some of the main questions that arise from what has been presented.

### ***10.5.1. Why is the Use of Performance Information More Prominent for Budget Execution than for Budget Formulation and Approval?***

The findings from Chapters 9 & 10 show that performance information is more often considered during budget execution as compared to budget formulation and accountability. In the following paragraphs, we discuss some potential explanations.

One major difference between budget execution and budget formulation and approval is how time-constrained they are. On the one side, budget formulation and approval are highly limited by time pressures. For example, DIPRES must analyze and negotiate the budget for all government agencies in less than 60 days. Similarly, government agencies only have 30 days to adapt their budget requests to their budgetary ceilings. In fact, it is a well-known fact in the Chilean public sector that July and August are busy months due to budget formulation. On the other side, budget execution lasts at least 11 months every year, providing ample time to establish monitoring systems based on frequent reports and meetings.

The claim that tight timeframes are an obstacle to using performance information is not new. In fact, it aligns closely to the idea of budgetary incrementalism which was introduced in the first chapter of this study. One of the major arguments of incrementalism is that public officials do not have the time (or capacity) to analyze and compare competing alternatives (Lindblom, 1959; Wildavsky, 1964). The decision-making processes within Chile's government

agencies during budget formulation and execution fit the idea of incrementalism as decisions are based on a narrow amount of information (mostly financial execution and political priorities), while additional analysis is only used for marginal changes (programs seeking budgetary expansions). However, it should be noted that incrementalism is 'smarter' in Chile as the budget base is determined by the financial resources needed to keep current service levels, and not simply by the financial resources allocated for the previous year.

Another potential explanatory factor is that budget execution is less bureaucratized than budget formulation. In Chapter 7 we explained that the budget process is highly dominated by DIPRES. In Chapter 9 we argued that concentration of power by DIPRES left almost no instances for government agencies to maneuver and to develop their own internal processes. The situation is different during budget execution, as DIPRES role is limited to monitoring financial execution and approving resource re-allocations. DIPRES is not involved in designing the monitoring systems of government agencies, which has allowed each institution to create structures that better fit their particular needs. This situation is evident in the Subsecretariat of Energy and in the Directorate of Waterworks, as they have established unique systems that are aligned with their internal priorities and with the characteristics of their programs.

The fact that DIPRES has a less prominent role during budget execution might also reduce the incentive for government agencies to obscure negative information.

For instance, while showing evidence of low performance during budget formulation might result in reduced funding from DIPRES and in no particular gains for the agency, using more information during budget execution involves no external penalty and may potentially lead to more successful interventions.

One final alternative explanation is that program managers are naturally more performance-oriented than budget officials. While this might be true, there are at least two issues with this argument. First, reports from previous authors suggest that DIPRES budget analysts had a more performance-oriented focus during the Frei and Lagos administrations (Zaltsman, 2008; Blöndal & Curristine, 2004; Guzmán, 2005; Rojas, et al., 2005). Second, there might be an endogenous relation as program managers might be more performance oriented because they have more time and flexibility to use performance information.

In sum, we discuss three potential explanations for the fact that the use of performance information is more prominent for budget execution than for budget formulation and approval. These three explanations are not rivals, i.e. the presence of one does not preclude the other ones from being true. The two most convincing explanations are that budget execution has less strict timeframes and less bureaucratization from DIPRES. The former provides agencies more time to analyze and decide based on performance information, while the latter gives more flexibility to design appropriate systems and reduces the incentive to obscure negative information.

### ***10.5.2. What are the Main Success Factors and Obstacles for Establishing a Performance-Based Monitoring System for Budget Execution?***

This chapter shows that the Subsecretariat of Energy and the Directorate of Waterworks have developed and institutionalized more robust performance monitoring systems. Those two cases have some characteristics that differentiate them from the other two government agencies included in this study. Those characteristics are: executive leadership and information system capacity. In addition, the systems that these two government agencies installed have the common particularity of including a PMO. Finally, there are some individual characteristics of some of these government agencies that might facilitate success. We discuss these factors in the following paragraphs.

In Chapter 8 we showed that interviewees from all government agencies reported that high turnover of mid- and high-level managers was severely detrimental. For instance, interviewees linked high turnover with lack of clarity on strategic goals and diminished executive involvement in program success (MS1, 2016; MS2, 2016; MS4, 2016; SSS1, 2016; SSS4, 2016; SSS6, 2016). The difference is that in two of the government agencies interviewees were talking about recent rotation, while in the other two they were describing a situation from previous years that was no longer occurring. The two government agencies that have not been recently involved in high turnover of mid- and high-level managers are the Subsecretariat of Energy and the Directorate of Waterworks.

Besides having a lower turnover rate, more than half of the interviewees from the Subsecretariat of Energy and the Directorate of Waterworks said that the fact that the executive leaders care about performance has been critical for the success of their current monitoring systems (MOP1, 2016; MOP2, 2016; MOP5, 2016; MOP6, 2016; ME1, 2016; ME3, 2016; ME5, 2016; ME6, 2016; ME7, 2016; ME9, 2016). It remains unclear whether leaders that care about performance information are more likely to stay in the job longer, or if staying in the job longer leads to higher interest in performance information. This is a relationship that should be further studied.

It is worth mentioning that respondents from the other two government agencies were not particularly critical of the capacity of their current leadership. Instead, they argued that constant turnover has resulted in lack of clarity of strategic priorities and on little time for managers to get involved with individual programs (MS1, 2016; MS2, 2016; MS4, 2016)(SSS1, 2016; SSS4, 2016; SSS6, 2016).

Another aspect in which the Subsecretariat of Energy and the Directorate of Waterworks have a better situation related to information systems. The best situation was reported at the Subsecretariat of Energy where two thirds of those interviewed said that they have access to quality and timely information for their decision-making processes, while the other third said that they have access to most, but not all, the information they need (ME1, 2016; ME2, 2016; ME3, 2016; ME4, 2016; ME5, 2016; ME6, 2016; ME7, 2016; ME8, 2016; ME9, 2016). The proportion of positive

respondents drops to 42% at the Directorate of Waterworks (MOP1, 2016; MOP2, 2016; MOP3, 2016; MOP4, 2016; MOP5, 2016; MOP6, 2016; MOP7, 2016).

The situation at those two agencies is much better than that at the Subsecretariat of Social Services and the Subsecretariat of Health Care Networks where all program managers reported multiple issues with their information systems, leading to less availability of information, more time spent in data revision, and difficulties analyzing larger sets of information (MS3, 2016; MS4, 2016; SSS4, 2016; SSS5, 2016).

The reasons why the Subsecretariat of Energy and the Directorate of Waterworks have more adequate information systems are straightforward. The former invested in new system as part of the plan of the Minister to institute a strong performance monitoring structure based on a strategic planning effort. In addition, program managers do not require complex software because of the small size of the programs. The latter has not made any major investments in the intrinsic advantage of executing homogeneous projects, meaning that they can use similar metrics (and software) to track most of their portfolio.

It is important to state that there have been efforts at the Subsecretariat of Health Care Networks and at the Subsecretariat of Social Services to implement information systems. In both cases, there are broad systems that provide general information that is useful for some programs. Also, at the time of the interviews one program in each of those institutions had already contracted a firm to develop an



individualized system for them. However, programs at these two institutions are neither small nor homogeneous, so their needs are harder to satisfy than those of Energy and Waterworks.

Another important difference is the creation of a PMO in the Subsecretariat of Energy and the Directorate of Waterworks. In both cases, the PMOs played a pivotal role for performance monitoring. For example, they generate reports, preside meetings, monitoring program and division managers, among other functions. The creation of PMOs appears to have been a direct decision by the leadership of these institutions.

Certain characteristics of the least successful systems might help explain their situation. First, the performance monitoring system at the Subsecretariat of Social Services is the only one that focuses on PMG indicators. This might have been a suboptimal decision given the weaknesses of the PMG that have been discussed throughout this study. Additionally, this might have prevented a larger exercise of deciding internally on more relevant indicators for each program, such as the one carried-out within the Subsecretariat of Energy. Second, the performance monitoring systems at the Subsecretariat of Health Care Networks were designed to have a particularly aggregated focus. This might be a correct decision given that this is a very large government agency and that its main role is to coordinate many decentralized units. However, it appears that they could have complemented that

system with one that covers the individual programs that are managed from their headquarters in Santiago.

In sum, the evidence presented here suggests that the main success factors are having executive leaders that actively care about performance monitoring, taking the right approach in designing monitoring systems (such as creating a PMO office, carrying-out a strategic planning process, and directing resources towards information systems), and some intrinsic characteristics of the organizations (such as their size and the homogeneity of their products). These success factors are not competing but complementary explanations, and while all of them might have had an impact it is difficult to determine their relative importance.

