

Property Rights in Land

Questions:

- How did the American colonists establish property rights in land to begin with?
- What did the Revolution do to existing property rights?
- How did Americans allocate property rights to land outside of the original colonies?
- What are property rights?

Colonial Charters:

The Virginia Company charter, issued in 1606 by King James, created the Virginia Company, and granted the company the right to settle land in the King's name:

“...either appertaining unto us, or which are not now actually possessed by any *Christian* Prince or People, situate, lying, and being all along the Sea Coasts, between four and thirty' degrees of *Northerly* Latitude from the Equinoctial Line, and five and forty Degrees of the same Latitude, and in the main Land between the same four and thirty and five and forty Degrees, and the Islands thereunto adjacent, or within one hundred Miles of the Coast thereof;”

Two very important parts of the charter follow. First, everyone who lived in the colony would be a subject of the English King:

Also we do, for Us, our Heirs, and Successors, DECLARE, by these Presents, that all and every the Persons being our Subjects, which shall dwell and inhabit within every or any of the said several Colonies and Plantations, and every of their children, which shall happen to be born within any of the Limits and Precincts Of the said several Colonies and Plantations, shall HAVE and enjoy all Liberties, Franchises, and Immunities, within any of our other Dominions, to all Intents and Purposes, as if they had been abiding and born, within this our Realm of *England*, or any other of our said Dominions.

And all land sold by the Virginia Company would be held in “Free and Common Socage”:

And finally, we do for Us, our Heirs, and Successors, GRANT and agree, to and with the said Sir Thomas Gates, Sir George Somers, Richard Hackluit, Edward-Maria Wingfield and all others of the said first colony, that We, our Heirs and Successors, upon Petition in that Behalf to be made, shall, by Letters Patent under the Great Seal of England, GIVE and GRANT, unto such Persons, their Heirs and Assigns, as the Council of that Colony, or the most part of them, shall, for that Purpose, nominate and assign all the lands, Tenements, and Hereditaments, which shall be within the Precincts limited for that Colony, as is aforesaid, To BE HOLDEN Of Us, our heirs and Successors, as of our Manor at East-Greenwich, in the County of Kent, **in free and common Soccage only, and not in Capite:**

In the Northwest Ordinance of 1787, the Congress established a method for selling land to private individuals, and for creating new states.

Land was to be held in “fee simple” our version of “free and common socage.” Although the federal government owned all of the western lands, once land was sold to a private individual, the state became the “donor” of the land. As a result, the right to collect land taxes devolved onto the states after land was sold to a private individual.

Land was to be surveyed:

- Townships (36 square miles) and sections (36 square miles)

Sold at auction with a minimum price.

- First \$1.00, then \$2.00, then \$1.25

The right to tax land passed to the states, after the land was sold to a private individual.

Constitution

I use three organizing questions when I talk about the constitution:

- 1) The weaknesses in the Articles of Confederation.
- 2) The relationship between the federal and state governments.
- 3) The relationship between governments and individuals.

1) The weaknesses in the Articles of Confederation and the explicit problems in governing that the Constitution was designed to address.

- The inability of the national government to levy taxes.
- The consequent inability of the national government to repay its debts.
- Interstate competition in commerce and trade, and the disruption and barriers that ensued.

Questions:

Why did the Articles create such a weak central government?

Why didn't the Continental Congress solve these problems in 1776?

Who wrote the first American constitutions?

2) The importance of republican traditions and inherent difficulties in creating a democratic form of government.

On the “negative” side:

- The Madisonian concerns for the rights of minorities. This concerns the national level and operates through the checks and balances imbedded in the federal system.

- The original concern about strong central governments and protection of the independence of the state governments. This also operates through checks and balances at the national level (the role of the Senate), as well as explicit limits on the powers of the national government (e.g. reserved powers clause, tenth ninth amendment).

- The relationship between taxation and representation.

On the “positive” side:

- The creation of a national free trade area. (Article 1, section 8)

- National regulation of the currency.

- Regulation of domestic and international commerce.

- Regulation of foreign affairs and the military.

Questions:

How did the Constitution tie taxation and representation together?

How were states, as governments, able to protect their interests in the federal system?

What powers of the national government were absolute, which were shared?

