

I. Introduction to Public Economics

A. What is Public Economics?

Public economics is the study of the government's impact on the "private economy," whereby the private economy we mean the market outcomes that are the focus of most micro-economic textbooks.

The private economy is the system of consumer demands, production by private organizations called firms, and market prices that coordinate the activities of consumers and firms so that the quantities produced in each market approximately equal the quantity demanded of each good or service produced. That equilibrium assumes just a minimal—but very important—role for government. Namely, the government assures clear definitions of who owns what and limits methods of transferring ownership rights from one person to another to voluntary exchange and gift giving. The government thus implicitly assures that theft, extortion, and fraud are essentially eliminated—which is to say reduced to a such a level that it can be ignored without substantial loss. The government also is implicitly assumed to enforce contracts so that intertemporal exchange is possible. These roles are almost never included in micro-economic textbooks, but without them, private exchange and production would be unlikely to take place at anything like the rates that we take for granted in contemporary market-based societies.

Public economics analyses how public policies affect the market outcomes associated with the private economies. There are three parts to this process (1) positive economics, (2) normative economics, (3) the political economy of public policies.

The first part—and the one that most textbooks focus most of their attention on—is analyzing how a specific public policy affects a market or group of markets. Here, one might have begun with analysis of how various forms of property and contract law affect the kind and extent of market activities that tend to emerge in the private economy. However, for the most part the civil and criminal laws are taken to be fixed for public economics and so are not included in courses on public economics. Instead, the focus of positive public economic is on how various governmental expenditures, taxes, and regulations affect the private economy—while implicitly holding the civil and criminal law constant. Although this is easier than analyzing the effects of such framing laws, it is not a trivial exercise. There are by now thousands and thousands of such policies and each has an impact that is partly determined by the impacts of all the others. In part I of this course, we'll examine some

of the more commonplace policies using tools from microeconomics in an “other things being equal” policy environment. That is to say, we’ll examine the consequences of a few important policies on the private economy, holding all others constant. The policies of greatest interest for part I of this course (and in most other public economics courses) is the effect of various taxes and subsidies on previously untaxed, unsubsidized, and unregulated markets—which is to say the markets modelled in a standard microeconomics course.

These analyses reveal that public policies normally affect both consumers and firms even when they are “aimed” at only one or the other side of the supply and demand relationships. Any policies that directly or indirectly affect prices—such as sales taxes, excise taxes, and subsidies then to have effects on both consumers and firms and via the latter on various input markets. Similarly, any policies that directly or indirectly affect production costs also have effects on firms, consumers, and input markets. And, the same is true of government expenditures that alter the pattern of demand for final goods and services or inputs. Market prices adjust to set supply equal to demand and by doing so they tend to distribute the burden of taxes and benefits of subsidies between firms and consumers.

The **second part** of analyzing the effects of public policies on the private economy is a normative evaluation of the policies. This part of public economics attempts to determine whether a policy improves on market outcomes or not, and whether the policy is the best one could imagine, given the realities of individual interests and resource scarcity. For the most part, this is done using various extensions of utilitarian philosophy that economists refer to as welfare economics. (It is called welfare economics because the aim is to determine whether “overall welfare” has been improved or worsened by a particular policy.)

Although all kinds of policies may be adopted and implemented by governments, their effects differ. Some clearly make most people in society worse off and others clearly make most people better off. Others are more difficult to assess because there are both winners and losers from a given policy. If one eliminated parking on main street in Morgantown and turned that space into bicycle lanes, cyclists would benefit but auto drivers would lose their ability to easily park and walk to a business. Businesses would suffer if more such auto driver customers exist than cyclist customers. The losses from such a policy are thus probably larger than their benefits.

Both the first and second parts of the analysis can be undertaken with a variety of **geometric and mathematical “tools”** that demonstrate why economists predict particular types of results from particular policies. A good deal of the course is devoted to teaching those tools, because they

are what make the course a rigorous public economics, rather than a loose discussion of public policy based on intuition alone. They are the foundation lurking behind all good economic analysis whether done in words, pictures, or songs. There is an intuition that emerges from the analyses developed—and hopefully you will see both the intuition and the logic behind it after you master the tools taught in the course.

The **third part** of the analysis attempts to explain why the public policies that we see are in fact in place. There are two aspects of this analysis—again positive and normative parts. There are normative problems associated with self-interested behavior in some settings and some of these problems may attract the attention of government officials and voters. Social welfare is often maximized by private markets, in the sense that the “net benefits” of consumers and firms are maximized in individual markets. However, there are cases in which this is not true—externality and public goods problems—and in which government policies can improve on market outcomes. For example, air and water pollution may be neglected by markets, but be important to persons living near a group of factories. Various regulations and tax policies can improve on market results in such cases—and anyone interested in maximizing social welfare would favor one or more of the policies that a public economist would recommend as solutions.

However, the policies that are chosen or emerge from a political system may not maximize social welfare. A dictator is not necessarily a utilitarian philosopher king that aims to maximize social welfare. Voters in a democracy may similarly be uninterested in the conclusions of utilitarian policy analysts. They may have different norms or have practical interests that they regard to be more important, or may simply be ignorant about the details necessary to recognize and solve the problem. In any of these cases, public policies will differ from the ones commonly recommended by public economists. These too, need a coherent explanation and the tools used in the first half of the course can be extended to analyze the policy preferences of both dictators and voters. We’ll only have time to examine those of voters and majority rule based governments in this course.