### ***10.5.3. Why are there Differences in the Level of Prominence that PMG Indicators have in Each Government Agency?***

Government agencies monitor PMG indicators differently during budget execution. Interviewees from the Directorate of Waterworks are the ones that spoke more positively about PMG indicators. All five interviewees who commented on the PMG indicators explained that the indicators are part of the organizational culture and that meeting the targets requires attention and corrective actions (MOP1, 2016; MOP3, 2016; MOP4, 2016; MOP5, 2016; MOP6, 2016). However, three of those interviewees added critiques including that DIPRES tends to impose inadequate targets, and that the impact of the PMG varies across areas. This situation contrasts with what was reported in other government agencies: three of the four interviewees

who commented about PMG performance indicators at the Subsecretariat of Social Services argued that the targets are inappropriate (SSS4, 2016; SSS5, 2016; SSS7, 2016; SSS6, 2016); five of the seven interviewees who commented about PMG performance indicators at the Subsecretariat of Energy had issues with them (ME1, 2016; ME3, 2016; ME4, 2016; ME6, 2016; ME7, 2016; ME8, 2016; ME9, 2016); and PMG indicators have no relevance for program managers at the Subsecretariat of Health Care Networks because the indicators for this government agency are not at the program level (MS4, 2016; MS5, 2016).

There is no evidence suggesting that the reason why PMG indicators are more prominent at the Directorate of Waterworks is because they have taken them more seriously than other government agencies. In fact, there is evidence that PMG are taken seriously elsewhere. For example, as described in this chapter, PMG indicators have been introduced into the institutional monitoring systems at both the Subsecretariat of Energy and the Subsecretariat of Social Services, and are monitored by personnel whose main responsibility are PMG indicators.

An alternative, and more reasonable explanation why PMG indicators are more prominent at the Directorate of Waterworks is, once again, the fact that this government agency has the intrinsic advantage of executing homogeneous projects, meaning that they can use similar metrics to track most of their portfolio. Because financial and physical execution are their most relevant metrics, it made sense that they were also used for the PMG; resulting in similar (or identical) indicators for their

PMG as for their internal monitoring systems (albeit possibly with different targets).

In fact, the first two PMG indicators of the Directorate of Waterworks are general indicators that measure deviation from original execution deadlines and the percentage of construction contracts with final costs 20% higher than original costs.

Those two indicators are relevant to all projects within the organization and match the indicators covered in internal monitoring systems. Those general indicators are then complemented with indicators that are relevant for most projects within each organizational area<sup>59</sup>; thus, resulting in each project having two or more relevant indicators. This explanation is convincing because it make sense for PMG indicators to be more prominent when they are relevant to an agency's goals and when they cover most of the outputs of most of the projects.

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<sup>59</sup> Each area has many projects, all of them covering a similar topic. For example, the indicator that measures the urban surface drained of rainwater is relevant for most projects of the Riverbanks Conservation area.

## Chapter 11: Discussion, Implications and Recommendations

The last two chapters presented an analysis of the use of performance information by line ministries throughout each stage of the budget cycle. This chapter begins with an analytical summary of the findings of this study guided by the variables of our research framework (Section 11.1). Then, section 11.2 focuses on the three objectives of this study: (1) proposing a research framework, (2) having a better understanding of line ministries, and (3) discussing the findings in the context of LAC countries. Section 11.3 tests the three hypotheses defined for this study. The final section concludes with general implications and policy recommendations.

### **11.1. Main Discussion: The Use of Performance Information for Decision-Making**

This study analyzes the role of performance information at the line ministry level in the different decision-making processes that arise throughout the budget cycle. Those decision-making processes include formulating the budget, negotiating the budget proposal with the central budget office, getting the budget approved by the legislature, and executing the programs financed through the budget. The evidence collected for this study suggests that the role of performance information differs for each type of decision-making process.

The internal budget formulation process is very similar for all the cases analyzed in this study. The process is divided in two stages. In the first stage, program

managers prepare draft budgets for each program. This draft assumes either program continuity or expansion. Continuity refers to the resources needed to maintain current service levels and meet existing commitments for the upcoming year, regardless of whether this requires additional resources due to inflation or other reasonable price changes. In contrast, program expansion refers to an increase in the program's coverage or in the services provided to its beneficiaries. The second stage starts after the central budget office, known as DIPRES, submits information about the amount of resources that will be made available for each government agency. In this stage, higher-level authorities from the government agency discuss the draft budgets submitted by each division/program and decide on a preliminary list of programs selected for budget expansion. While the process of deciding on this preliminary list is not transparent, the information provided by interviewees suggests that the decision is based on political priorities, and not on performance information. However, the programs from this preliminary list are then analyzed in further detail before they are confirmed as candidates for budget expansion. This analysis focuses on coverage data, financial execution, and performance metrics specific to each program. Some examples of those performance metrics are: satisfaction surveys from program beneficiaries, results from health care tests applied to program beneficiaries, and evidence of the impact of the program on its beneficiaries. If the performance information suggests a poorly performing program, then it is likely to be dropped from the list of programs selected for budget expansion. The internal budget formulation process ends with the submission of a budget request to the DIPRES.

The processes of negotiating the budget requests with DIPRES and getting the budget approved by Congress are also very similar for all the cases analyzed in this study. Budget negotiations start with an analysis of the continuity budget. That analysis is strictly technical and it is based on financial information. Afterwards, DIPRES officials follow a more exhaustive review of the programs for which government agencies are requesting budgetary expansions. While some performance metrics specific to each program are analyzed at this point, the review is strongly skewed towards three variables: coverage data, financial execution, and linkage with political priorities.

Government agencies have a very limited role defending their budget proposals in front of Congress. Instead, officials from the Ministry of Finance and DIPRES take a leadership role in explaining and defending the executive budget proposal. The available evidence suggests that performance information has almost no role in budgetary discussions in Congress. Some interviewees from government agencies suggested that legislators have a particular interest in Budgetary Annotations, which are a list of footnotes with very specific restrictions included in the budget document of each government agency.

The use of performance information is more common during budget execution. Performance information is used in both the institutional- and program-level monitoring systems built in each government agency to take managerial decisions that affect program execution. Monitoring systems at the institutional level

tend to focus on a set of key indicators or key projects that are determined before the start of the fiscal year. While all the government agencies analyzed in this study have some performance monitoring system at the institutional level, these systems differ in how institutionalized their processes are, in the quality of the information that is analyzed, and on their perceived importance among members of the government agency. Performance monitoring systems at the program level tend to be based on ad-hoc procedures and platforms, leaving most program managers with less performance information than what they would like.

In Chapter 5 we introduced a scale to grade the use of performance information in each organization (see Table 13). The scale measures the number of stages of the budget cycle in which line ministries use performance information for decision-making purposes. Therefore, a line ministry where performance information is used in every stage of the budget cycle gets a full grade of A. Each stage of the budget cycle for which the line ministry does not use performance information reduces the grade by one letter to B, C or D. The objective of designing this scale was to provide a standardized measurement framework to facilitate comparisons within units of a single country study, and future comparisons between case studies.

Table 42 grades each government agency based on the criteria from Table 13. The Subsecretariat of Energy is highlighted as the most successful case as it uses performance information in all stages of the budget cycle, while all the other three ministries get a score of B for using performance information in all stages except for



budget accountability. However, as we explain later in section 11.2.1, this scale is not an appropriate comparison tool as its grading system does not capture the key differences on how performance information is used in each line ministry.

**Table 42: Use of Performance Information by Each Government Agency**

<i>Subsecretariat of Health Care Networks</i>
<p>The Subsecretariat of Health Care Networks has a score of B because it uses performance information during budget preparation/approval, and budget execution.</p> <p>As it is the case in all government agencies in this study, performance information has the following roles during budget preparation and negotiation:</p> <ul style="list-style-type: none"> <li>▪ A continuity baseline is built from expected coverage data.</li> <li>▪ Program expansions are debated internally, and negotiated with DIPRES, using coverage data, financial execution, and some individual performance metrics for each program. However, political priorities appear to be more relevant than performance information.</li> </ul> <p>Program managers use performance information to take decisions during budget execution. For both of the programs analyzed, managers are dissatisfied with the quality of their information systems and would like to have more performance information available. The institutional-level monitoring system is not relevant for program managers.</p>

<i><b>Directorate of Waterworks</b></i>
<p>The Directorate of Waterworks has a score of B because it uses performance information during budget preparation/approval, and budget execution.</p> <p>The use of performance information during budget preparation and negotiation is similar to what was described above for the Subsecretariat of Health Care Networks.</p> <p>Performance information is used during budget execution by project managers as well as by mid- and high-level managers. At the institutional-level, performance is monitored through frequent and structured meetings headed by a PMO. The downside is that, due to the nature of their projects, performance monitoring is heavily skewed towards physical and financial execution.</p>
<i><b>Subsecretariat of Social Services</b></i>
<p>The Subsecretariat of Social Services has a score of B because it uses performance information during budget preparation/approval, and budget execution.</p> <p>The use of performance information during budget preparation and negotiation is similar to what was described above for the Subsecretariat of Health Care Networks.</p> <p>Performance monitoring during budget execution is also similar to that at the Subsecretariat of Health Care Networks: program managers struggle to get high-quality information, and the institutional-level monitoring system has limited impact.</p>

### *Subsecretariat of Energy*

The Subsecretariat of Energy has a score of A because it uses performance information to support all the following: budget preparation/approval, budget execution, and budget accountability.

In addition to the role that performance information has in other government agencies during budget preparation and negotiations, the Subsecretariat of Energy is the only case where expected performance was discussed as part of a strategic planning process.

While all government agencies use performance information during budget execution, the Subsecretariat of Energy stands out as the agency with the most sophisticated and applauded institutional monitoring system. As it is the case in the Directorate of Waterworks, performance monitoring in the Subsecretariat of Energy is also led by a PMO.

Finally, the Subsecretariat of Energy is the only government agency in this study that publishes performance reports, including annual summaries of their goals. However, these reports are not always published timely.