3) The relationship between governments and individuals:

- The Bill of Rights.
- The Contract Clause. (Article I, section 10)
- Procedural guarantees: due process, speedy trial, property rights, etc.

Questions:

Is the relationship between governments and individuals specified in the original constitution or in the Bill of Rights?

Is the relationship between states and the national government specified in the original constitution or in the Bill of Rights?

Opening Access in Early America

John Wallis, EFIAH

One of the central questions in American history in general is why economic growth has been so robust and persisted for so long. The question is *the central* question in American economic history. Much of the material we cover this week concerns how the economy works and how the American economy in particular developed.

One of the key elements in the growth of the American economy is the government's relationship with the economy. On one hand, governments in wealthy societies tend to do a good job at providing certain services and functions:

- Legal system: secure property rights, unbiased enforcement of laws
- Infrastructure: roads, water, sewage, power
- Education
- Social welfare services: public health, old age assistance, assistance for poor
- Police, fire, and public safety
- Military

Providing these functions requires a strong and capable government. The other thing that governments in wealthy countries tend to do is allow their citizens a considerable range of personal freedom and security.

That is, governments in wealthy countries have a good bit of capacity and ability to provide valuable public services, but somehow manage to avoid using their capacity and power to infringe on the rights of individual citizens.

How does that happen that governments simultaneously get stronger and manage to use less coercion against their own citizens?

Douglass North, Barry Weingast, and I have developed a framework for answering these types of questions.

The framework begins by asking how is it that societies solve the problem of violence. That is, how do societies not only how do societies provide physical order through policing violence, but how do societies prevent powerful individuals from using violence as a means of coercion?

There appear to be three fundamental ways that societies solve the problem of violence. We call these solutions *social orders*.

The first social order dominates most of human history. In *primitive social orders*, societies are organized in very small groups, somewhere between 25 and 100 people. Face to face repeated interaction with the same individuals enables these societies to control violence somewhat, but the level of violence, both between and within groups, is high.

The second social order emerged about 10,000 years ago. In *limited access social orders* a group of powerful individuals agree to recognize each other's rights to valuable functions and assets within the society. These rights are *privileges* that generate rents to individual members of the elite group.

Elite privileges include the control of assets like land, labor, and capital as well as functions like prayer, trade, and education.

Members of the elite include the militarily powerful as well as religious, economic, political, and educational elites. Military power is typically dispersed through the dominant coalition, that is there are multiple sources of potential violence, and individual elites are allied with one another through extensive patron/client networks.

Because the rents generate by elite privileges are more valuable if there is peace, elites have a strong incentive to maintain order. This does not mean that everyone enjoys rights, only the elites (at least in a stark, ideal type of limited access order).

This is called a limited access order because elite rents are created by limiting access, and then the rents are used to stabilize the political and social system.

One of the most valuable source of elite rents is the ability to form organizations

that the society will enforce. In a limited access order only elites have the rights to form organizations.

In a limited access order, the political system systematically manipulates the economy. We call this form of political and economic organization the *natural state*.

The third type of social order first appeared about 200 years ago. In *open access social orders* control of violence is accomplished by consolidating control of military power in a political organization (military power takes the form of both armies and police forces), giving the political organization a monopoly on the use of violence, and then constraining the use of violence by the government through political and economic competition.

The point of the *limited access order* is to limit political and economic competition as a way to provide incentives for powerful individual to refrain from using violence. In an *open access order*, control of the government and economic functions is open to competition.

The essence of an open access order is that people can form organizations at will, and use those organizations to pursue whatever ends they want: political, economic, religious, etc. The one constraint on the formation of organizations is that they cannot use violence to pursue their goals. As Max Weber said: the state is the organization in society with a monopoly on the legitimate use of violence. Weber's definition applies only to open access orders.

When governments in open access order overstep their bounds, they are disciplined by electoral, political, and economic competition.

Because access to organizations is open, whenever a group is harmed by the actions of the government, they can organize politically to defend their *rights*.

The equilibrium of social forces in a open access order is provided by competition, the equilibrium of social forces in a limited access order is provided by rent creation.

When did the United States become an open access order?