For the most part, the focus is on policy making within democracies for roughly the same reason that we assume markets to be competitive. Most of you live in societies with democratic politics and competitive markets. We’ll assume that political competition for higher office induces candidates to take policy position to win enough votes to be elected to office. Successful candidate will be, on average, neither more or less interested in “social welfare” than a typical voter is. That model has some clear implications about the public policies that will be observed—namely those preferred by the “median voter” (not the average voter).

In general, this course focuses on relatively straight forward but sophisticated analysis of public policies and the politics of public policies.

Public economics has been subdivided into a number of fields including: political economy, public finance, economics of regulation, law and economics, urban economics, environmental economics, and macroeconomics. The tools of these fields are, in principle, all the same although specific problems and puzzles emerge in what have become separate fields of study. This course focuses for the most part on public finance and political economy, although most of the ideas and models developed in the course apply to and are used the other subfields as well.

B. Why Study Public Economics?

At the time when microeconomics was being worked out, many Western governments could be approximated as “watchman states.” They enforced criminal and civil law, took care of national defense, and did relatively little else. This is not to say that they did nothing else. There were public works projects such as highway and canal systems. There were regulations on the disposal of human and industrial wastes. There were tax financed schools and modest social welfare systems. But all these programs were relatively small and typically consumed less than a tenth of what economists would later refer to as Gross National Product (GNP).

Such a minor part of the economy could be ignored in order to focus on how markets operated individuals and as social systems. To reduce the enormous complexities of real world economic organizations and enterprises to a few diagrams and equations that capture their central tendencies was an amazing achievement. To do so, required largely putting aside—or holding constant in the background—all kinds of things including the policies, organization, and manner in which public policies contributed to the “market order” that emerges from billions of individual decisions in societies with tradable clear property rights. The microeconomic theories taught in principles of economics courses in a semester were worked out over the course of a century by thousands of talented men and women who (in the end) attempted to develop and understand the implication of rational more or less self-interested behavior for final goods and input markets.

However, to continue ignoring the role of the public sector in contemporary market orders is no longer tenable and it has not been for decades. In several other Western economies, government expenditures now exceed half of GDP. That implies that more than half of the pattern of trade observed to day is either directly determined by government policies or significantly influenced by them. The effects of public policy on the “market order” can no longer be ignored. It may still be

useful for teaching to deal with the private economy separately from the political economy, but such efforts no longer tell students most of what they need to know about the real markets that they participate in every day. Much of what is directly experienced in today's commercial societies is determined by public policies, which in turn are products of politics.

Taxes and expenditures are much higher today throughout the West than they were in 1850, 1900, or 1950 in all industrial countries as a percentage of income and in absolute levels. Higher taxes imply that more of a nation's GNP is directly allocated by governments than before. These expenditures affect the pattern of demand throughout a nation's economy and have effects on the pattern of production throughout the nation and the world.

Although governments for many purposes can be thought of as a "giant consumer," governments do not make decisions in the manner in which economists characterize consumer choices. Moreover, much of their effect on the pattern of market exchange occurs indirectly through grants and relative price discrimination rather than from direct purchases of goods and services or the direct production of goods and services. For example, contemporary tax-financed retirement programs shift purchasing power from relatively young "workers" to relatively old "pensioners." The latter implies that less production takes place with the demands of young workers in mind and more of it takes place with the demands of retired persons in mind.

Moreover, the scope of government regulation is also much broader and affects the availability of goods and services through direct and indirect effects on the costs of goods and services. Firms, for example, can no longer simply dispose of their waste products in the nearest stream or river, which increases their production costs because wastes must now be "hailed off" and disposed of in ways that are less likely to cause problems for persons living downstream or downwind from major production facilities. Changes in the types of relative cost of different production methods induced by such "environmental" regulations cause profit-maximizing firms to change from what formerly were "least cost" methods of productions to ones that are "least cost" given the new regulations. This increases prices for goods that tend to have relatively large waste biproducts relative to others that have relatively lower waste (or less toxic) waste products.

Detailed regulations affect the basics of life. Environmental laws affect the quality of the air that we breath and the water that we drink. Other regulations affect the housing that we live in and the food that we eat. The things that we as consumers have to choose from within markets are still products of competitive efforts by firms to attract our dollars, but these efforts are far more influenced by public policies today than they were in 1900 as neoclassical economics emerged.

This is not to say that microeconomic theory is no longer relevant. But it is to say that a more general and descriptive theory of the market order must now take account of public policies. We are no longer in 1900 or even 1950. If you want to understand today's markets, you have to study public economics.

Understanding public economics is not only important for students of economics, but also for individuals in their roles as investors, consumers, and voters. Without a reasonable understanding of public economics all sorts of errors with respect investment decision, purchases of goods and services, and voting for candidates and policies.

Indeed, the effects of public policies can be seen in your own choices. Many of your decisions today were affected by government fiscal policies. You are attending WVU. WVU is (partly) a publicly financed university. About 15% of WVU's operating expenses are paid by West Virginia taxpayers, and much of the research conducted at WVU is also supported by tax dollars or tax deductions associated with research and development expenses. You doubtless chose WVU, in part, because the cost of a college education at WVU is relatively less expensive than at an equivalent private university. And, if you received fellowship money from a private donor, his or her decision was probably influenced by the tax deductibility of charitable contributions.