Note: author's elaboration.

Finally, a small section of this study is dedicated to analyzing the use of government's performance information by non-government actors. That section concluded that the Chilean government makes public a reasonable amount of performance information. The information, however, is not accessible in user-friendly formats and it does not allow establishing linkages between each other, making it of little use for civil society's initiatives regarding public accountability.

In sections 11.1.1-3. we discuss the factors that were found to be determinants of the use of performance information. The discussion is divided between the factors related to the characteristics of the organizations, the characteristics of the system, and the political and external environment.

#### ***11.1.1. Characteristics of the Organizations***

In the previous section, we highlighted the Subsecretariat of Energy and the Directorate of Waterworks as most salient cases. For instance, both have robust institutional performance monitoring systems based on structured and frequent meetings that are headed by a PMO. In the following paragraphs, we discuss the variables that explain the differences between government agencies. To complement this discussion, Table 43 lists all the variables related to the characteristics of the organizations included in our research framework. The table includes the expected impact, which appeared in Table 12 of Chapter 5, and the actual findings for each variable.

**Table 43: Summary of Findings on Variables About the Characteristics of the Organizations**

<b>Variable</b>	<b>Expected Impact</b>	<b>Actual Findings</b>
Ability to link strategic plans to organizational activities	Members of the organization will be more committed to its goals if they can trace a clear linkage between their regular activities and the achievement of results.	<ul style="list-style-type: none"> <li>- President's Bachelet government plan influences resource allocation and priority-setting. This plan does not derive in short- and medium-term goals for performance monitoring.</li> <li>- There is only one case with internal strategic planning that is actively used for performance monitoring. This plan increased commitment towards strategic goals.</li> </ul>
Ability to link resources to organizational activities	Linking resources to specific goals signals that performance results matter.	<ul style="list-style-type: none"> <li>- During budget execution, government agencies monitor both resources and performance at the program level.</li> <li>- There is no link between budget resources and performance indicators from DIPRES systems, which may explain its lack of use. This fact is further analyzed later as a characteristic of the performance budgeting system.</li> </ul>

Fear of transparency	Members of the organization will resist performance budgeting reforms if they perceive that their goal is to punish and to persecute opponents.	- There is no indication that fear of transparency is an issue in Chile.
Informational system capacity	Performance information will be more readily available when it is handled through appropriate informational systems.	- Lower quality information systems led to lower quality and less use of performance information. - Low-quality information systems also resulted in increased workload for data collection.
Input- vs performance-oriented culture	Performance information will become more relevant when it is not only a requirement from outsiders, but instead part of the internal culture.	- A performance-oriented culture is present at the program level; while an input-oriented culture dominates resource-allocation. - The relation between culture and use of information might be endogenous. There is no strong evidence to conclude on either direction.

Management support	Organizations where managers communicate and lead based on performance will develop an environment where performance measures are seen as relevant.	- Management support was highlighted as a key factor for the most successful cases. The support level was in direct relation with the tenure of high- and mid-level managers.
Organizational factors (e.g., size, reorganization)	There are several organizational factors that could have opposite impacts, so the effect of this variable is a priori indeterminate.	- Larger organizations had an easier time establishing performance monitoring systems. - The evidence regarding reorganizations was mixed.
Resources for performance-based reforms	An organization that sets aside a constant and appropriate amount of resources for performance measurement will be more likely to periodically generate relevant information.	- Some program managers argued that resources for improving performance-based monitoring are lacking. This has had a negative impact on the quality of the informational systems.
Self-interested motivation	Officials who truly believe in the goals of the organization are more likely to be interested in measuring and considering performance.	- This was not identified as a relevant variable. - It was found to be particularly challenging to measure, and it is difficult to differentiate it from executive leadership support and staff buy-in.

Staff buy-in	Internal ownership of the reform makes members of the organization more prone to take the reform seriously.	- There is high staff buy-in for internal systems, and low for DIPRES systems. Higher buy-in led to more use of performance information
Staff capacity	The organization needs to have adequate human resources for performance information to be gathered and analyzed.	<ul style="list-style-type: none"> <li>- Staff capacity is adequate in most cases. Not described as a major factor differentiating line ministries.</li> <li>- Some cases have minor understaffing issues.</li> <li>- Major difficulty with the staff capacity at decentralized offices, which is a problem in all cases.</li> </ul>
Time investment	Performance budgeting is less likely to be found useful if it becomes too burdensome.	- Time requirements were found to be reasonable.

Note: author's elaboration.

As discussed in Chapter 10, there are some characteristics that the two most successful government agencies have in common. The first characteristic is managerial support for performance monitoring. In all cases, greater managerial support was directly linked to lower turnover rates of high- and mid-level managers. Interviewees from the most successful government agencies argued that high- and mid-level managers have been critical in raising the importance of performance information and in setting up systems for frequent monitoring. This argument is



strengthened by two other facts. First, respondents that have been at the most successful government agencies for many years explained that performance monitoring was not successful in the past when they had higher turnover rates of high- and mid-level managers. Second, respondents from least successful cases commonly referred to high turnover rates of high- and mid-level managers as a major obstacle for performance monitoring.

The second characteristic is the quality of the information systems. Unlike other cases, most of the respondents from the Subsecretariat of Energy and almost half of those from the Directorate of Waterworks did not report issues with their information systems, either at the institutional or at the program level. In Chapter 10 we explained that the reasons why the Subsecretariat of Energy and the Directorate of Waterworks have better information systems is that the former decided to actively invest on new systems, and the latter has the intrinsic advantage of executing homogeneous projects, meaning that they can use similar metrics (and software) to track most of their portfolio. Those who did report issues about their information systems at other government agencies also reported less availability and lower quality of performance information, more time spent in data revision, and difficulties analyzing larger sets of information.

A third characteristic is related to something not included in the research framework: the structure of the performance monitoring systems. In both the Subsecretariat of Energy and the Directorate of Waterworks the performance

monitoring systems have been built around the figure of a PMO. The PMO has an important managerial role that includes generating reports, presiding meetings, monitoring program and division managers, among other functions. Respondents in both of those institutions spoke highly of their PMOs. The creation of PMOs appears to have been a direct decision by the leadership of these institutions.

Certain characteristics of the least successful systems might help explain their situation. First, the performance monitoring system at the Subsecretariat of Social Services is the only one that focuses on the Management Improvement Program (PMG) indicators. This might have been a suboptimal decision given some weaknesses of the PMG that have been discussed throughout this study: the PMG indicators do not tend to cover program's performance comprehensively and they are not always considered appropriate by program managers. Additionally, this might have prevented a larger internal exercise of identifying the most relevant indicators for each program. Second, the performance monitoring systems at the Subsecretariat of Health Care Networks were designed to have an aggregated focus. This might have been a correct decision given that this is a very large government agency whose main role is to coordinate many decentralized units. However, it appears that they could have complemented that system with one that covers the individual programs that are managed from their headquarters.

Another success factor for the Subsecretariat of Energy was creating a strong strategic plan that is used as the basis for performance monitoring. The strategic

planning process involved wide internal participation, and resulted in a total of 99 goals and 17 people responsible for those goals. The participatory nature of the plan is considered as one reason for its high internal ownership.

There are some organizational factors that facilitated (or obstructed) performance monitoring. The main two organizational factors have already been mentioned in previous paragraphs. One is the fact that projects within the Directorate of Waterworks tend to be homogeneous; thus, making it easier for managers to decide on performance metrics and allowing them to have a single information system that works for everyone. The other factor is the size of the organization as the largest case in this study, the Subsecretariat of Health Care networks, has so many tasks that it needs more than one performance monitoring systems; while being small was mentioned as a facilitator for the Subsecretariat of Energy. The ways in which size helped the Subsecretariat of Energy was by making it easier to conduct a participatory strategic planning process, and by reducing the complexity of the information systems needed by program managers.

#### ***11.1.2. Characteristics of the System***

While the characteristics of the organizations explain the differences in the use of performance information between government agencies, the characteristics of the system explain why certain sources of information are preferred to others and why certain processes are more conducive to the use of performance information. Table 44 lists all the variables related to the characteristics of the system included in our

research framework. The table includes the expected impact, which appeared in Table 11 of Chapter 5, and the actual findings for each variable. In the next paragraphs, we analyze the most relevant of those variables, mostly building on the analysis presented in Chapter 9.

