

My research project, “The Possibility of a Pigovian Crash Tax”, began with a simple thought experiment. I was fortunate to be in an Economics Writing class with Professor Winett. He encouraged me to turn my thought experiments into an original research paper.

Economic theory deals extensively with the problem of “externalities”. These are situations in which one person’s actions affect another person without compensating the affected party. The economist A.C. Pigou proposed that the government could levy a tax equal to the amount of this external effect. This would force the person who caused the externality to take into account the costs he is imposing on others. This is known as a Pigovian tax. Conventional economics suggests that it will alter people’s behavior to “correct” externalities.

But I have never been satisfied with conventional economics. “Is it possible,” I wondered, “that there are some situations in which individuals already face such high costs that a Pigovian tax will have no effect on their behavior?”

I also happen to spend lots of time driving. When I drive, I tend to think about how others behave on the highway. I’ve always been interested in transportation economics. It was only natural that I started thinking of the externalities caused by driving as a way to test my idea. Was it possible that the individual costs of an accident were so high that a Pigovian crash tax would not do any good?

I began my research by refreshing my understanding of externalities and Pigovian taxes, going back to old economics textbooks. But I needed to know more, so I began accessing other papers on traffic economics. This would have been impossible without access to the seemingly limitless information available through the University Library’s Research Port. I was able to access articles from the top economics journals using JSTOR and EBSCOHOST. I even had to

look up textbooks on fields I was not familiar with, such as transportation engineering. I would have had little access to these kinds of sources without access to Maryland's libraries.

I knew of some important articles by reputation, but it was more difficult to determine the relevance of more obscure studies. By seeing how often articles were cited by others, I could gauge which papers made significant contributions to the field. By reading curriculum vitae of the authors, I learned which scholars were experts in which fields. Even these techniques did not answer all of my questions, however. I knew I needed to consult an expert.

I met with Professor Leland Gardner, a transportation professor in the business school. Prof. Gardner was extremely helpful in identifying where to find additional information. He instructed me how to access online data from the Department of Transportation.

After several discussions with Professors Winett and Gardner, I decided that I had neither the time nor the resources to conduct the kind of empirical analysis I originally desired. I still had enough data and enough ideas to address the topic theoretically, however.

As my research continued, I began to see how I could modify standard economic models to communicate my ideas. Economics PhD student Giorgo Sertsios showed me how to electronically construct the graphs I would need to use to convey my conclusions. As my project neared completion, I showed portions of my paper to both Giorgo and Professor Gardner, to make sure that my arguments were sound and were communicated clearly. The input from Giorgo and Professors Gardner and Winett was invaluable.

From this research, I learned just how time consuming it can be to access large datasets. I also learned how important it is to discuss ideas with others who are knowledgeable in the field. Discussions with experts complement reading works published by other authors. This project also proved how important it is to be able to utilize diverse information sources, because often

research will take you into fields beyond your area of expertise. Of course, the experience of composing my own research was priceless.

In the end, I am proud of this research. I believe it asks an important question and examines economic theory from a new perspective. And it was extremely satisfying to follow my thought experiment through to its conclusion.