You probably used highways and/or public transit to make your way to class. You probably paid sales tax on your lunch, and also paid a variety of state and federal excise taxes on the gasoline that you used to drive here. If you worked during the summer or while attending WVU, you paid a variety of federal, state, and local income taxes, and your employer was subject to a variety of labor regulations.

If you plan to marry some day, your decision will be based partly on the standardized bundle of rights and obligations associated with the "marriage contract," which are largely determined by state laws and regulations. If you think about retiring some day, your decision is influenced in part by the magnitude of Federal Social Security and Medicare benefits--and risks associated with their provision by the federal government (and, of course, future tax payers!).

Overall, whether one likes it or not, public economics affects all manner of plans and decisions at the margin, and by doing so has consequences for private lives and market activities, and also public sector politics insofar as they were adopted with their anticipated consequences in mind.

II. On the Historical Setting for Contemporary Public Economics

The scope of governmental policies expanded greatly during the 20th century relative to what it had been in the previous century. Some aspects of this expansion may be regarded as historical accidents and others may be regarded as driven by domestic politics, which is to say by the votes of a nation's citizens and the lobbying efforts of various organized interest groups. Together these three factors account for much that arose in the West during the past century or two of public policy reform and expansion.

A. The Great Transformation of the 19th and Early 20th Centuries

The 19th century was a period of great transformation for both markets and politics. It was the period in which farming stopped being the main enterprise of most persons. Although trade and trading networks have always existed, they were not always as central to life as they are now. Most people in 1800 lived on farms or in farming villages and most worked on farms or sold goods and services to farmers. Farm help was largely paid "in kind," which is to say with room and board rather than with money. Innovations in the agriculture and technological advance shifted this ancient pattern of life toward the modern ones as fewer farmers were needed to produce food and the labor released from agriculture migrated to productive towns and cities, where more and more persons were paid in cash for their labor, rather than through room and board. At the same time, governments which many years later became known as the "West" (including Japan) were transformed from more or less authoritarian systems of government with kings and emperors and unelected or narrowly elected parliaments into constitutional democracy through a long series of constitutional reforms. By 1925, essentially all adult men and women could vote in elections and those elections were used to select "representatives" who would make policies, rather than the kings and nobles of the systems replaced.

These transformations of society caused two things to happen. Shift from villages and farms to cities reduced the extent to which informal family, church, and village "safety net" programs could be relied upon to help out persons with temporary health, crop, or cash flow problems. In cities such services were often provided by private savings, private clubs, and insurance companies, but these were less reliable than the old village systems. At the same time, business cycles directly affected more persons. Such cycles would not have much affected farmers, who were largely self-sufficient, although they would mean periods in which their purchasing power would be reduced. In an industrial city environment, one could not fall back on one's crops (unless persons returned to their

former homes in the country side). So disruptions in markets for labor were more disrupting for persons “hiring themselves out for wages,” than they would have been back on the farm. This created a political demand for tax-financed “safety net” programs (social insurance) and the effects of votes on policies cause tax-financed social insurance programs to be adopted throughout the West, with some countries doing so a bit later than others. For example, such programs were not introduced in the United States two or three decades after they were introduced in Europe, possibly because farming remained a relatively more important enterprise in the United States than it did in much of Northern Europe during the first third of the 20th century and so local safety net programs were more widely regarded to be adequate by voters.

During roughly the same period, industrialization also tended to cause a good deal of local pollution and again electoral pressures tended to support rules that would reduce air and water borne pollutants (waste products with obnoxious odors or health risks). A variety of smoke stack and waste controlling regulations were thus adopted to top up earlier ones that had long been incorporated into civil laws—as for example, one could sue persons for damages caused by the action of others.

Together, industrialization and democratic politics thus tended to increase the size of the tax-financed social insurance programs and the extent and nature of governmental regulations that implicitly modified older pre-industrial safety nets and rules governing the use of the air and water for disposing of wastes. Not all tax-financed expenditures and regulations emerged from industrialization and democratization, but many clearly did. For example, industrialists and labor unions often lobbied for policies that would increase industry profits or labor salaries by reducing the competitiveness of particular markets without advancing the interest of moderate voters. These too would affect the incentives for persons to live and work in particular places and to specialize in particular skill sets, services, and products.

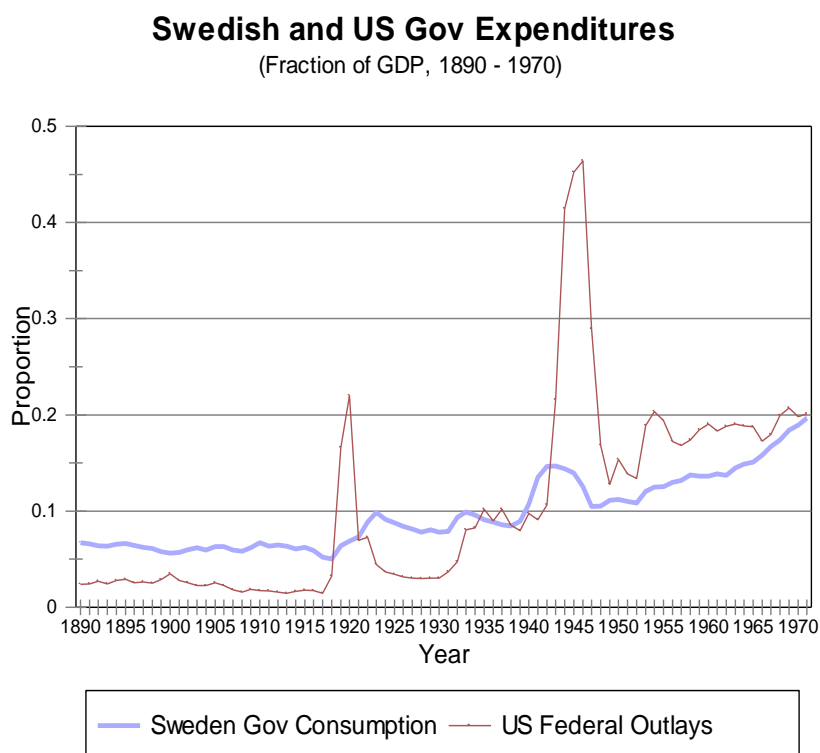
The new more regulated commercial societies that emerged in the twentieth century reflected technological advance as emphasized by most microeconomic textbooks, but also the social insurance and regulations adopted by governments to address new problems associated with industrialization—or ones that could be more easily addressed through tax-financed programs.