**Table 44: Summary of Findings on Variables About the Characteristics of the System**

Variable	Expected Impact	Actual Findings
Availability of data	Performance information is more likely to be considered only when up-to-date information is made available at key decision-making periods.	<ul style="list-style-type: none"> <li>- Comparisons of evaluated and non-evaluated programs yielded only subtle differences.</li> <li>- Other centralized systems provide similar amounts of information to every case; thus, impeding comparisons.</li> </ul>
Characteristics of budgetary processes (e.g., timelines, earmarks, aggregations)	A clear and ordered budgetary process, which allows time for deliberation and has a limited percentage of allocations earmarked, is more prone to be influenced by performance information.	<ul style="list-style-type: none"> <li>- The timeframe for budget formulation and negotiations is short, leaving little time to analyze performance.</li> <li>- Congressional budget approval is dominated by DIPRES, who takes the role of defending its agreements with government agencies.</li> </ul>

Characteristics of the performance system (e.g., complexity, objectives, methodologies, program structure)	A well-designed performance budgeting system is more likely to be correctly implemented.	<ul style="list-style-type: none"> <li>- The system is robust and has many components that provide different types of information.</li> <li>- The system is not linked to the budget structure, thus diminishing the utility of the information.</li> <li>- Reforms aimed at linking performance systems with managerial incentives have not been successful.</li> </ul>
Performance budgeting legislation	Cases with a clear legislation are more likely to endure political changes.	<ul style="list-style-type: none"> <li>- All systems but performance indicators are based on legal requirements.</li> <li>- Existence of performance budgeting legislation was not found to be a relevant factor.</li> </ul>
Quality of measurement system	Information presented by a strong and independent performance measurement system is more likely to be trusted.	<ul style="list-style-type: none"> <li>- The quality of performance indicators and of the PMG system has deteriorated.</li> <li>- The quality of ex-post evaluations appears to be irregular.</li> </ul>

Top-down or bottom-up approach to performance budgeting	Each approach has both strengths and weaknesses, so the expected impact is a priori indeterminate.	- The system appears to rely excessively on a top-down approach from DIPRES to government agencies. This has resulted in reduced ownership of centralized system and in diminished use of the information from those systems.
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Note: author's elaboration.

Chile's centralized performance information system is built by several components that reach almost all government institutions and that generate information for different purposes. As explained in Chapter 7, the ex-ante evaluation system facilitates the objective of not funding undesirable initiatives and provides basic information to improve project design, the ex-post evaluation system provides practical information to improve current initiatives, the performance indicators system allows authorities to detect potential issues and to decide which programs to evaluate, and so on. However, this study shows that the information from the centralized systems is not commonly used for decision-making at the line ministry level.

The case of performance indicators is particular in that it is the only component for which government agencies have their own systems outside of those from DIPRES. The evidence presented in this study shows that indicators from the

internal systems of government agencies are more relevant than those from DIPRES. As discussed in Chapter 9, the factors that better explain why this situation happens are: weak ownership of DIPRES systems, deterioration of the quality of performance indicators, and lack of comprehensiveness of their reach within government agency's programs.

There is weak ownership of DIPRES systems both by government agencies and by DIPRES officials themselves. Lack of ownership within DIPRES is explained by internal disconnection between two organizational areas of DIPRES: the area that produces performance information and the one that negotiates the budget. Furthermore, the DIPRES officials that negotiate the budget have no incentives to use performance information as it reduces their discretionary authority to allocate resources.

In numerous instances, officials from government agencies expressed frustration with the top-down approach used for performance indicators, arguing that it results in arbitrary and irrelevant indicators. As explained in previous chapters, this situation is the result of principal-agent issues and of the powerful nature of DIPRES. In addition, the principal-agent issues have become more prominent after DIPRES performance indicators started being used to determine the PMG salary bonuses. This provides a perverse incentive for government agencies to set easy targets; thus, deteriorating the quality of the indicators.

Another relevant factor is that each government agency has only a handful of DIPRES performance indicators, leaving many programs (and even entire divisions) without a single indicator. Even the programs that are included in DIPRES performance indicators system are likely to have only one indicator, which is not enough to judge a program's performance. This results in indicators that are not relevant to the core mission of many, if not most, areas within government agencies. This situation is reasonable as it would be almost impossible for a centralized system to be comprehensive enough for the entire government; therefore, it might not suggest that the centralized system needs to be expanded, but instead complemented with individual systems.

The findings are not too different for other components of DIPRES performance information systems. For example, there is no evidence suggesting that the Comprehensive Management Reports (BGI) and the strategic definitions are ever used to inform decisions, although they may be successful in increasing government transparency. The most positive results are for ex-ante evaluations (conducted by DIPRES and the Ministry of Social Development (MDS)), as they seem to be functioning properly as a mechanism to prevent weak social return public investment programs from being funded.

Finally, the case of ex-post evaluations shows mixed results. As it will be detailed in the last section of this study, our findings relating to ex-post evaluations do not share the same level of internal validity as the rest of our findings. Of the four



evaluated programs included in this study, interviewees from two of them were highly critical of their evaluations, while interviewees from the other two programs were very satisfied. Those dissatisfied complained that evaluators did not make enough of an effort to understand the more complex details of their programs; therefore, they arrived at incorrect conclusions of no use for them. Those satisfied with the evaluations provided examples of how the evaluations resulted in decisions that should lead to improved performance.

Another question that can be explained by the characteristics of the system is why the use of performance information is more prominent during budget execution than during budget formulation, negotiation, and approval. The best explanation for this phenomenon is that budget execution is less bureaucratized than budget formulation, negotiation and approval. As explained in previous chapters, the final stages of budget formulation and negotiation are highly dominated by DIPRES, leaving almost no instances for government agencies to maneuver and to develop their own internal processes. The situation is different during budget execution, as DIPRES role is limited to overseeing financial execution and approving resource re-allocations. DIPRES is not involved in designing the monitoring systems of government agencies, allowing each institution to create structures that better fit their particular needs. This situation is evident in the Subsecretariat of Energy and in the Directorate of Waterworks, as they have established unique performance monitoring systems that are aligned with their internal priorities and with the characteristics of their programs. In contrast, formulation, negotiation and approval is shaped by

procedures established by DIPRES, resulting in almost identical processes in all the government agencies included in this study.

Another important difference between budget execution and budget formulation, negotiation and approval is how time-constrained they are. Budget formulation, negotiation and approval are highly limited by time pressures. For example, DIPRES must analyze and negotiate the budget for all government agencies in less than 60 days. Conversely, budget execution lasts at least 11 months every year, providing ample time to establish monitoring systems based on frequent reports and meetings.

### ***11.1.3. Political and External Environment***

The final set of variables is related to the political environment. These variables had less explanatory power about the use of performance information, but they help explain how the reforms initiated and what the main obstacles to their implementation were. Table 45 includes the expected impact, which appeared in Tables 9 & 10 of Chapter 5, and the actual findings.

**Table 45: Summary of Findings on Variables About the Political and External Environment**

<b>Variable</b>	<b>Expected Impact</b>	<b>Actual Findings</b>
Executive leadership support	Strong and constant leadership can help a reform move forward and gain notoriety, making it more likely that officials at line ministries will take the reform seriously.	- Leadership from the President and from entrepreneur technocrats was crucial to initiate reforms, and leadership from the Budget Director to implement them.
General political support	If politicians support the reform, then line ministries will be more interested in achieving and demonstrating performance improvements.	- Reforms came about despite lack of general political support.
Legislative support	If the legislature is interested in performance, then line ministries will need to make sure that their budget requests are clearly linked to performance targets.	- Reforms came about despite lack of support from members of the legislature.
Stakeholder involvement (e.g., planning ministry, finance ministry, audit office)	The more coordination and collaboration between stakeholders, the higher the probability of success.	- Reforms came about despite lack of stakeholder involvement. For some years, there was a difficult relation between some stakeholders.

Citizen support and performance culture	As citizens are more engaged with performance-based accountability, government officials will be more likely to take performance-based reforms seriously.	<ul style="list-style-type: none"> <li>- Citizen pressure does not appear as a major factor; still, there is clear evidence of two cases during the Lagos administration of reforms motivated, at least partly, by external pressure.</li> <li>- The performance culture of citizens was not measured to avoid excessive survey-related costs. Given little evidence of citizen pressure, it is reasonable to expect that performance culture was not a factor.</li> </ul>
Demographic characteristics of the population	A more educated population is more capable of understanding and demanding accountability based on performance information.	<ul style="list-style-type: none"> <li>- There is no evidence that the demographic characteristics of the population were a factor.</li> </ul>

Economic factors (e.g., economic downturn, budget cuts)	Performance information can have a lower impact during economic downturns, as other considerations (mostly political) become more urgent.	<ul style="list-style-type: none"> <li>- The lack of sense of urgency to reform the system reduced political support but allowed a gradual implementation approach.</li> <li>- Some interviewees argued that performance information has had less impact during economic downturns.</li> </ul>
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Reform timing (e.g., too many reforms, complementary reforms)	On the one hand, having strong financial management, strategic planning, monitoring and evaluation, and civil service career systems provide the basis for a more effective introduction of performance budgeting. On the other hand, implementing multiple reforms at the same time is more burdensome (time and resources) and can lead to ‘reform fatigue’.	<ul style="list-style-type: none"> <li>- Reforms were designed inside DIPRES and introduced directly by DIPRES, which might explain the fact that DIPRES dominates the system.</li> <li>- As democracy consolidated during the Aylwin administration, it became easier to propose performance-based reforms in the following administrations.</li> <li>- The gradual implementation approach has been mentioned as a success factor.</li> <li>- Chile has a set of fiscal responsibility reforms which reduce uncertainty in budget formulation and facilitate performance budgeting.</li> </ul>
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Note: author’s elaboration.

In the year 1990 a long-standing military dictatorship ended and Chile became once again a democratic country. While state modernization reforms were important for the first democratic President, the timing was not appropriate for wholesale

changes. Instead, the priority during the first years of the 1990s was to secure the continuity of democracy in a deeply divided country.

Performance-based reforms were enabled by the actions of a few leaders that include the technocrat Mario Marcel, President Frei, and President Lagos. As the economic conditions of Chile continued improving, there was no sense of urgency to introduce reforms to increase public sector's efficiency. For that reason, performance-based reforms continued being pushed by only a handful of government officials. The different components of the Chilean performance budgeting system were brought gradually, all designed and introduced by DIPRES.

