

Chapter 12: Forest from the Trees Lecture, A Short Overview

I. Introduction

In the beginning of the course, I argued that public economics is an important field—indeed an increasingly important field, because public policies have an increasingly large effect on the real economy. RGDP for the United States is approximately 32 trillion dollars and the central government's expenditures are approximately 8 trillion, state spending is somewhat over 2 trillion, and local expenditures are on the order of 2 trillion dollars, for a total of about 12 trillion dollars, about 35% of US GDP. Many of these expenditures are “transfer” or “insurance” programs in which recipients receive cash or cash equivalents and individuals and firms are free to spend it as they wish. Some of this total also reflects intergovernmental transfers rather than final spending at a particular level of government: the federal government sent more than 1 trillion dollars to state and local governments in 2024 (mostly to fund health care programs such as Medicaid), and state governments passed along more than 800 billion dollars of their own budgets to local governments as grants-in-aid—so part of the state and local totals above are simply federal or state dollars being counted again as they work their way down to the governments that actually provide the relevant services.

These expenditures have been increasingly financed by issuing debt. Total federal debt is currently about 38 trillion dollars, while combined state and local government debt (mostly bonds issued to finance long-lived infrastructure) totals around 4 trillion dollars. Total government debt across all three levels add up to more than 42 trillion dollars.

Both government expenditures and their method of funding directly change the distribution of private expenditures—with those receiving the transfers or government contracts have more to spend and those paying the taxes or purchasing the bonds that finance the transfers have less. In addition to transfer payments, government expenditures include wages and purchases of inputs used to produce public services of various kinds, as with the court system, primary and secondary education, national defense, and road network. And, beyond

that, there are areas in which various subsidies are provided for purchases of such things as various agricultural products, battery-driven automobiles, and airports. Together these expenditures reshuffle more than $1/3$ of GNP in the US from one use to another. (The basic law enforcement system consumes only a small fraction of the overall cost of government services, approximated here as 1% of GNP.) The tax revenues and bonds issues add up to approximately the same amounts, a bit more than $1/3$ of US GNP.

In addition to their direct effects on the expenditures out of which GNP is composed, all three levels of government adopt regulations that affect the pattern of consumption and production. Here one can begin with various health and safety regulations standards for building, electricity transmission, and rules for entering and in some cases leaving an industry. There are a variety of tax laws, effluent regulations, and zoning regulations that indirectly affect how and where production takes place. The scale of this regulatory activity can be seen in the Federal Register, which ran to more than 61,000 pages of rules, proposed rules, and notices in 2025, down from an all-time high of more than 107,000 pages the year before. Not all of that total reflects regulations actually in force, however: a portion of each year's Federal Register pages are proposed rules still open for public comment, along with notices and other material that may never take effect as binding law. The Code of Federal Regulations—the compiled body of regulations that are actually in force at a given time, shown in the last figure of the appendix—ran to about 103 million words as of 2019, and it grows only when a proposed rule survives that process and is finalized.

Overall, an analysis of trade and production networks that ignores public policy will miss a good deal of what actually determines the prices of goods, services, and the processes of production used to produce, transport, and sell those goods and services.

Organization and Focus of the Course

Positive public economics is, thus, central to understanding the private economy of contemporary economies. This was less true in 1900 when microeconomic models were

being worked out, but in the period after WWII, ignoring the effects of government policies on the private economy became increasingly problematic. Relatively few markets can be characterized by the usual competitive or monopoly models, where production costs reflect relative input scarcity, technology, and the pattern of demand (grounded in marginal product and tastes) alone. Such models are not irrelevant, but they tell only part of the story—an important part, but only part of the story.

However, understanding what a market would look like without the intervention of government policies provides a useful point of departure for Public Economics. It allows one to model and identify the effects of government policies in a manner that would be difficult if not impossible without it. So the competitive model is not a waste of time; it is a precondition for working out the effects and demands for public policies. Demand and supply still operate, but how they affect prices and outputs is jointly determined by market factors and government policies. It is still largely market outcomes, however, that produce the circumstances (most of the real goods and services, and, indirectly, the electoral and interest group demands) that induce governments to adopt the policies that they do.