B. The 20th Century and the Expansion of the Welfare State

Trends that began in the late nineteenth century continued through out the twentieth century. Electoral and interest group support for larger and more government safety net programs, more

expensive national defense efforts (another side effect of technological advance), and the direct production of more government services induced democratically elected governments to increase taxation, expenditures and regulations. Over the course of the twentieth century this produced what some term a “mixed economy,” an economy in which state regulations, taxation, and expenditures play a central role in the patterns of commerce that we observe. Price and quality competition still ultimately drive the networks of exchange that we observe, but these are more in more influenced by public policies. It also in the twentieth century that governments began to systematically track expenditures, national output, and prices. These can be used to illustrate the growth in tax-financed activities during the 20th century.

Most of the charts displayed below are as fractions of GDP. This avoids all the problems of measuring prices or purchasing power in economies in which innovation is continuous and the mix of products demanded change radically of the course of the 20th century. The first chart shows the fraction of GNP that has been accounted for by the central governments of Sweden, an exemplar of the modern welfare state, and the United States, and exemplar of a country with a relatively small welfare state. Government consumption rather than expenditures are used for Sweden, because an expenditure series going back to the early part of the 20th century was not available. Notice that both governments spent well under 10% of their respective GNPs in 1900 and approximately 20% of GNP in 1970. In the case of the U. S., more of that expenditure would have been national defense than in Sweden, in part because the U.S. adopted a more world wide program of National Defense after World War II. Note the great expansions of expenditures by the U.S. during both the first and second world wars.



The second chart examines how the composition of expenditures has changed in the period from 1960-1996, a period in which social insurance programs expanded greatly throughout the West. Denmark and the United Kingdom are added to the list of countries examined. Notice that central government expenditures increased far more than government consumption in this period. The difference is largely accounted for as expansions of social insurance and redistribution programs. Notice also that Swedish central government expenditures exceeded half of its GNP in 1993.

**Table 1: Central Government Consumption, Tax Receipts, and Expenditures
As Percent of GDP (1960 -1996)**

Year	Sweden (Central Government)			United States (Central Government)			Denmark		U. K.		
	Swd Gov Con	C. G. Tax Rev.	Cent. Gov Exp.	US Gov Con	C. G. Tax Rev.	Cent. Gov Exp.	D Gov Con	Cent Gov Exp.	C. Gov Con..	Cent. Gov Exp.	
1960	16	..	..	17	..	..	13		16		
1961	16	..	..	17	..	..	14		17		
1962	17	..	..	18	..	..	15		17		
1963	17	..	..	17	..	..	15		17		
1964	17	..	..	17	..	..	16		17		
1965	18	..	..	16	..	..	17		17		
1966	19	..	..	17	..	..	17		17		
1967	20	..	..	19	..	..	18		18		
1968	21	..	..	19	..	..	19		18		
1969	21	..	..	18	..	..	19		17		

1970	22	26	25	18	..	..	20	32	18	32
1971	23	28	26	18	..	..	22	32	18	32
1972	23	28	28	18	17	19	22	32	19	32
1973	23	27	28	17	17	19	22	29	19	32
1974	24	27	29	18	18	19	24	33	20	36
1975	24	27	29	18	17	21	25	34	22	39
1976	25	31	32	18	16	21	25	33	22	39
1977	28	33	35	17	17	21	24	33	21	37
1978	28	32	37	17	17	21	25	34	20	37
1979	29	31	39	16	18	20	26	35	20	36
1980	29	30	39	17	18	22	27	39	22	38
1981	30	32	42	17	19	23	28	41	22	41
1982	30	32	43	18	19	24	29	43	22	41
1983	29	32	45	18	17	25	28	43	22	40
1984	28	33	44	17	17	23	26	42	22	40
1985	28	34	45	18	18	24	26	40	21	40
1986	27	34	43	18	17	24	24	37	21	38
1987	27	37	41	18	18	23	26	37	21	37
1988	26	37	40	18	18	23	26	39	20	35
1989	26	37	39	17	18	23	26	39	20	34
1990	27	38	41	18	18	23	26	39	21	38
1991	27	36	43	18	18	25	26	39	22	40
1992	28	35	46	17	18	24	26	41	22	43
1993	28	31	52	17	18	24	27	42	22	42
1994	27	29	49	16	18	23	26	43	22	42
1995	26	34	49	16	19	23	26	41	21	42
1996	26	37	46	16	19	22	26		21	

Source: World Development Indicators, 1999, (CD) World Bank, ISBN 0-8213-4375-0.