The fact that the reforms were not part of a major public sector reform agenda, but instead were slowly introduced by DIPRES, might explain why almost all components of the performance budgeting system are managed by DIPRES. While DIPRES technical capacities were key to implement the reforms, the overconcentration of powers in DIPRES has led to a top-down approach that has negatively impacted the use of centralized information in government agencies.

## **11.2. Analysis of the Research Objectives**

As explained in Chapter 5, this study has three research objectives: (1) propose a research framework for the analysis of performance budgeting at line ministries, (2) understand differences between the way line ministries use performance information, and (3) have a better understanding of performance

budgeting at line ministries in the context of LAC countries. We now analyze how the study met these three objectives. In upcoming sections 11.2.1-3. we show that the research framework used in this study was almost entirely adequate, propose a revised framework for future studies, highlight some variables that were particularly useful in understanding differences between line ministries, and analyze the main takeaways for other LAC countries.

***11.2.1. Research Objective 1: Propose a Research Framework for the Analysis of Performance Budgeting at Line Ministries***

The first objective of this dissertation was to propose a research framework for the analysis of performance budgeting in line ministries. This objective was motivated by the findings of a meta-analysis, presented in Chapter 4, which showed that less than 10% of studies that analyzed the use of performance information under performance budgeting systems provided a detailed theoretical framework. That finding is consistent with a recent systemic review of papers about performance budgeting (Lu, Mohr, & Ho, 2015). Furthermore, there was no consistency on the structure of the research frameworks used by that small proportion of studies.

The research framework used in this study was built around the variables mentioned by the studies included in that same meta-analysis. Two thirds of the studies from the meta-analysis contained some explanatory variables, including many of the studies that did not make their research framework explicit. Those variables



were standardized and categorized through a set of steps detailed in Chapter 4, resulting in the research framework used in this study.

The research framework used in this study is composed of 26 variables divided in four categories (see Chapter 5, section 5.2.). The first category relates to the external environment, focusing on factors like certain characteristics of the population, the economic situation of the country, and other relevant changes or milestones that, while exogenous to the performance budgeting reform, might have affected its design or implementation. The second category focuses on the political environment around which the reforms are designed and implemented. The third and fourth categories are about the characteristics of the performance budgeting system and of the line ministries, respectively.

We analyze the research framework by answering the following two questions: Was the research framework appropriate for this study? Should the research framework be modified based on the findings from this study?

The research framework proved to be appropriate for this study. It served as an excellent guide to determine the key aspects that needed consideration and measurement. The framework also pushed the author towards a holistic view that allowed capturing and differentiating whether a phenomenon was caused by a factor intrinsic or extrinsic to a specific organization or system. The findings of this study show that the variables included in the research framework are appropriate to

understand why performance information is (or is not) used, why certain sources of information are preferred to others, and why and how performance-based reforms are enacted or obstructed.

Naturally, not all the variables in the framework were relevant in explaining the case of Chile, but that does not mean that they should be excluded from the framework. For instance, the technical capacity of the staff was mentioned as relevant by many interviewees, but had little explanatory power for the study because of homogeneity between cases. However, the technical capacity of the staff will likely have higher explanatory power if we apply this research framework to compare Chile with a country with less qualified public servants. This example illustrates how having a robust research framework that guides the researcher to analyze all variables relevant to a subject facilitates comparisons with future research.

The only aspect of our research framework that was not entirely adequate was the scale to grade organizations based on how they use performance information (see Chapter 5, Table 13 and Chapter 11, Table 42). Measuring the use of performance information through a quantitative scale limits the analytical freedom to weigh the key differences between cases. For example, the scale resulted in the same score for the Directorate of Waterworks and the Subsecretariat of Social Services although the use of performance information is more institutionalized in the former. While one potential solution is to improve the scale for it to include more dimensions, this will result in an overly complicated scale that might still fail to standardize and capture the

factors that differentiate cases in governments around the world. Our recommendation is for researchers to include in their frameworks a list of examples of potential uses of performance information (such as the list in Chapter 5, Table 13) to guide their analysis, but not to use a quantitative scale to award a score.

While the list of explanatory variables in our research framework was deemed appropriate, we propose some modifications to improve it. The most important modifications are adding three variables discovered as a result of the in-depth nature of this study. The first variable is the structure of the performance monitoring processes. In the case of Chile this proved important, as having a structured, periodic meeting system was a good way of increasing the relative importance and use of performance information. The other two variables relate to the outputs of internal performance systems: the availability and the quality of the information they produce.

The final research framework is presented in Table 46. Besides adding the variables discussed in the last paragraph, we made the following less substantial changes:

- First, combine the categories of external and political environment. This change was implemented during data analysis for this study because it became clear that it is very challenging to differentiate the impact of one from the other.
- Second, merge two variables from the external environment that are closely interrelated: Citizen support and performance culture, and

demographic characteristics of the population. Besides being interrelated, the comparative importance of these variables is low, evidenced by the facts that they were not relevant for this study and that they were only mentioned in 2% of the studies in the meta-analysis.

- Third, combine four variables that measure the involvement of the staff in the reforms. The variables are: Fear of transparency, input- vs performance-oriented culture, staff buy-in, self-interested motivation.
- Finally, edit the name of some variables to make them more intuitive.

**Table 46: Research Framework to Analyze the Use of Performance Information in Performance Budgeting Systems**

FINAL RESEARCH FRAMEWORK	CHANGES FROM ORIGINAL FRAMEWORK
<b>I. EXTERNAL &amp; POLITICAL ENVIRONMENT</b>	External and political environments were originally two separate categories
I.1. Citizen pressure for performance-based reforms	Combination of two variables: (1) Citizen support and performance culture (2) Demographic characteristics of the population
I.2. Economic factors (e.g., economic downturn, budget cuts)	-
I.3. Executive leadership support for performance-based reforms	Original name: Executive leadership support
I.4. General political support for performance-based reforms	Original name: General political support
I.5. Legislative support for performance-based reforms	Original name: Legislative support
I.6. Reform timing (e.g., too many reforms, complementary reforms)	-
I.7. Stakeholder involvement (e.g., planning ministry, finance ministry, audit office)	-
<b>II. CHARACTERISTICS OF THE SYSTEM</b>	-
II.1. Availability of performance information from centralized systems	Original name: Availability of data

II.2. Characteristics of the budgetary processes (e.g., timelines, earmarks, aggregation-level)	-
II.3. Characteristics of the performance-based systems and processes (e.g., complexity, objectives, structure)	Original name: Characteristics of the performance system (e.g., complexity, objectives, methodologies, program structure)
II.4. Legal framework of performance-based reforms	Original name: Performance budgeting legislation
II.5. Quality of performance information from centralized systems	Original name: Quality of the measurement system
II.6. Top-down or bottom-up approach to performance budgeting	-
<b>III. CHARACTERISTICS OF THE ORGANIZATIONS</b>	-
III.1. Availability of performance information from internal systems	New variable
III.2. Informational system capacity to collect, store, and access performance information	Original name: Informational system capacity
III.3. Linkages between planning and budgeting	Original name: Ability to link resources to organizational activities
III.4. Managerial support for performance-based reforms	Original name: Management support
III.5. Organizational factors (e.g., size, reorganization, types of goods and services provided)	Original name: Organizational factors (e.g., size, reorganization)

III.6. Quality of performance information from internal systems	New variable
III.7. Resources for performance-based reforms	-
III.8. Staff buy-in for performance-based reforms	Combination of four variables: (1) Fear of transparency, (2) input- vs performance-oriented culture, (3) staff buy-in, (4) self-interested motivation
III.9. Staff capacity for performance-based processes	Original name: Staff capacity
III.10. Strategic Planning capacity	Original name: Ability to link strategic plans to organizational activities
III.11. Structure of performance monitoring processes (e.g., frequency of meeting, information discussed)	New variable
III.12. Time investment in processes related to performance-based reforms	Original name: Time investment

Note: author's elaboration.

### ***11.2.2. Research Objective 2: Understand Differences Between the Way Line Ministries Use Performance Information***

The next objective was to gain a better understanding of what factors explain the differences on the use of performance information between line ministries. This objective was also motivated by findings from the meta-analysis: that, as compared to the executive cabinet/central budget office and the legislature, line ministries are the most likely to use performance information but the least analyzed by previous researchers.

The in-depth analysis in this study sheds light on several key variables that allow better understanding and analyzing line ministries. Some of those variables are the structure of performance monitoring processes, the availability and the quality of information, the capacity of informational systems to collect, store, and access performance information, and the managerial support for performance-based reforms. As explained in the previous section, the relative explanatory power of these and other variables might change in each country. Finally, this study not only provides a list of relevant characteristics of line ministries, but also structures them as part of a broader research framework.

The findings from this study suggest that future analysis of line ministries should not be constrained to cases with government-wide performance systems. Instead, as it is reflected in the final version of the research framework, researchers need to pay special attention to internal information systems and processes within line



ministries. The fact that government-wide performance systems were no substitute for internal systems in a country like Chile, which has been praised for its centralized systems, suggests that a similar situation might be happening in many other countries.