We usually tell the story of American history beginning in the revolution and continuing through the constitution. But it is not clear that the American society was completely open access even in 1787.

Open access requires open political competition, and in every developed society today that involves some type of political parties. Political parties were an anathema to the founding fathers. Remember the “dangers of faction” in Federalist paper #10.

No state had free adult male suffrage by 1787, all of them had some form of property, wealth, or tax paying restriction.

Open access requires open economic competition. In every state obtaining a corporate charter required an act of the state legislature. In New York, granting of bank charters was limited to political friends of the Albany Regency, headed by Governor Martin Van Buren. In Pennsylvania, the number of bank charters was limited in order that the sale of bank charters would generate revenues for the state treasury. In New Jersey, one company, the Camden and Amboy railroad had a monopoly on northeast/southwest rail traffic. Again, as with the Pennsylvania banks, the state was selling limited economic privileges in return for revenues. But, as in New York, the creation of valuable economic privileges also generate political returns as well.

Americans in the early 19th century, were legitimately concerned that their democracy would founder. Their deepest concerns would be that a political faction would use the creation of economic privileges to generate economic rents, and then use those rents to solidify control over the political system. They were concerned, in short, that their democracy would operate like a limited access order.

In the 1830s and 1840s, state governments began changing their institutional and constitutional structures to mandate open access.

On the political side, this occurred through the development of competitive political parties and the extension of the suffrage. On the economic side, it came through the adoption of general incorporation acts that allowed any one who

wanted to form a corporation to do so simply by filing the appropriate paperwork at a state administrative office. In banking, general incorporation acts were called “free banking” acts, where the free referred to entry, not to regulation.

Interestingly, the first general incorporation act was for churches in New York in 1783.

By the 1850s, Americans had transformed their political and economic institutions at the state level in a manner that insured open access to political, economic, and religious organizations. That access guaranteed that ongoing political and economic competition would enable the American society to effectively control violence through the operation of its governments. Open competition also insured that those governments could be effectively prevented from limiting access or using violence against its own citizens in an unconstitutional manner.

Banks and Banking Regulation:

The United States has a system of fractional reserve banking. I'll explain exactly what that means over the next hour, but it is important to remember that the US has always had a fractional reserve system of banking.

No matter how the system was structured, and no matter which level of government regulated banks, it is always a fractional reserve system. The goals of banking regulation are tied to the problems any fractional reserve system faces. This was true in the 1830s, in the 1930s, and it is still true today in 2006.

The starting point in understanding the monetary system is to understand that most money takes the form of "liabilities of the banks."

This sounds odd, but it isn't.

When you put money into your checking account, you have a deposit.

The deposit is an asset to you and a "liability" to the bank.

It is an asset to you because you can convert it into goods and services "on demand."

In the early 19th century most banks issued bank notes. These were literally paper money that was the liability of the bank. Note holders had the right to demand that the bank convert the bank note into "specie" (typically gold or silver coins).

Changes in the banking system introduced during the Civil War "National Banking Act(s)" made it unprofitable for most banks to issue notes. So they dramatically expanded the creation of deposit liabilities through a rapid expansion of checking accounts. Today, most of the money in the United States is held in the form of bank deposits.

Here is how the system works.

Start with Individual A making a \$100 deposit. The bank follows the policy of making \$80 in loans for every \$100 in deposits it receives, maintaining reserves of

\$20.

"A" believes he has \$100 in the bank.

The bank makes an \$80 loan to individual B, which he deposits in his bank. He thinks he has \$80. The next bank makes a loan of \$64 on the basis of individual B's deposits.

As in the following table:

Deposits	Reserves	Loans
100	20	80
80	16	64
64	12.8	51.2
51.2	10.24	40.96
.	.	.
.	.	.
Sum		
500	100	400

The result of the initial deposit of \$100, is to increase the money supply by an additional \$400.

The "money multiplier" is the ratio of the initial deposit to the change in the total money supply, mathematically it is equal to $1/\text{reserve ratio}$, where the reserve ratio is the amount of a deposit that the bank keeps on hand.

Money Multiplier = $1/RR$

One key thing about the money multiplier in a fractional reserve system is that it works in both directions. If an individual withdraws \$100 from his bank account and puts it in his mattress, the money supply ultimately must decrease by \$500.