The next table examines various indicators of average citizen welfare. It is one thing to say that government expenditures have increased and another to assert or show that such expansions increased voter wellbeing. Notice that all countries experienced significant increases in longevity in this period, including those with the least government consumption expenditures. The income share of the bottom 40% of the citizenry generally increase at least partly because of expanded social insurance programs, but unemployment tended to increase during this period, in spite of significant economic growth in all the listed countries. (All are OECD countries, all are democracies, and all have “first world” income levels.)

Table 2: Government Growth and National Performance, 1960 and 1995

(Sorted by 1995 Central Government Consumption)

	Government Consumption as % RGDP		Life Expectancy		Income Share Bottom 40%		Unemployment Rate	
	1960	1995	1960	1995	1960s	1980s	1960	1996
Sweden	16	25.8	74	79	15.1	21.2	1.4	8
UK	16.4	21.4	71	77	19.2	17.3	1.7	7.4
Norway	12.9	20.7	73	78	17.1	19	2.5	4.9
Canada	13.4	19.6	71	79	19.7	17.5	7	9.7

Germany	13.4	19.5	70	76	14.8	19.5	1.3	10.3
France	14.2	19.3	71	78	10	18.4	6.2*	12.4
Australia	13	18.8	69	77	19.7		3.5	6.2
Austria	11.2	17.5	71	77	20.1	15.5	2.4	8.5
Spain	8.3	16.6	70	77	16.5	19.4	11.5*	22.7
Italy	12	16.3	70	78	15.6	18.8	4.2	12.1
USA	19.4	16.2	70	77	15.9	15.7	5.5	5.4
Belgium	12.4	14.8	71	77		21.6	5.4	12.9
Ireland	12.5	14.7	70	77			6.7	11.3
New Zealand	10.5	14.3	71	76	20.9	15.9	2.5*	6.1
Netherlands	12.3	14.3	73	78	14.5	20.1	1.2	6.7
Switzerland	8.8	14	72	78		16.9	0.2*	4.7
Japan	8	9.7	69	80	15.3	21.9	1.1	3.3
Average	12.629	17.265	70.941	77.588	16.743	18.58	4.8	10.173

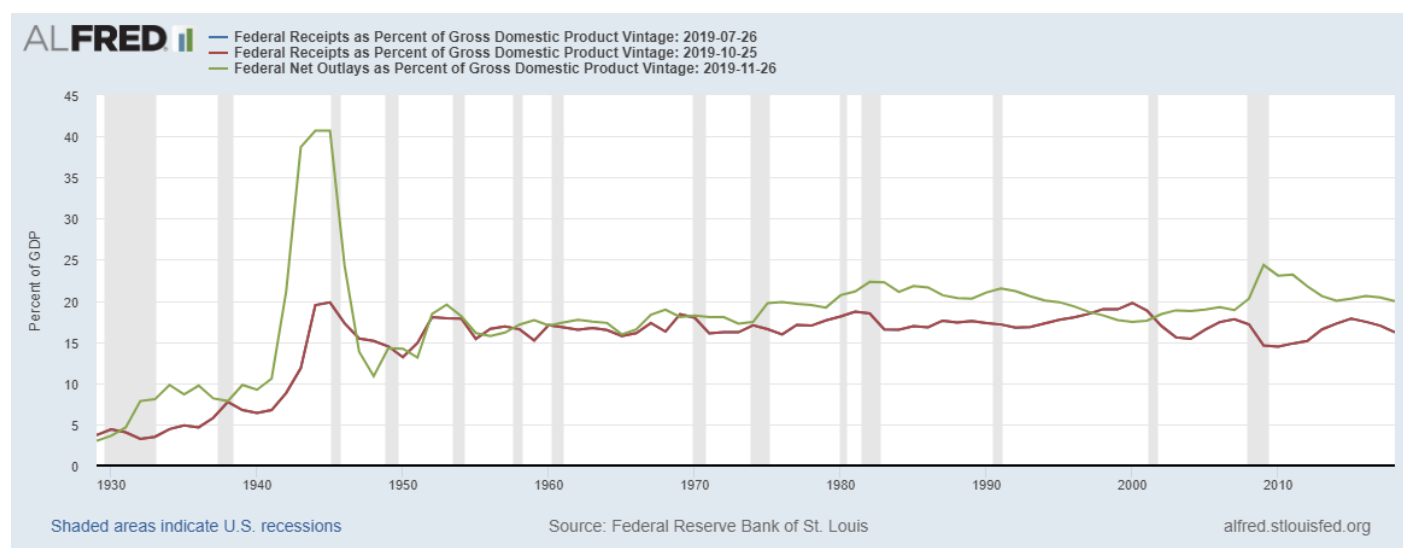
Assembled from Tanzi and Schuknecht (2000) various tables. (Most of their data is from various OECD reports.)