### ***11.2.3. Research Objective 3: Have a Better Understanding of Performance***

#### ***Budgeting at Line Ministries in the Context of LAC Countries***

The final objective of this study is to allow a better understanding of performance budgeting at line ministries in the LAC countries. In Chapter 3 we initiated the discussion by presenting some of the main characteristics of LAC countries with respect to performance budgeting. The first characteristic common to many countries in the region is the prevalence of macroeconomic and institutional challenges. Some challenges are at least partly attributed to dependence on the revenues from commodity exports, which may increase fiscal volatility and reduce incentives to develop a strong tax collection system. While some LAC countries have adopted reforms to tackle fiscal volatility, such as fiscal responsibility laws and stabilization funds, many of those reforms have failed due to short-sighted local politicians.

Another challenge is the gap between the social services provided by the government (as LAC governments spend a lower percentage of Gross Domestic Product (GDP) in social services than in developed countries) and the needs of the population (a significant proportion of people who live in LAC countries are in

poverty and/or do not have access to basic services). Finally, the capacity of LAC governments is limited insofar as their civil service systems remain undeveloped.

Chile is one of the few countries in the region that has implemented a performance budgeting system. However, Chapter 3 shows that more than half of LAC countries have taken initial steps to implement performance budgeting. The findings from this study might be valuable for those countries that are still designing and/or starting to implement their performance budgeting systems

Throughout this study, we document some aspects for which the case of Chile is an outlier as compared with other LAC countries. Those aspects can be summarized into two major themes. First, Chile is one of the few countries in the region that has been successful in managing fiscal volatility. Second, as suggested by the results of multiple surveys carried out by international organizations, the government of Chile has a higher technical capacity than that of most LAC countries.

The fact that Chile has a better handle of macroeconomic challenges and a stronger public sector suggests that other LAC countries should be extremely careful in addressing their weaknesses when implementing performance budgeting. For instance, while Chilean line ministries could invest in information systems that would make more performance information available for program managers, other LAC countries should first make sure that their program managers have the skills needed to manage and analyze large sets of information before investing in advanced

information systems. Also, LAC countries with high fiscal volatility need to consider the fact that performance budgeting tends to be fragile in economic downturn; thus, it may be harder for it to become institutionalized in a setting where fiscal contractions are common.

Despite those differences, two of the most important findings from the case of Chile should be extremely useful for other LAC countries. Those findings are the need to get mid- and high-level managers in line ministries involved with the reforms, and the importance of facilitating the development of customized internal informational systems. As it has been established throughout this study, the Chilean performance budgeting system is highly centralized in the central budget office – DIPRES –, leading to a situation of overinvestment in centralized systems and disregard for individualized systems. Having a presidentialist tradition and a concentration of authority within the central budget office is common among LAC countries; therefore, it is reasonable to say that other LAC countries are prone to taking a similar top-down approach as the one used in Chile. The findings from this study suggest that LAC countries should not replicate Chile's centralized approach, but instead try to engage individual ministries and facilitate the introduction of internal practices aimed at the decision-making processes during budget execution.

Finally, the research framework applied for this study should be an excellent fit for analyzing the situation of other LAC countries. This would be particularly appropriate for cases, like Mexico and Brazil, that have advanced in the

implementation of performance budgeting and that may provide lessons learned for other countries.

### **11.3. Analysis of the Hypotheses**

In Chapter 5 we list the three hypotheses to be tested in this study. In this section, we discuss each hypothesis to determine whether we should reject them. The three hypotheses relate to the impact of three variables: (1) the relative budgetary power of different political actors, (2) the availability of performance information, and (3) the size of each line ministry. The evidence suggests that we should not reject any of the hypotheses.

#### ***11.3.2. The Relative Impact of Certain Political Actors***

The first hypothesis tested in this study focuses on how the attitude of line ministries is shaped by the relative budgetary importance of the executive and legislative branches. The hypothesis was stated as follows:

*Hypothesis 1: given that Chile has a strong executive vis-à-vis the legislature, decision-makers at the line ministries will focus most of their budgetary efforts in satisfying demands from the executive and not from the legislature.*

This hypothesis was motivated by previous research on LAC countries showing that the norm in the region is to have a strong executive branch that controls the budget process at the expense of the legislature (Marcel, Guzmán, & Sanginés,

2014; Hallerberg, Scartascini, & Stein, 2009). For instance, in Chapter 3 we presented a survey of 18 LAC countries that shows that 16 of those countries place restrictions on the congressional ability to increase or re-allocate expenditures (Filc & Scartascini, 2007). In addition, unlike the case of OECD countries, in most LAC countries the President has veto authority over the approved budget (Marcel, Guzmán, & Sanginés, 2014).

Similarly, Chile's executive budget authority is much stronger than that of the legislature (Schick, 2002; Aninat, Landregan, Navia, & Vial, 2006; Siavelis, 2000). One researcher argued that "the Chilean political system is one of the strongest presidential systems in Latin America. The Executive has exclusive legislative initiative on several policy areas, (and) has a highly hierarchical control of the budget process" (Aninat, Landregan, Navia, & Vial, 2006, p. 27).

Based on the evidence from this study, we cannot reject the hypothesis that line ministries will pay less attention to Congress in countries where the legislature is weaker in budgetary terms. As discussed in Chapter 10, while government agencies formulate their budgets by preparing to answer the most common inquiries from DIPRES officials (such as financial execution, coverage levels, and linkages between programs and political priorities), government agencies have little involvement in congressional discussions and pay less attention to requests from Congress.

The Chilean Congress lack of authority and technical capacity on budgetary matters has reduced the importance of congressional budget approval to the point that government agencies have almost no involvement in it. Interviewees from all agencies, and from DIPRES, explained that DIPRES, instead of government agencies, has the leadership role in defending the executive budget proposal by answering inquiries presented by members of Congress (MS2, 2016; ME2, 2016; SSS5, 2016; MH3, 2016)..

Some interviewees at government agencies explained that members of Congress focus almost exclusively on Budgetary Annotations, which are a list of footnotes with very specific restrictions included in the budget document of each agency (ME2, 2016; MS1, 2016). While government agencies must meet the restrictions introduced in the Budgetary Annotations, no interview mentioned them as having any impact in any decision-making process throughout the budget cycle. As suggested by our hypothesis, the relative importance of Budgetary Annotations is very low as compared to the financial and performance requirements set by DIPRES.

### ***11.3.3. The Impact of the Availability of Performance Information***

The second hypothesis in this study is that, all else equal, line ministries with access to more performance information will be more likely to use performance information for decision-making.

*Hypothesis 2: because ex-post evaluations are a major source of performance information, areas within line ministries that have recently been the subject of an evaluation will be more likely to use performance information for decision-making purposes.*

There are two reasons why the hypothesis was built around ex-post evaluations. First, previous studies of Chile highlight ex-post evaluations as the most important source of performance information (Hawkesworth, Huerta Melchor, & Robinson, 2013; Zaltsman, 2009). Some studies explain that the commitments signed between government agencies and DIPRES as a result of ex-post evaluations derive into specific actions to improve program's performance (Hawkesworth, Huerta Melchor, & Robinson, 2013; Zaltsman, 2009; DIPRES, 2005; Arenas de Mesa & Berner Herrera, 2010). Second, ex-post evaluations facilitate a structured comparison of cases as many government agencies have programs that are similar in many respects but that differ in that one has been recently subject to an ex-post evaluation while the other one has not.

Based on the evidence from this study, we do not reject the hypothesis that cases with more performance information available are more likely to take decisions based on performance information. However, this conclusion is based on only two of the four recently evaluated programs included in this study. This is a consequence of the fact that the premise that evaluated programs have more performance information available was flawed in two of the four recently evaluated programs included in this

study. In the next paragraphs we explain this situation by contrasting two groups: cases where program managers were dissatisfied, and cases where program managers were satisfied about the ex-post evaluation of their program.

In two of the four cases, program managers spoke negatively about the ex-post evaluation of their programs (MS3, 2016; MOP6, 2016; SSS5, 2016; ME8, 2016). Those program managers argued that evaluators did not make enough of an effort to understand the more complex details of their programs, and/or that the evaluations were too superficial; therefore, the evaluators provided recommendations that had no use for program managers because they were either incorrect or vague. For these two cases, it is clear that the premise of our hypothesis was flawed as they had no additional performance information available as compared to non-evaluated programs.

In contrast, the evidence from the two cases where program managers were satisfied with the ex-post evaluations shows that the availability of additional performance information from the evaluations led program managers to take more decisions based on performance. The most prominent case is the Decent Night program where the findings of the ex-post evaluation motivated a comprehensive reform of one of the program's components and to the creation of a system of working meetings between the Subsecretariat of Social Services and three other institutions whose work is relevant to the program (SSS5, 2016).



#### ***11.3.4. The Impact of the Size of the Organization***

The final hypothesis is the following:

*Hypothesis 3: decision-makers in line ministries that are smaller in size are, all else equal, more likely to collect and regularly use performance information as an input for their decisions.*

The inclusion of a hypothesis related to the size of line ministries was motivated by two facts. The first is that the size of institutions has been mentioned in previous literature as an important factor in analyzing decision-making processes. For example, Downs suggests that the challenge of collecting pertinent and timely performance information for decision-making is greater in larger bureaus (Downs, 1966). The second fact is that size is one of the few characteristic of line ministries that can be easily measured and observed prior to starting the empirical research. This allowed a structured comparison by selecting four line ministries that differ on their size.