You can see the central problem:

The liabilities of the banking exceed the reserves of the banking system, but not the assets of the banking system.

This is what we mean by a "fractional reserve" system of banking.

It means that if all the banks depositors come in on a given day and try to withdraw their deposits, there will not be enough reserves in the bank.

What typically results is a banking panic, people frantically trying to get their deposits out of the bank. Since the money multiplier works in reverse as well, when people take their money out of the banking system, the money supply falls by a multiple of the initial withdrawal.

This plays a big role in understanding the Great Depression.

(1)

The first central element in banking regulation, therefore, is regulating the reserves that the banking system holds.

Banks have an inherent financial interest in holding as few reserves as possible. Funds held on reserve do not earn any interest. So the more loans a bank makes and the fewer reserves it holds, the higher the profits.

On the other hand, banks have an inherent financial interest to increase the amount of reserves they hold. The more reserves they hold, the better able they are to withstand unexpected depositor withdrawals.

These two conflicting forces determine the actual amount of reserves that banks hold.

An important part of bank regulations, therefore, is specifying the amount of reserves that banks must hold against various types of liabilities.

In the National Banking Act of 1863, the national government created "national banks" who were able to issue "national bank notes." But those notes had to be 110% backed by federal government bonds. [The federal government was very interested in borrowing money from the banks during the war]. Because the notes were 100% backed, the national banking act ended bank panics by note holders.

The Federal Reserve Act of 1914 created the Federal Reserve system. The FED regulates the reserve ratios of member banks.

Banks are required to have minimum reserves, which the banks can hold as cash in their own vaults, or on deposit with the Federal Reserve System.

(2)

Enforcing reserve requirements requires the banking regulator to regularly audit the books of the banks. This is the second central type of bank regulation.

Bank regulators must have accurate and timely information to determine whether individual banks are meeting their reserve requirements. This leads to the creation of mechanisms whereby real time information on the state of individual banks is available to the regulators.

As a result, banks that are in difficulties are often closed by the regulators.

Enforcing reserve requirements, however, does not stop banking panics!!!!

Remember, panics occur because the reserves of the banking system are less than the outstanding liabilities. The banking system is solvent, its assets are more valuable than its liabilities, but most of the banking system's assets are loans to individuals that cannot be liquidated quickly.

What ended banking panics in the United States was the establishment of the Federal Deposit Insurance Corporation (FDIC). The FDIC insured depositors up to a maximum level (today it is \$100,000).

Since individual depositors knew they would be able to get their money from the FDIC, they did not panic when an individual bank ran out of reserves on a given day.

The only bank panics that have occurred since the 1930s in the United States occurred in places where the banks — or more accurately the savings and loans — were not adequately insured.

The problem with insuring bank depositors, however, is that the second check on the banks' reserve decision, which is also its loan decision, has changed. Banks no longer have to worry about depositors suddenly running on the bank. As a result, banks want to make as many loans as possible and keep limited reserves.

They are partly constrained by the reserve requirements. But the reserve requirements only apply to reserves, they do not apply to the kind of loans banks make. As a result, banks have an incentive to make riskier loans.

So the third part of banking regulations is:

(3) Because of the incentive to make riskier loans when deposits are insured, bank regulators limit the kind of loans that banks can make.

From the 1930s to the 1990s, commercial banks were prohibited from making loans for the purchase of stock. Commercial banks were prohibited in general from participating in "investment banking."

Savings and loans were a type of bank whose loans were restricted to home mortgages. In the early 1980s these restrictions were eased, and the savings and loan crisis followed shortly thereafter. The cause of the crisis was not deregulation, it was the behavior of the S&Ls, but the two were connected.

The Causes of the Great Depression

The Big Question is what caused the Great Depression?

- What weaknesses in the 1920s contributed to the Great Depression?
- What occurred between 1929 and 1933 that contributed to the Great Crash?
- What was the relative role of international and domestic forces?