We next look at how expenditure categories have changed in the United States during the at the end of the twentieth century and beginning of the twenty first century. Notice the great expansion of social insurance programs (Social Security, Medicare, Medicaid, and Disability, etc.) and the decrease in relative importance of defense spending over this period. These are simple levels of expenditures. They can be adjusted using a variety of price indices. For example the Consumer Price Index was 127.4 in 1990, 168.8 in 2000, and 216.7 in 2010. Thus, to compare the purchasing power cost of the programs in 2010 dollars one should multiply the 1990 column by 216.7/127.4, and the 2000 column by 216.7/168.8. Much but not all of the increase in defense spending, for example, was induced by inflation the column would read 509.1, 377.9, 693.6. Instead of doubling, real defense expenditures increased by about 20% in this period. Even in relatively low inflation periods, it can not be ignored when making comparisons across decades. The health row would have been 265.0, 451.4, 706.7, which is more than a 150% increase. In both nominal and real terms health care has been the fastest area of spending growth during the past 40 years. Net interest on the national debt, in contrast has decreased in real terms—not because the government has become more frugal, but because interest rates fell to historically very low rates during his period.

Table 3 Major U. S. Federal Outlays by Function (Nominal Dollars, Billions)			
Function	1990	2000	2010
National Defense	299.3	294.4	693.6
Veterans Benefits	29	47	108.4

Health: Medicare + Medicaid etc. (all, non vet)	155.8	351.6	820.7
Social Security (pension)	248.6	409.4	706.7
Income Security (disability, unemployment etc)	148.7	253.7	622.2
Net Interest	184.3	222.9	196.2
Education	37.2	53.8	127.7
Transportation	29.5	46.9	92
Natural Resources and Environment	17.1	25	43.7
Community Development	8.5	10.6	23.8
Agriculture	11.8	36.5	21.4
Total	3159.8	3751.8	5466.4
Subtotals:	2900.3	3417.6	5026.7
<i>Insurance and Risk Management</i>			
<i>Pure and Near Public Goods</i>	2335.9	2366.3	2839.3
<i>Redistributive</i>	454.8	764	1501.8
CPI (standardized dollar)	0.765	0.581	0.459
GNP	5801	9952	14660
Population (millions)	250.132	282.385	308.745
Total Outlays is calculated from the table entries, and neglects several small categories of expenditures not included in the functional categories tabulated. All data taken from the 2012 Statistical Abstract except for the 2010 population estimate, which is from the US Bureau of the Census Website (downloaded 10-29-12).			

The last chart to be examined characterizes expenditures and revenues as a fraction of GNP for the past 90 years. It shows both the expansion of the size of government and the extent to which taxes have routinely been lower than expenditures for most of the twentieth century.



Notice that this chart also includes indicators for periods in which the U. S. economy was in recession and that with minor exceptions there is no clear evidence of a strong “counter cyclical” fiscal policy, with relatively large deficits being run during recessions and balanced budgets or surpluses being run during periods of positive growth. There is, however, some evidence that expenditures are more stable than tax receipts and that when revenues fall during a recession expenditures are held more or less constant (often expanding a bit perhaps because of increased unemployment insurance payments) and borrowing expands somewhat beyond the usual degree.

Notice also that only in the post war period were expenditures routinely close to balance. From 1970 onward, deficit finance was a routine part of the manner in which the U. S. government “paid” for its programs. Since about 1975 expenditures by the central government have averaged around 20% of GNP and tax receipts around 18% of GNP, which implies a deficit of about 2% of GNP, which is roughly equal to the economy’s average growth rate.

All these charts show that government spending increased relative to the private sector over the course of the twentieth century. In the U. S. most of this expansion occurred between 1930 and 1950 (ignoring the war years). Other Western countries grew relatively more, with several countries having expenditures approaching 50% of GDP by the early to mid-1990s. During the same period, many indicators of human welfare increased: longevity and education, for example, increased, although far less than proportionately to absolute real expenditures per capita or even as fraction of GNP.

The increase in the relative size of government spending relative to spending was significant in the United States, but has not materially increased since around 1950, although the composition of national expenditures has changed, with a much larger portion of government spending going to Social Security and Healthcare than in past decades.

Part I of the course shows how tools from microeconomics can be used to analyze the effect of such changes in government policies—here budgetary and tax rules—tend to affect the pattern of trade that we refer to as the market order. Part II of the course attempts to explain why such changes in policy occurred. In both cases, we’ll focus on the effects of government policies on individuals, because it is individuals that ultimately make all the decisions that produce a market order.

The theoretical parts of the course—which provided the core of this course—apply to all market economies with democratic governments. The illustrations are mostly from the United States, but the rest of the world will not be entirely neglected.

III. Some Philosophical Background for the Course

One of the “problems” with studying public economics is that it is not just an abstract exercise. We are looking at real policies and many individuals care deeply about policies for various ideological, philosophical, normative reasons. It is for that reason that its worth spending some time on a few philosophical issues, that can help take the “heat” out of public economics.

A. The Distinction between Positive and Normative Theories

Conservative and libertarian economists often argue that the West would be richer if we had much lower taxes and regulation. Progressives would argue that the West would be more just if it redistributed a good deal of income from rich to poor. However, it is not that simple. One cannot simply point to the deadweight loss of taxes or regulation and conclude that modern policies reduce national income and welfare. Nor can one simply point to a homeless person and conclude that “capitalism” has failed. The industrialized democracies are the wealthiest on earth by essentially all physical measures of welfare: real income per capita, housing size, longevity. Even the poor are far richer than they have ever been in the West than elsewhere or in human history.

Moderates, in contrast, might argue that a lot depends on how taxes are collected and spent, and also on the kinds of regulations adopted. They might believe that poverty programs should attempt to help only “the deserving poor,” rather than everyone who might like to have more income for less work. Life is not easy, but it's better than it has been in the past. Moderates might—along with conservatives and progressives believe that life could be improved, but insist that it would probably not be improved by an enormous amount through improvements in public policy.