The evidence from this study suggests that the size of the organization is a relevant factor to explain the use of performance information; therefore, the hypothesis should not be rejected. The evidence of the impact of the size of the organization is clear in the largest and in the smallest of the four line ministries in our study. Size was arguably an obstacle for the largest organization, the Subsecretariat of Health Care Networks. As discussed in Chapter 10, this organization is large enough

that, at the same time, they must coordinate several individual health care centers that are distributed throughout the country, and manage a large portfolio of targeted programs. This situation differs from the other cases in this study which work primarily through targeted programs. The institutional-level performance monitoring systems of the Subsecretariat of Health Care Networks focus on the coordination of health care centers, which is their main activity as determined by law, while there are no major institutional monitoring mechanisms directed at individual programs. This means that the size of the Subsecretariat of Health Care Networks requires them to have multiple performance monitoring systems at the institutional level, resulting in a more difficult situation for gathering, analyzing, and using performance information than that of other cases.

On the other end, having a small size was mentioned as a facilitator for the smallest case in our study: the Subsecretariat of Energy. In Chapter 10 we discussed some specific examples of how being smaller helped, which include: making it easier to conduct a participatory strategic planning process that resulted in the Energy Agenda, and reducing the complexity of the information systems needed by program managers. Both the Energy Agenda and the appropriateness of the information systems were factors that facilitated collecting and using performance information.

#### **11.4. General Implications & Policy Recommendations**

This section concludes the study by listing general implications for performance budgeting reforms and policy recommendations for Chile. Before

presenting these, we address potential weaknesses of our findings by discussing the external and internal validity of this study.

The major weakness of studies with limited units of analysis is their low potential for generalization. With that in mind, we took some steps to increase the external validity of this study. First, we used a comprehensive theoretical framework that was built from the variables mentioned in studies that cover 86 countries where performance budgeting has been implemented. By using that framework, we attempted to ensure that the aspects covered in this study relate to those that have been found relevant in other cases. In addition, the external validity of this and other studies will increase as the same research framework is applied to other cases. Second, we were especially careful in framing the case of Chile in the context of other LAC countries. As discussed in the previous section, we showed how Chile compares to other LAC countries in some relevant factors, and analyzed how those differences and similarities impact the transferability of our findings to other countries within the same region.

The situation is different with regards to internal validity. Analyzing a single country study and using process-tracing leads to higher understanding about the characteristics of the case. This study uses the process-tracing methodology for descriptive and analytical purposes. Process-tracing was used to provide in-depth description of internal processes, such as budget elaboration, budget negotiations, and performance monitoring during budget execution. As recommended by process-

tracing methodology, the in-depth observation of these processes was guided by a predefined theoretical framework. The analytical sections of this study, particularly sections 9.4, 9.5, 11.1 and 11.2, build on process-tracing methodology to analyze potential causal mechanisms. This is done by contrasting alternative and/or rival explanations of the mechanisms that influenced behavior and decision-making through qualitative probabilistic; and by discussing, based on available evidence, which alternative is the most likely explanation. In some cases, the analysis includes a discussion of whether the evidence at hand is necessary and/or sufficient to confirm the existence of a hypothesized causal mechanism. While in most cases the analysis of the evidence yielded a highly probable explanation of the causal mechanisms, it is uncommon to find sufficient evidence to categorically attest the mechanisms behind complex and unobservable decision-making processes.

Another aspect that enhances the internal validity of our findings is that the triangulation of evidence shows consistent results. For instance, we repeatedly got accounts of different interviewees, each of them interviewed separately and anonymously, providing the exact same description of specific processes. In addition, in as many cases as possible we contrasted the descriptions from interviewees with evidence from internal documents. One caveat to this argument is that almost two-thirds of our interviewees are from line ministries; therefore, the depiction of the relations between line ministries and other institutions may be biased.

In Chapter 5 we introduced another potential weakness of studies with limited units of observation and multiple explanatory variables: having potentially low degrees of freedom for inferential leverage (King, Keohane, & Verba, 1994). The issues with reduced degrees of freedom in qualitative studies are not as straightforward as in quantitative studies where one simply compares the number of cases (or data-set observations) with the number of variables. Instead, the inclusion of key variables in qualitative studies may increase inferential leverage despite decreasing degrees of freedom (Collier, Brady, & Seawright, 2010). The increased inferential leverage is the result of a better understanding of the causal mechanisms that explain the findings of a case study, where the better understanding is achieved through the additional ‘causal-process’ information provided by key variables. However, not all of our variables were found to be key ones. For instance, some variables showed no variation among our eight units of analysis and were not found to have much explanatory power. A good example is the capacity of the staff at line ministries to interpret and use performance information. This variable was not found to have explanatory power because its perceived value was homogenous in all our units of analysis. The correct interpretation of those variables is not to mark them as irrelevant, as one might do in a quantitative study with higher degrees of freedom for the value of each variable to vary, but to label them as having been held constant for this study.

There are four important caveats about the evidence presented in this study. First, the analysis is based primarily on the point of view of officials from line

ministries. This was a purposeful decision as the study focuses on line ministries; however, this also means that the description of other institutions, such as DIPRES, could be biased. The potential for bias was addressed by including some interviewees from DIPRES and from third-party experts, who in almost every situation validated the opinions of officials from line ministries. Second, this study does not attempt to measure the impact of using performance information, but instead to determine if performance information is considered for decision-making purposes. One consequence of this approach is that we did not analyze budget outcomes. The main reason for that decision is that budget outcomes tend to be a biased measure of the use of performance information. For instance, even in cases when performance information is considered, there might be no immediate budgetary consequences; therefore, focusing on budget outcomes may lead a researcher to wrongfully conclude that performance information was ignored<sup>60</sup>. Instead, other documents -like minutes from meetings, budget preparation documents and institutional reports- were analyzed only to corroborate information from interviewees. Third, this study is not designed to analyze comprehensively any particular component of the Chilean performance budgeting system, but instead only to analyze if performance information that those components generate is used at the line ministry-level. Some of the components of the Chilean system might have had other goals, different than getting their performance information used by line ministries, which were not analyzed in detail as part of this study. Fourth, the intention in this study is to compare the use of performance information between different line ministries, but not between them and other types

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<sup>60</sup> This argument is further explained in Section 2.2.

of agents like legislature or central budget office. The use of performance information by the latter type of agents is analyzed only in processes that directly involve line ministries.

A final caveat is that ex-post evaluations are the only topic on which we got somewhat contradictory evidence. For that reason, we believe that our findings relating to ex-post evaluations do not share the same level of internal validity as the rest of our findings.

The central theme of the implications from this study to performance budgeting reforms elsewhere is that the focus needs to be placed on line ministries. As compared to legislators and to central budget officers, officials from line ministries are the most likely to use performance information in decision-making processes. This implication, which appears in recent literature<sup>61</sup>, was confirmed by our meta-analysis and is strengthened by the study of the case of Chile.

A stronger focus on line ministries may translate into numerous policy options. First, providing them with the appropriate tools to generate, store, and analyze performance information. Those tools range from infrastructure, such as information systems, to technical capacity, which can be enhanced through training and workshops.

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<sup>61</sup> For more information see Chapter 4.

Another implication that is sustained by recent literature, our meta-analysis, and the case of Chile, is the importance of targeting the decision-making processes that arise during budget execution. This implies that even if resource allocation is not decided based on performance, efforts can still be directed towards improving the efficiency and the effectiveness of how those resources are spent.

There are at least two other findings from this study that are likely relevant for many other cases:

- One of them is the importance of getting those in managerial positions involved with the performance considerations of the organization. This is not a new topic; instead, we only provide additional support to an issue that has been addressed by multiple scholars of public management. One metric that was linked to managerial involvement in all of the line ministries analyzed in this study is the turnover rate. Although the relation may be endogenous, it appears that as the tenure of mid- and high-level managers increases, their support for initiatives related to performance budgeting also increases. This relation might be due to higher knowledge about the programs of the institution and greater trust in the advice of program managers.
- Another aspect that is more often neglected is the importance of adapting solutions to the individual characteristics of line ministries. The findings from this study point to two characteristics that are easily observable and stable over time: the size of the organization and the types of goods and



services that it produces. The latter should lead reformers to avoid strict standardization of the types of indicators that they request from each organization, and to realize that in some cases they may have a more difficult task when building indicators and measuring performance.

As for the case of Chile, it has become clear that the actual use of performance information is not directly linked to the most structured and costly of their performance information systems, but instead it is based on ad-hoc solutions implemented within individual government agencies. However, this does not mean that centralized systems should be abolished in favor of decentralized ones, but instead it suggests that future efforts should be linked to both.

For the case of information systems within line ministries, the Chilean government should make available funds and technical assistance to facilitate their development. Despite this being a solution that needs to be adapted to the needs of each organization, there is a case for centralized coordination to reduce costs and avoid duplication of efforts. For instance, a software solution that serves a large social program in the Ministry of Health might be adaptable, with some minor changes, to social programs from other line ministries. Furthermore, having a coordinated technological approach would facilitate communication between platforms and data-sharing. For centralized coordination to work it will be necessary to ensure broad participation from line ministries and to invest in understanding their specific needs.

The government of Chile should also facilitate learning from best practices. The performance monitoring systems within the Ministry of Energy are an excellent example of processes that could be adapted to other organizations. Presenting exemplary cases could help motivate reforms elsewhere, and may be a source of practical ideas on how to design and implement performance monitoring systems.