Although we have thought a bit about normative issues, the main focus of the course has been on explaining and predicting the kinds of policies that would be adopted in democracies if voters are reasonably well-informed about the costs and benefits of alternative policies, where those costs and benefits are both grounded in the pre-intervention circumstances and the anticipated consequences of public policies. For example, what normative public economics refers to as externality and public goods problems are normally ones in which voters can at least potentially benefit from a variety of regulations, user fees, taxes, and subsidies. Electoral demand may thus be expected to “demand” or at least support policies that reduce the personal disadvantages of such problems. (No assumption has been made that voters or the government will maximize social net benefits, only that anticipated benefits motivate voters to favor one policy over another.)

The same sorts of anticipated benefits may also be associated with policies that transfer wealth or income to particular groups of individuals. Farmers, for example, tend to

favor subsidies and tax-funded crop insurance, because it tends to increase their profits and reduce their risks. Such policies make little or no sense from the perspective of welfare economics, but do make sense for farmers and they will support such policies with their votes and (through various farm cooperatives and similar organizations) contribute to the lobbying expenses associated with petitioning government to enact and continue such programs.

Notice that in both cases, it is the original pre-intervention setting that describes the gains from public policy that voters and interest groups anticipate. The utilitarian normative framework provided by welfare economics could help explain solutions to externality and public goods problems (as with environmental regulations and national defense) but only if voters all had internalized those theories! Instead of benevolent dictators or central-planners, we have simply assumed that elections and interest groups motivate politicians to discern what pivotal voters want and to attempt to adopt policies that are consistent with those wants—more or less as entrepreneurs do when they open and stock a retail outlet. Failures to do so will cause candidates for higher office to lose elections and private entrepreneurs to lose money.

The second step—after the base non-intervention state has been characterized—is to analyze how democratic processes (majority rule-based elections) work if voters and firms behave more or less in the same way as consumers and producers. It is these majoritarian processes that characterize the main directions and general nature of the details of public policies.

Given the second step, the third step is to take account of the fact that voters are not fully informed about public policies nor is electoral competition perfectly competitive. These “imperfections” allow interest groups to determine many of the fine details of public policy. The influence of such groups emerges oddly enough because of public goods problems associated with lobbying. Were it not for such effects, consumers would drive most public policies, because they have interests in every market and are more numerous than producers are. However, consumers free ride on such efforts and so do little or fund little direct

lobbying. This creates an opening for producers to lobby for preferential treatment. If we take Olson's logic seriously, this tends to favor relatively more concentrated industries who have relatively less free riding to overcome and industrial groups that are organized for other purposes such as farmer cooperatives and labor unions. Such groups can drive public policies away from median voter outcomes by trading campaign support for policy preferences and also by persuading voters, politicians, and/or bureaucrats that their interests are aligned with industries.

The second and third steps are the public choice or political economy models of public policy formation. They are positive theories (although they can take account of voter norms and ideology) that explain public policies as joint outcomes of voter and interest group demands under preexisting political institutions. Those theories bring public policy into the analysis instead of leaving it outside the economic system. In econometric terms, it reminds us of the obvious: that such policies are endogenous rather than exogenous. And, moreover, that public policies with economic effects are normally motivated by those effects. The effects of public policies are not accidental!

The fourth step in the analysis is to analyze how institutions affect this process. That is to say, the "pre-existing institutions" may have systematic effects on the kinds of policies adopted. For example, dictators and voters have different preferences over government policies for many reasons. Dictators tend to be more interested in "extraction" than in voter welfare. Voters are naturally more interested in their own welfare than in shifting their resources to the ruler or central government.