All such claims are “normative” claims. That is attempts to rank order alternative states of the world with the aim of reaching conclusions about how to improve things, or to discern which outcomes are “better” than others.

Most contemporary theories—but not all of them—are consequentialist, which means that whether an action or policy is good or bad, improves or worsens the world, etc. is determined by the consequences of those actions and policies. If for example, income is believed to be an index of the quality of life, one might conclude that both the rich and poor—and the middle class—are on average far better off than they have ever been in human history within contemporary commercial societies. If being “better off” is accepted as a “good thing,” one might conclude that the economic system and public policies that produced that improvement are “good” ones. This illustrates the manner in which a normative theory can be used and also that normative theories can be objective once

chosen. Some normative principles may be widely held. That the aim of public policy should be making people “better off” might well be accepted as a normative principle by most people.

If average or median income is used as an indicator for the quality of life, the relevant consequence for a normative theory that regards “higher income as better than lower income” are real, mostly observable, states of the world—namely observable income or purchasing power.

Consequentialist normative theories require “positive” theories if they are to affect behavior or public policies. That one should try to increase average or personal income through public policies requires a positive theory that connects public policies with average or median income. Some policies may reduce average or median income and others increase them. Still others may have no effects on average or median income at all. Theories that connect public policies with economic consequences are “positive” in that they attempt to explain how actions generate consequences without assessing whether particular actions are good or bad or whether particular consequences are good or bad. The positive questions regarding causes and effects are separate from the normative questions regarding good or bad actions or good or bad policies. They are, in a sense, completely independent of a scientist’s personal normative theory—although as human beings scientists will tend to find some questions to be more interesting than others because answers to some questions are more likely to advance his or her normative aims than others..

“Normatively” assessing the relative merits of those consequences requires “normative” theories. Many people use their “gut reactions” as their normative theory. Others study issues and attempt to identify principles that can explain both their gut reactions and address other issues that one has no intuitive feelings about. The study of ethics, for example, attempts to identify principles that can produce a “good life” or a “good society.”

As a consequence, one can distinguish between normative and positive statements. Positive statements concern “what is,” “what has been,” or “what will be.” In contrast, normative statements concern “right and wrong,” “good and bad,” “just or unjust,” “fair or unfair,” and “better and worse” with respect to assessments of both actions and consequences.

There is a far wider range of normative theories than there are positive ones. That is to say, there is only one real world to analyze, model, and test hypotheses about. However, there are an infinite number of “ideal” lives and societies that one can imagine. Thus although scientists often disagree about states of the world and causal relationships—especially at the “frontiers” of their fields of study—there is considerably more agreement about matters at the “interior” of their fields of study. There is a fact and theory base that they take for granted in their research projects.

The same may be said about persons who research (contemplate and speculate) about moral principles within a particular school of thought or from a particular theological or ideological perspective—although this would not be true across schools of thought, religions, or ideologies. There is a far greater variety of moral theories than there are of contemporary scientific theories.

For the most part, this course is concerned with cause and effect. What effects do various public policies have on the private economy and what factors tend to cause a particular policy to be adopted rather than others.

It is a course in positive political economy or positive public economics rather than a normative one. Some conventional normative ideas from Pigovian welfare economics are applied from time to time, as in most public economics courses, but for the most part it is causes and effects that are the main focus of the course.

The positive focus of the course is partly because it is hard enough to understand causal relationships in public economics, and partly because it is often easier to reach agreement about such relationships than on normative ones. A course on economic and political morality could also be constructed, but such a course would spend less time on causal and interdependent relationships than on intellectual history.

B. A Digression on Normative Theories Used by Economists

Most of the normative ideas used in economics emerged from utilitarianism at the beginning of the twentieth century shortly after the field of economics and other social science emerged as a specialization within what previously been a broad sub-area of philosophy. Many of the most famous academic economists held university positions in moral philosophy when they did their most famous writings. Others were non-academics, scholarly folks who were independently wealthy or at least had relatively lucrative but not demanding jobs.

Utilitarianism is a normative theory that was worked out by Jeromy Bentham in the late eighteenth century and deepened by many others in the twentieth century, including James Stuart Mill who wrote one of the first widely used textbooks in economics. Utilitarian normative theory assumes that every persons is motivated by a quest for happiness or utility and that one society is better than another if it generates more aggregate utility than another, where aggregate utility is normal-

ly thought of as the sum of individual utilities (happiness). As utility functions were devised as a manner to systematically represent happiness about a century later, one could use sums of utility functions to analyze how different public policies might affect aggregate utility (sometimes referred to as social welfare). Such “social welfare” functions are still widely used in the subfield of economics called welfare economics.

This approach has a good deal of intuitive appeal—everyone should count and everyone’s happiness is important—but it has one problem, namely utility functions (if they actually exist) and happiness levels are unobservable and difficult if not impossible to measure. It is not easy for an individual to determine whether he or she is happier this year than last—and for an outsider that does not know such a person very well, it is essentially impossible.

In the early 19th century Alfred Pigou attempted to “operationalize” utilitarian analysis by noting that utility tends to increase with income. (The marginal utility of income is normally assumed to be positive over its entire range.) Thus when everyone’s income rises, it must be the case that aggregate utility increases. Similarly, if one can estimate the benefits and costs associated with an individual’s action and the benefits are greater than the costs, then his or her utility must increase because utility rises when the net benefits associated with an action increases. These two ideas create a method for analyzing individual and national welfare that is measurable (or at least estimatable) and so can in principle be used as guides for utilitarian public policy.