The findings from this study suggest that implementing successful performance monitoring systems is highly dependent on the support from those in managerial positions. Getting managers aligned with performance is particularly challenging in Chile due to the disconnect between ministers and the heads of government agencies<sup>62</sup>. Furthermore, ChileManages, which is the only reform that directly aimed at bridging this gap, was discontinued after only a couple of years. There is at least one additional system that has gained notoriety over the years and has recently been reformed: The Public Sector Senior Executive System (ADP). Unfortunately, while the latest ADP reform has the potential to fix some of its most important weaknesses, there are no plans to link the metrics used in the ADP with those from other performance-based systems in the country. The government of Chile should take active steps towards changing the way line ministries and government agencies are structured, and/or linking performance metrics from the ADP to those at the organizational level, and/or introducing a replacement for ChileManages.

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<sup>62</sup> For more information see Chapter 8.

Lack of linkage between performance-based indicators is an issue that spans every centralized system in Chile. The evidence suggests that there is no linkage between the strategic objectives, products and performance indicators that government agencies report to DIPRES. In addition, it is not clear that the reported strategic objectives and products match the actual strategic priorities of government agencies.

Besides addressing the lack of linkages between its performance-based systems, DIPRES should move its financial reporting towards a program-based structure that allows linking financial resources with performance indicators. Having a program-based structure would serve as a basis for determining the focus and the number of performance indicators for each government agency, would facilitate the use of performance information during budget formulation, negotiation, and approval, and would enhance budgetary accountability to non-government actors. This and the previous recommendation should not focus only on budget formulation -the phase with more participation from DIPRES- but also as tools that could help agencies during budget execution.

DIPRES could introduce reforms to institutionalize stronger communication channels between the department that manages performance-based systems and the one that negotiates the budget. An analysis of DIPRES organizational structure is outside the scope of this study; therefore, we are not able to detail the issues nor to propose solutions. However, this study shows that internal budget formulation within

government agencies is heavily influenced by the type of information that DIPRES asks during budget negotiations; hence, increasing the use of performance information by DIPRES budget analysts could have trickle-down effects onto government agencies.

The final policy recommendation is to reform the PMG system. This study makes it clear that linking performance indicators with monetary incentives resulted in increased gaming, a stronger principal-agent problem, and the deterioration of performance indicators. Our main two recommendations to reform the PMG are aligned to those from a recent study published by the Ministry of Finance (Centro de Sistemas Públicos, 2016). First, the Chilean government should reduce the PMG monetary incentive to at least a third of what it is today. This recommendation responds to evidence that officials see the PMG as ‘too big to miss’, meaning that they are not willing to set challenging goals that might risk such a big proportion of their salaries. This recommendation may be particularly difficult as it might require changing current legislation. Second, DIPRES should switch back the incentive from performance indicators to other categories that are less prone to resulting in irrelevant or inappropriate indicators. There is evidence of a move in this direction as transversal indicators have been added to the PMG in recent years. Our recommendation is to align the PMG with the development of performance information systems, i.e. to meeting the first policy recommendation mentioned in this section.

## Appendix: Complete List of Studies Included in the Meta-Analysis

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## List of Interviews

- ME1. (2016, June 29). Current Official - Ministry of Energy. (J. P. Martínez Guzmán, Interviewer)
- ME2. (2016, June 30). Current Official - Ministry of Energy. (J. P. Martínez Guzmán, Interviewer)
- ME3. (2016, June 30). Current Official - Ministry of Energy. (J. P. Martínez Guzmán, Interviewer)
- ME4. (2016, June 30). Current Official - Ministry of Energy. (J. P. Martínez Guzmán, Interviewer)
- ME5. (2016, June 30). Current Official - Ministry of Energy. (J. P. Martínez Guzmán, Interviewer)
- ME6. (2016, July 5). Current Official - Ministry of Energy. (J. P. Martínez Guzmán, Interviewer)
- ME7. (2016, July 6). Current Official - Ministry of Energy. (J. P. Martínez Guzmán, Interviewer)
- ME8. (2016, July 8). Current Official - Ministry of Energy. (J. P. Martínez Guzmán, Interviewer)
- ME9. (2016, July 11). Current Official - Ministry of Energy. (J. P. Martínez Guzmán, Interviewer)
- MH1. (2016, June 15). Current Official - Ministry of Finance. (J. P. Martínez Guzmán, Interviewer)
- MH2. (2016, July 12). Current Official - Ministry of Finance. (J. P. Martínez Guzmán, Interviewer)
- MH3. (2016, July 8). Current Official - Ministry of Finance. (J. P. Martínez Guzmán, Interviewer)
- MOP1. (2016, June 22). Current Official - Ministry of Public Works. (J. P. Martínez Guzmán, Interviewer)
- MOP2. (2016, June 22). Current Official - Ministry of Public Works. (J. P. Martínez Guzmán, Interviewer)

- MOP3. (2016, June 23). Current Official - Ministry of Public Works. (J. P. Martínez Guzmán, Interviewer)
- MOP4. (2016, June 23). Current Official - Ministry of Public Works. (J. P. Martínez Guzmán, Interviewer)
- MOP5. (2016, June 23). Current Official - Ministry of Public Works. (J. P. Martínez Guzmán, Interviewer)
- MOP6. (2016, June 24). Current Official - Ministry of Public Works. (J. P. Martínez Guzmán, Interviewer)
- MOP7. (2016, June 29). Current Official - Ministry of Public Works. (J. P. Martínez Guzmán, Interviewer)
- MOP8. (2017, January 27). Current Official - Ministry of Public Works. (J. P. Martínez Guzmán, Interviewer)
- MS1. (2016, June 21). Current Official - Ministry of Health. (J. P. Martínez Guzmán, Interviewer)
- MS2. (2016, June 21). Current Official - Ministry of Health. (J. P. Martínez Guzmán, Interviewer)
- MS3. (2016, June 24). Current Official - Ministry of Health. (J. P. Martínez Guzmán, Interviewer)
- MS4. (2016, July 1). Current Official - Ministry of Health. (J. P. Martínez Guzmán, Interviewer)
- MS5. (2016, July 1). Current Official - Ministry of Health. (J. P. Martínez Guzmán, Interviewer)
- MS6. (2016, July 4). Current Official - Ministry of Health. (J. P. Martínez Guzmán, Interviewer)
- MS7. (2016, July 11). Current Official - Ministry of Health. (J. P. Martínez Guzmán, Interviewer)
- OI1. (2016, April 21). International Organization Expert. (J. P. Martínez Guzmán, Interviewer)
- OI2. (2016, April 27). International Organization Expert. (J. P. Martínez Guzmán, Interviewer)
- OI3. (2016, April 27). Academic Expert. (J. P. Martínez Guzmán, Interviewer)

- OI4. (2016, April 28). International Organization Expert. (J. P. Martínez Guzmán, Interviewer)
- OI5. (2016, May 18). Former Official - Ministry of Finance. (J. P. Martínez Guzmán, Interviewer)
- OI6. (2016, May 18). Former Official - Ministry of Finance. (J. P. Martínez Guzmán, Interviewer)
- OI7. (2016, June 16). Former Official - Ministry of Finance. (J. P. Martínez Guzmán, Interviewer)
- OI8. (2016, June 20). Former Official - Ministry of Finance. (J. P. Martínez Guzmán, Interviewer)
- OI9. (2016, June 22). Former Official - Ministry of Finance. (J. P. Martínez Guzmán, Interviewer)
- OI10. (2016, July 7). Former Official - MINSEGPRES. (J. P. Martínez Guzmán, Interviewer)
- OI11. (2016, July 11). Former Official - Ministry of Finance. (J. P. Martínez Guzmán, Interviewer)
- OI12. (2016, November 22). Current Official - Civil Service Office. (J. P. Martínez Guzmán, Interviewer)
- OI13. (2017, January 10). Civil Society Expert. (J. P. Martínez Guzmán, Interviewer)
- OI14. (2017, January 24). Civil Society Expert. (J. P. Martínez Guzmán, Interviewer)
- OI15. (2017, January 27). Civil Society Expert. (J. P. Martínez Guzmán, Interviewer)
- SES1. (2016, June 20). Current Official - Subsecretariat of Social Evaluation. (J. P. Martínez Guzmán, Interviewer)
- SES2. (2016, July 1). Current Official - Subsecretariat of Social Evaluation. (J. P. Martínez Guzmán, Interviewer)
- SSS1. (2016, July 4). Current Official - Subsecretariat of Social Services. (J. P. Martínez Guzmán, Interviewer)
- SSS2. (2016, July 5). Current Official - Subsecretariat of Social Services. (J. P. Martínez Guzmán, Interviewer)

- SSS3. (2016, July 6). Current Official - Subsecretariat of Social Services. (J. P. Martínez Guzmán, Interviewer)
- SSS4. (2016, July 8). Current Official - Subsecretariat of Social Services. (J. P. Martínez Guzmán, Interviewer)
- SSS5. (2016, July 11). Current Official - Subsecretariat of Social Services. (J. P. Martínez Guzmán, Interviewer)
- SSS6. (2016, July 12). Current Official - Subsecretariat of Social Services. (J. P. Martínez Guzmán, Interviewer)
- SSS7. (2016, July 12). Current Official - Subsecretariat of Social Services. (J. P. Martínez Guzmán, Interviewer)