	GNP Billions	GNP Index 1929=100	GNP Deflator 1929=100	CPI 1929=100	GNP 1929 Prices
1929	104.4	100.0	100.0	100.0	104.4
1930	91.1	86.5	96.4	97.1	94.4
1931	76.3	72.6	86.8	88.4	87.4
1932	58.5	55.5	78.1	79.4	74.8
1933	56.0	53.2	76.9	75.2	72.7
1934	65.0	61.8	81.6	77.8	79.5
1935	72.5	68.9	82.5	79.8	87.8
1936	82.7	78.6	83.0	80.6	99.5
1937	90.8	86.3	86.1	73.0	105.3
1938	85.2	81.6	84.8	82.2	10.5
1939	91.1	86.5	83.7	80.8	108.7
1940	100.6	95.6	85.0	81.4	118.1

	Labor force	Employed	Unemployed	Unemployment Rate
1929	49180	47630	1550	3.2
1930	49820	45480	4340	8.7
1931	50420	42400	8020	15.9
1932	51000	38940	12060	23.6
1933	51590	38760	12830	24.9
1934	52230	40890	11340	21.7
1935	52870	42260	10610	20.1
1936	53440	44410	9030	16.9
1937	54000	46300	7700	14.3
1938	54610	44220	10390	19
1939	55230	45750	9480	17.2
1940	55640	47520	8120	14.6

One possible cause of the Great Depression is weaknesses in the economy of the 1920s.

There are several possible culprits here:

- Low farm incomes
- Collapsing markets for new house construction
- A bubble in the stock market

All three of these factors has some validity, but none are, by themselves (or even in conjunction) large enough to explain the collapse of the economy.

The United States has a “fractional reserve” system of banking.

Fractional reserve systems are extremely susceptible to crisis of confidence.

Deposits	Reserves	Loans
100	20	80
80	16	64
64	12.8	51.2
51.2	10.24	40.96
.	.	.
.	.	.
Sum		
500	100	400

This is a system of “fractional reserve banking”

The banking system only keeps liquid assets in its vault (reserves) that are a fraction of its “liabilities.”

Most of the bank’s assets are in the form of loans to individuals and businesses.

The bank can be solvent, that is the value of its assets can exceed the value of its liabilities, but

the bank can be illiquid.

Perhaps the biggest problem in the 1930s was “illiquidity.” During the banking panics, people lost confidence in the banks and tried to withdraw their deposits immediately.

Since the banks had only a fraction of their liabilities on reserve, they could not pay out cash to everyone, and the banks had to close.

Gradually the assets of the banks were liquidated and most depositors got their money, but in the mean time, the depression deepened.

There were banking panics in 1930. 1931, and 1933.

In 1929, the United States was on a gold standard, so depositing \$100 in gold in the banking system would produce \$500 money.

The third explanation for the depression is that international forces caused a gold outflow (primarily to Britain).

As gold left the United States, there was a contraction of the banking system, and banking panics.

There was also disruption to patterns of international trade.

The New Deal

Questions:

- Which level of government is the most important?
- Do governments coordinate or compete?
- What do we mean by BIG government?

Maybe by BIG government we don't mean the size of government, but the level of government.

Between 1929 and 1933 the economy entered into a deep depression and unemployment rose to 25% of the labor force. There was a wide spread dissatisfaction with the economic system (remember Big Business). There was also an urgency, bordering on panic, that something be done to turn the economy around.

I'm sure you have heard the phrase "New Deal Democrats." The Democrats had been a minority party from the end of the Civil War to 1932 and the election of FDR. What the Democrats did between 1933 and 1938 (The new Deal) was to commit the federal government to supporting government program in several key areas:

- Relief: what today we would call welfare.
- Agricultural Subsidies: farm price supports and payments to farmers.
- Reform of the Banking system and Stock Markets.

There were a number of other important initiatives (your favorite may have been left off this list), but the most important effects were in these three areas.

The upper panel of Table G-2 gives national government revenues, outlays, and debt for each of the years during the 1930s. The last column gives the excess of outlays in each year over the fiscal 1933 level (Hoover was president until March of 1933).

The second panel of the table gives the totals for what can be called “cooperative” grants (Column 7). These are expenditures in programs what are the joint effort of national state and local governments.

Four major categories are given:

Relief
Public Works
Agriculture
Highways

Between fiscal 1934 and 1940, national government expenditures increased by \$21,769 million. Grants in these cooperative programs totaled \$27,414 million, more than the increase in national government expenditures.