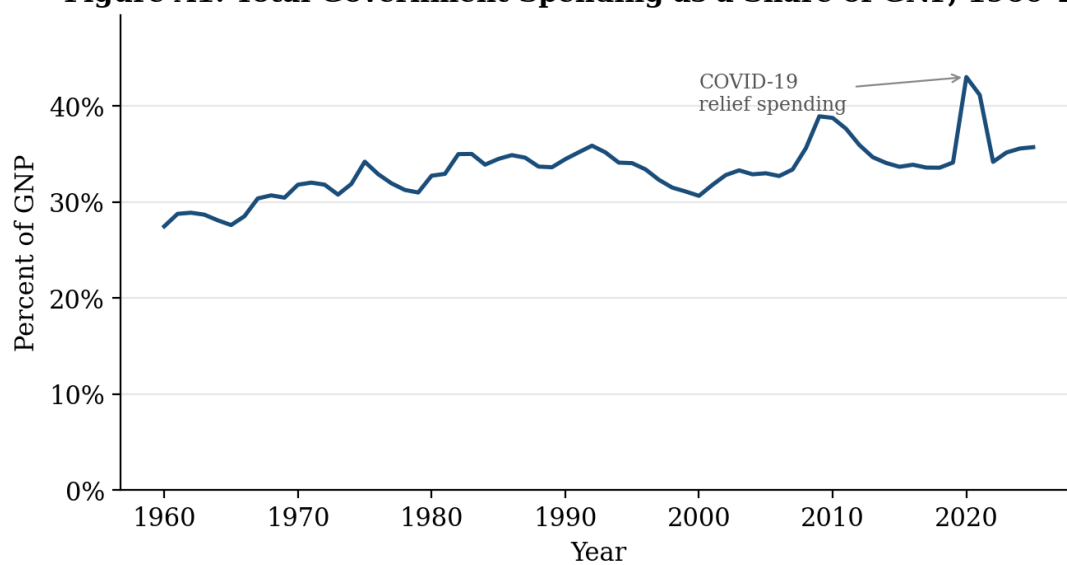
Differences in the way in which majoritarian electoral systems are organized can have effects on public policies (as with the difference between "first past the post" and "proportional representative" systems of elections). We also noted that incentives for local governments within decentralized systems of government differ from those in more centralized governments. Such effects imply that "institution" or "constitutions" matter.

Together steps two, three, and four provide a systematic framework for thinking about public policy, why voters and interest groups favor some policies over others, and why elected governments and their appointed agents tend to adopt particular kinds of policies. It is these policies that we observe in the real world and which account for about 35% of the pattern of expenditures in the United States along with regulations that direct or incentivize much of the rest. It is providing the micro-foundations of such policies that is the focus of the positive strand of public economics.

Appendix: Long-Run Trends in Government Size, Health Spending, Longevity, and Regulation

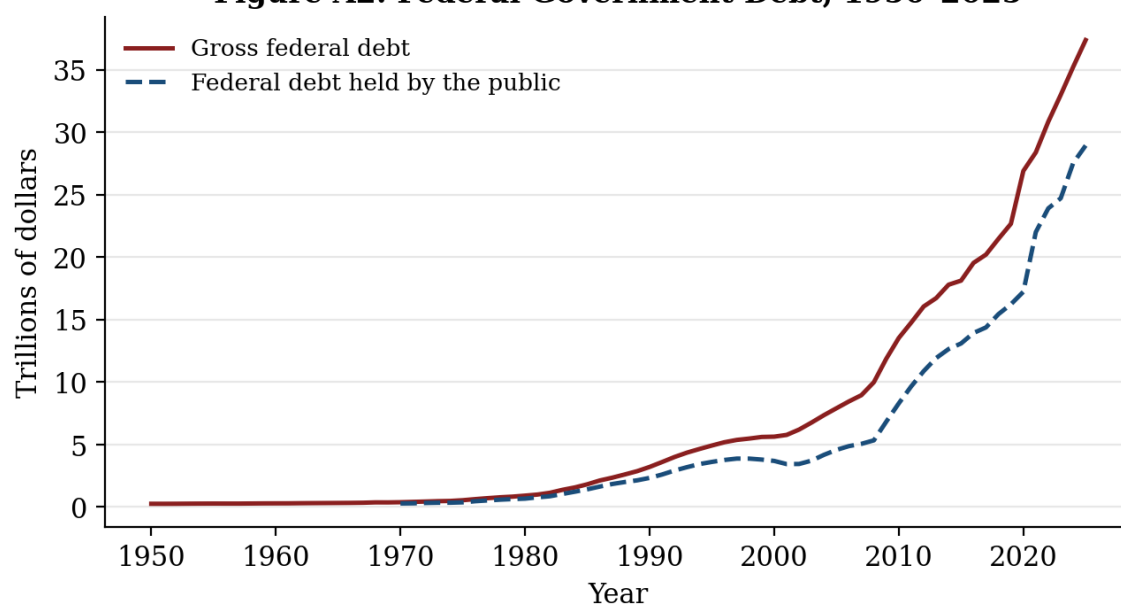
The figures below place the numbers discussed in this chapter in a longer historical perspective, drawing on data from FRED (the Federal Reserve Bank of St. Louis), the World Bank, and the Mercatus Center at George Mason University.