Also, one can use aggregate net benefits as a proxy for aggregate utility. In this case, however, the link back to utilitarianism is less precise, because it is possible for aggregate net benefits to rise, while aggregate utility falls. For example, all the gains [benefits] might be captured by one person and the losses [costs] by everyone else. Diminishing marginal utility would imply that the losses would reduce utility for the losers by more than it increases those of the winner, especially in cases in which the benefits are just a bit greater than the costs. Nonetheless, this “Hicks-Kaldor” measure of social welfare is widely used by economists—partly because as we’ll see it is geometrically easy to do with standard economic diagrams. It is not a perfect utilitarian social welfare indicator, but it is measurable and is—or so it is argued—a reasonable first approximation of aggregate utility. This idea provides, for example, the foundation for cost benefit analysis.

An alternative to the less than perfect social net benefit interpretation of utilitarianism is to focus on cases in which everyone benefits. Pareto suggested that one could imagine personal and policy choices in which at least one person benefits and no one is worse off. In such cases, aggregate utility necessarily increases. When such personal actions or public policies are impossible, then

nothing more could be said. The first case allows what came to be called Pareto superior moves to be made and the second is said to be Pareto optimal. In a Pareto optimal state, no Pareto superior moves are possible—it is not possible to alter conditions in a manner that makes at least one person better off without making anyone worse off. Notice that one need not be a utilitarian to apply this norm, but that it is another operational form of utilitarianism—although a weaker one because it cannot address cases in which there are winners and losers.

A less used, but still frequently used, alternative is to use consensus as a measure of the relative merits of institutions. This approach began with a book by Thomas Hobbes (1651) with the title *Leviathan*, continued through works by Locke (1689) and Rousseau (1762), and then disappeared for nearly two centuries as contractarian theories of the state and public policy were replaced by utilitarian ones. The general approach was resurrected by John Rawls (1971) and James Buchanan (1962, 1975, 1985). Rawls and Buchanan essentially reject the utilitarian approach for a variety of reasons (absence of a place for human rights, impossibility of understanding individual goals which may or may not be unidimensional, differences among individual expectations, and so forth) and argue that agreement is not only the best but the only possible way to determine whether an action, policy or institution is better than another. It is only if every one agrees that it is.

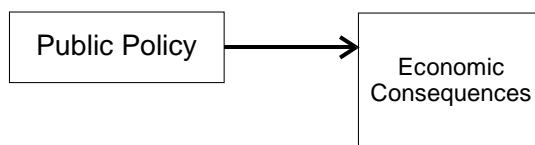
Rawls and Buchanan both focus their attention on institutions and both argue that uncertainty can help generate agreement about the nature of the best institutions. In Rawls' case he suggests that individuals should imagine themselves behind a veil of ignorance in which one would not know their own place in the society that would emerge after institutions are chosen. Given that imagined state, how would one choose among institutions or at least principles for designing institutions? The result would tend to be "fair" in the sense that everyone would agree either to design principles or to the specific institutions to be implemented. Buchanan argues that the nature of institutional or constitutional choice is such that one cannot fully understand what one's position will be like in the society that follows and so decisions are made from what he terms a "veil of uncertainty" in which each person imagines possible futures associated with particular institutions in a manner that also tends to distance themselves from their own narrow interests. It is the latter that makes consensus likely to emerge and it is the consensus that determines whether an institution can be said to be unanimously an improvement over the preexisting order.

Mathematical characterizations of the contractarian thought process resemble those of utilitarian models, but have a different motivation and interpretation. For example, there are no effi-

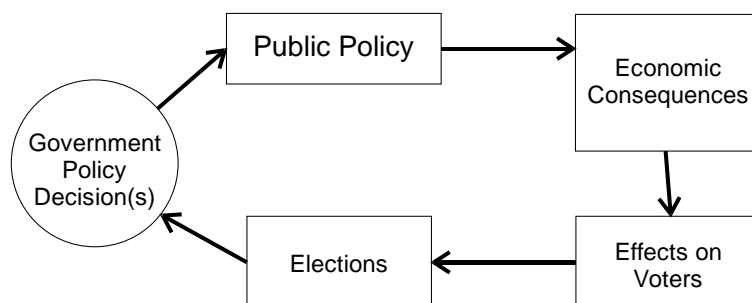
ciency-equity tradeoffs in contractarian theory because the result can be said to be both equitable (fair) and efficient (among the best possible, given preexisting circumstances).

These four groups of normative theories are the most widely used in public economics, although others are of course possible. Egalitarians may pursue equality (however defined) and regard only policies that increase equality as “good” policies. Libertarians may pursue policies that tend to increase the degree of voluntariness in social relationships and regard only policies that increase individual abilities to accept or reject alternatives as improvements. Kantians may search for rules that satisfy the categorical imperative (rules that can be followed by everyone without generating problems and/or which tend to make all better off) and attempt to have such rules implemented in public policies and private norms, and so forth. There are many many possible normative theories, among which economists use a relatively small fraction of in their normative research.

Part 1: Basic Public Economics



Part 2: The Political Economy of Public Policies



Part 3: The Constitutional Political Economy of Public Policies