How important was this overall. Figure 1 shows the share of all expenditures by level of government. The dramatic feature of both tables is the sharp decline in the share of expenditures by local governments, and the rise in the share of expenditures by the national government.

We have already looked at the sources of the growth of government. The big event in the 1930s was the expansion of the welfare system. The Social Security Act in 1935 created not only social security, but also a welfare system that included aid to dependent children, old age assistance, unemployment insurance, and aid to the blind.

This system, however, was not a NATIONAL system but a FEDERAL one. Most of the money was raised by the national government, but it was spent by the state and local governments. The fiscal arrangement by which this was accomplished was intergovernmental grants. Table G-1 shows a number of different measures of grants.

What began in the 1930s was a period of cooperative federalism, in which each level of government participated.

The Rise of Big Government

Opening Questions:

- What do we mean by Big Government?
- When did government get big, and which is the most important level of government in the United States?
- What does government spend its money on?

Just how big has government gotten in the twentieth century?

Government Table 3 gives government revenues as a share of GNP for a number of years from 1840 to 1992. Government has clearly grown relative to the economy. In the middle of the 19th century government revenues were about 5% of GNP, today they are almost 40%.

Has government been growing out of control?

Government Table 2 shows the size of government as a percentage of GNP and annual growth rates between dates in the table. Government growth was much faster early in the century than it has been later in the century. (It depends in part whether we count 1952 as early or late, but the picture is still the same.)

Why did government get bigger?

Today almost two thirds of all government expenditures are accounted for by 5 items:

- defense
- education
- welfare
- interest
- social security

As Government Table 4 and the figures show, it is social security that has been growing fastest as a share of government expenditures, from zero to 16 percent.

But the bottom panel of the table, which shows expenditures on these functions as a percentage of GNP shows that all of the functions contributed to the growth of government and no single function stands out.

The bottom row of the table was calculated by taking the change in Government as a percentage of GNP between 1902 and 1990 (it grew by 29% from 8% to 37%). The growth in each expenditure function as a share of GNP was also calculated, and then the share of total government growth as a percentage of GNP that can be explained by each category was calculated.

The results may be surprising. Welfare contributes the least to the growth in government, and Social Security the most (you may want to quibble about the distinction). Growth in education accounts for 15%, defense spending 17% and social security 20%.

In other words, there is no dominant expenditure function that explains the growth of big government.

Government Table 1
Government Fiscal Measures
1902-1992

Total Expenditures Share By Level YEAR	Total Expenditures			Total Revenues and Expenditures As a Share of GNPS&L		Federal Grants as a Share of Revenues
	Federal	State	Local	Rev	Expend	
1902	34.16%	8.22%	57.62%	7.84%	7.66%	0.7%
1913	29.89%	9.27%	60.84%	7.53%	8.09%	0.6%
1922	39.39%	11.69%	48.92%	12.58%	12.52%	2.1%
1927	30.57%	12.98%	56.44%	12.85%	11.78%	1.5%
1934	38.69%	16.83%	44.48%	17.36%	19.56%	13.7%
1940	44.91%	17.51%	37.58%	17.86%	20.36%	8.7%
1946	82.43%	6.24%	11.33%	29.51%	38.22%	5.7%
1952	69.10%	10.80%	20.10%	28.51%	28.40%	9.0%
1957	62.11%	13.48%	24.41%	28.64%	27.82%	9.1%
1962	59.98%	14.50%	25.52%	29.19%	30.56%	12.8%
1967	58.76%	15.64%	25.59%	30.81%	31.44%	16.8%
1972	52.41%	18.42%	29.17%	31.49%	33.09%	19.7%
1977	53.04%	18.95%	28.01%	32.82%	34.65%	24.6%
1982	57.45%	17.42%	25.13%	36.11%	38.82%	19.0%
1987	59.33%	16.50%	24.17%	36.97%	38.34%	15.8%
1992	58.33%	17.99%	23.68%	33.94%	38.42%	21.4%

Government Table 2
All Government Expenditures as a share of GNP
and growth rate of Government