Figure A1. Total Government Spending as a Share of GNP, 1960-2025



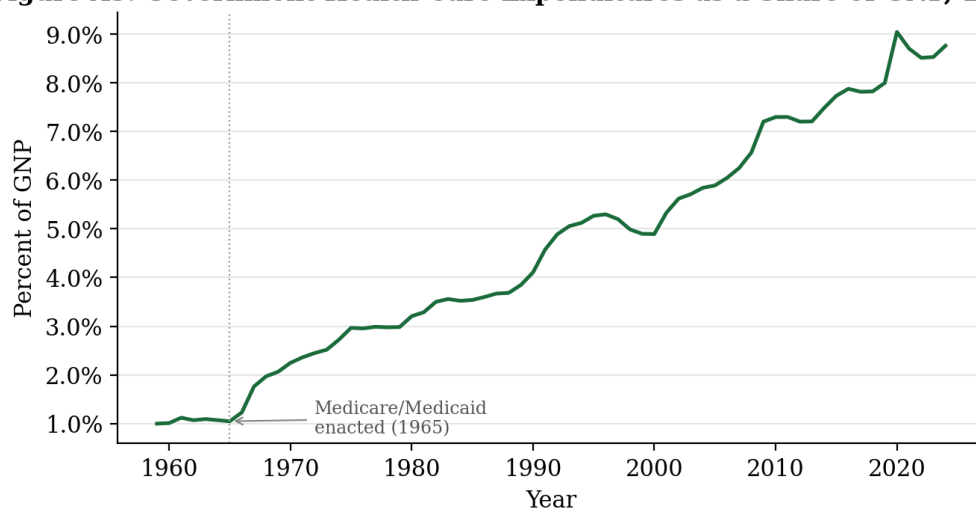
Source: U.S. Bureau of Economic Analysis, Government Total Expenditures (W068RCQ027SBEA) and Gross Domestic Product (GDPA), via FRED, Federal Reserve Bank of St. Louis.

Figure A2. Federal Government Debt, 1950-2025



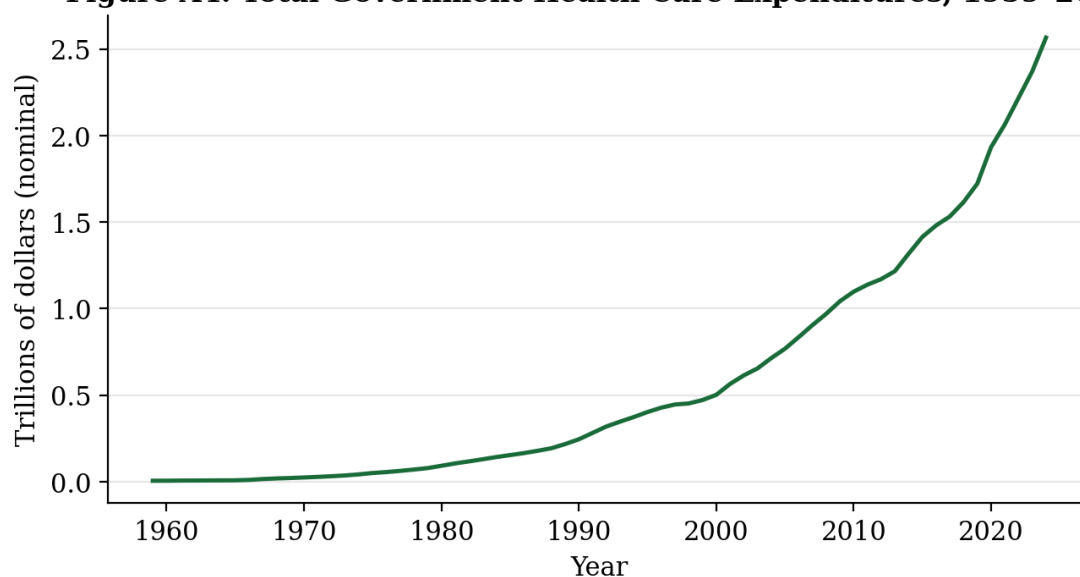
Source: Gross Federal Debt (FYGFD), Council of Economic Advisers; Federal Debt Held by the Public (FYGFDPU), U.S. Treasury Fiscal Service; both via FRED, Federal Reserve Bank of St. Louis.