Growth rate between

	Share of GNP	One Period	Two Periods
	(1)	(2)	(3)
1840	5.0%		
1902	7.8%	0.729%	
1913	7.5%	-0.4%	0.562%
1922	12.6%	5.9%	2.4%
1927	12.8%	0.4%	3.9%
1934	17.4%	4.4%	2.7%
1940	17.9%	0.5%	2.6%
1946	29.5%	8.7%	4.5%
1952	28.5%	-0.6%	4.0%
1957	28.6%	0.1%	-0.3%
1962	29.2%	0.4%	0.2%
1967	30.8%	1.1%	0.7%
1972	31.5%	0.4%	0.8%
1977	32.8%	0.8%	0.6%
1982	36.1%	1.9%	1.4%
1987	37.0%	0.5%	1.2%
1992	37.5%	0.3%	0.4%
1902 to 1940		2.2%	
1902 to 1952		2.6%	
1940 to 1992		1.4%	
1952 to 1992		0.685%	

Government Table 3
 Size of Government Expenditures in Dollars and
 as a share of GNP, 1800 to 1902

Size of Government in Dollars

	National	State	Local	Total	Percent of GNP
1800	1.96	0.42			
1810	1.80	0.36			
1820	2.52	0.56			
1830	2.07	0.54			
1840	1.50	0.88	1.23	3.60	4.0%
1850	1.93	0.99	1.23	4.14	4.2%
1860	3.32	1.72	2.17	7.20	5.4%
1870	9.82	2.34	5.48	17.64	8.4%
1880	6.39	1.70	4.98	13.07	5.7%
1890	5.74	1.84	5.96	13.55	6.4%
1900	6.42	2.43	8.83	17.68	7.2%

As Share of GNP

1902	3.0%	0.8%	4.0%	7.8%
1913	2.4%	0.9%	4.2%	7.5%
1922	5.8%	1.7%	5.2%	12.6%
1927	4.7%	2.1%	6.0%	12.8%
1934	6.0%	3.8%	7.6%	17.4%
1940	7.0%	5.0%	5.8%	17.9%
1946	22.3%	3.7%	3.6%	29.5%
1952	20.4%	4.1%	4.0%	28.5%
1957	19.3%	4.6%	4.7%	28.6%
1962	18.5%	5.2%	5.5%	29.2%
1967	19.7%	5.7%	5.4%	30.8%
1972	18.4%	6.9%	6.2%	31.5%
1977	19.2%	7.6%	6.0%	32.8%
1982	21.6%	8.2%	6.2%	36.1%
1987	21.0%	9.1%	6.9%	37.0%
1992	20.8%	9.3%	7.3%	37.5%

Government Table 4
Expenditure Shares by Major Categories, All governments

	defense	education	welfare	interest	SSI	Total	
1902	0.10	0.16	0.02	0.06	0.00	0.34	
1913	0.08	0.18	0.02	0.05	0.00	0.33	
1920s	0.07	0.19	0.01	0.13	0.00	0.41	
1930s	0.05	0.16	0.06	0.10	0.00	0.37	
1940s	0.32	0.11	0.05	0.07	0.00	0.54	
1950s	0.39	0.11	0.03	0.05	0.04	0.63	
1960s	0.29	0.14	0.03	0.05	0.08	0.61	
1970s	0.18	0.17	0.07	0.06	0.13	0.61	
1980s	0.16	0.15	0.07	0.08	0.16	0.61	
	As a share of GNP						All Govt % GNP
	defense	education	welfare	interest	SSI	Total	
1902	0.008	0.012	0.002	0.005	0.000	0.026	0.08
1913	0.006	0.014	0.001	0.004	0.000	0.025	0.08
1920s	0.009	0.023	0.002	0.016	0.000	0.050	0.12
1930s	0.010	0.029	0.011	0.018	0.000	0.067	0.18
1940s	0.095	0.032	0.014	0.021	0.001	0.162	0.30
1950s	0.109	0.032	0.008	0.015	0.011	0.175	0.28
1960s	0.088	0.043	0.010	0.016	0.025	0.183	0.30
1970s	0.059	0.054	0.021	0.020	0.043	0.197	0.32
1980s	0.057	0.057	0.026	0.028	0.058	0.226	0.37
Explains	0.170	0.152	0.081	0.082	0.197	0.682	0.292