Figure A3. Government Health Care Expenditures as a Share of GNP, 1959-2024



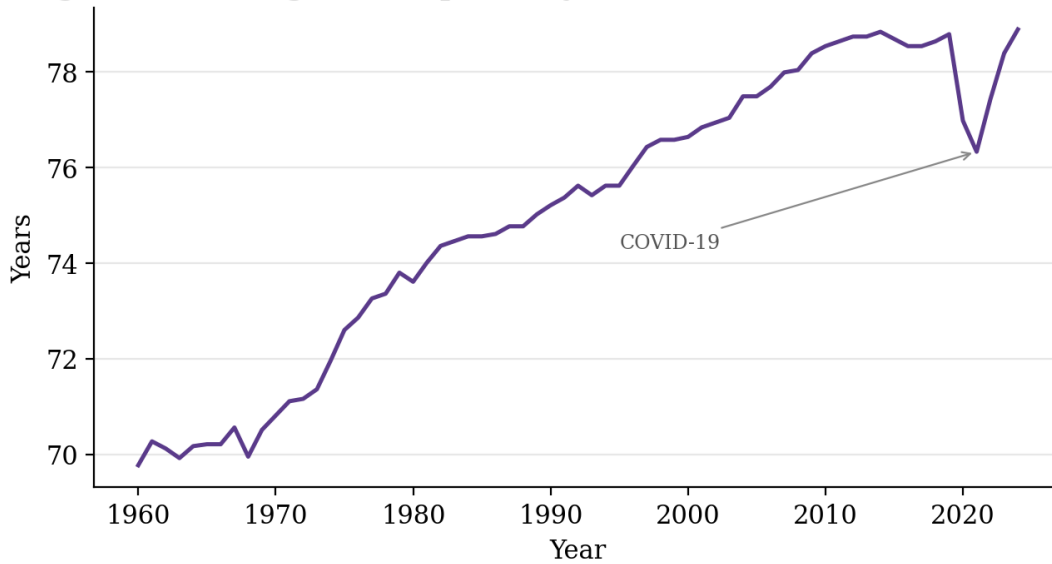
Source: Government Current Expenditures: Health (G160271A027NBEA), U.S. Bureau of Economic Analysis, and Gross Domestic Product (GDP), via FRED, Federal Reserve Bank of St. Louis.

Figure A4. Total Government Health Care Expenditures, 1959-2024



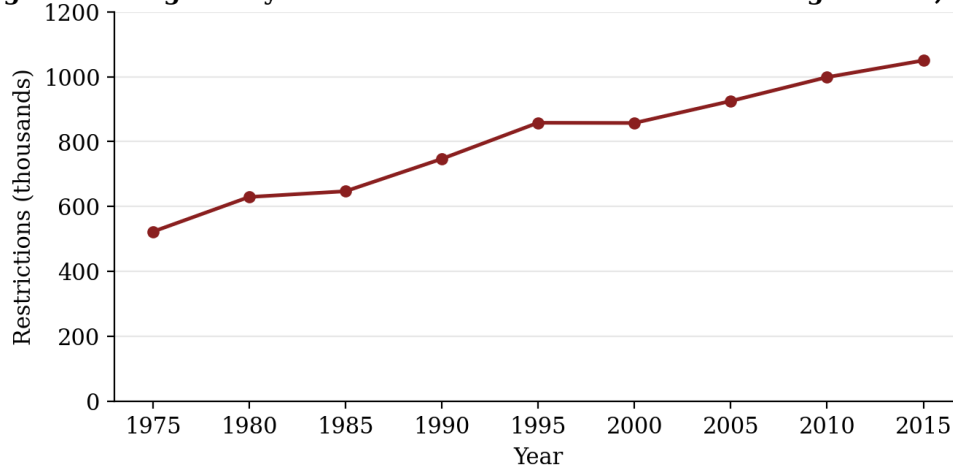
Source: Government Current Expenditures: Health (G160271A027NBEA), U.S. Bureau of Economic Analysis, via FRED, Federal Reserve Bank of St. Louis. Not adjusted for inflation.

Figure A5. Average Life Expectancy at Birth, United States, 1960-2024



Source: Life Expectancy at Birth, Total for the United States (SPDYNLE00INUSA), World Bank World Development Indicators, via FRED, Federal Reserve Bank of St. Louis.

Figure A6. Regulatory Restrictions in the Code of Federal Regulations, 1975-2015



Source: Mercatus Center at George Mason University, RegData/QuantGov. "Restrictions" are occurrences of words such as "shall," "must," and "required" that create a binding legal obligation—Mercatus's most detailed published time series on regulatory volume. This is a related but distinct measure from the raw word count of the CFR discussed in the text (about 103 million words as of 2019); the two move together closely but are not the same statistic.