

Economic History of the US

Depression and the World Wars, 1914-1946

Lecture #2

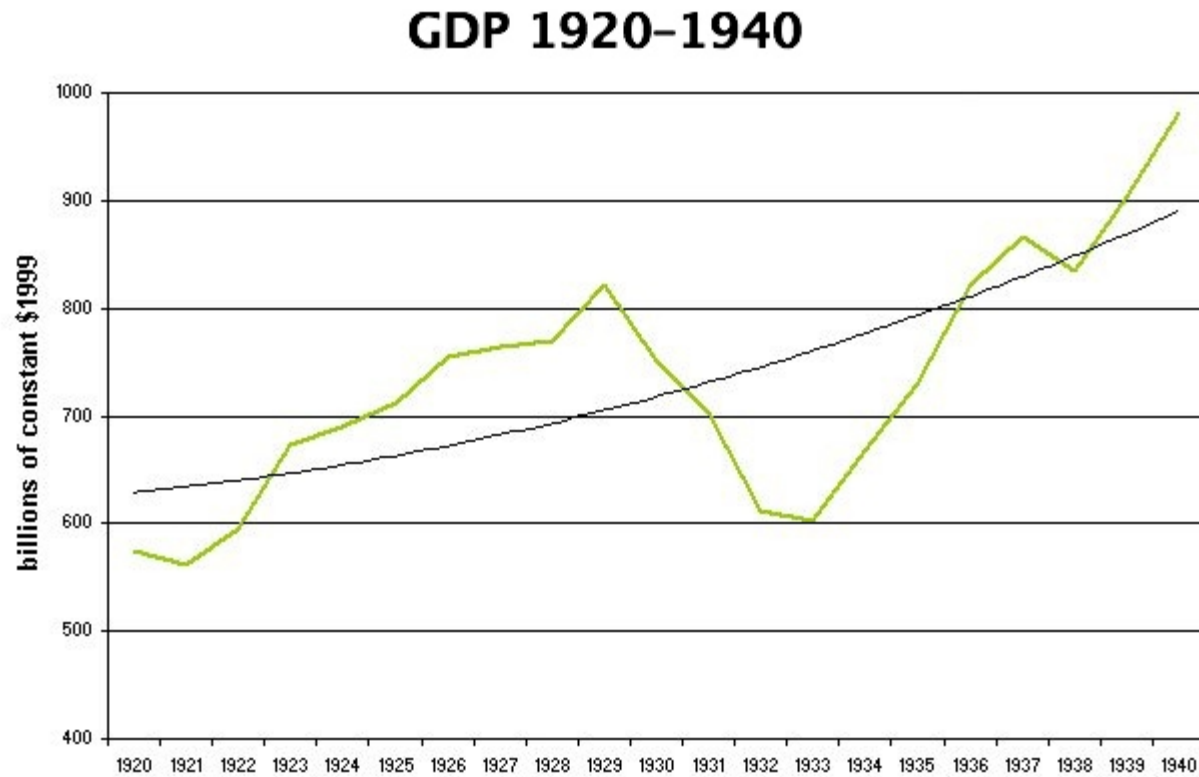
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Econ 120

Roaring '20s

- Real GDP growth...
 - 4.0% p.a., 1921-29
 - Inflation zero
 - Unemployment, 3.3% p.a., 1923-29
 - Industrialization thru WWI
 - Urbanization
 - Census of 1920, 106 million, more than half urban residents for first time
 - Migration of African-Americans from South to NY, Phila, D.C., Chicago, St. Louis and Los Angeles
 - Prosperity
 - Rise of “middle class” lifestyle
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Roaring '20s



Emergence of Consumer Economy

% of Families Owning Various Appliances

	1920	1930
Inside flush toilets	20%	51%
Central heating	1	42
Home lighting with electricity	35	68
Mechanical refrigerators	— ^a	8
Washing machines	8	24
Vacuum cleaners	9	30
Radios	— ^a	40
Automobiles	26	60

^aLess than 1 percent.

Source: *Lebergott 1976, 248–299.*

Market for Consumer Durables

□ Expanded by innovations in Supply and Demand

□ **Supply...**

- Mass production and technology
- ...lowered cost

□ **Demand**

- Advertising
- *Installment credit, BofA*
- *Household debt...*

United States: Approximate Hours of Housework per Week, 1900-1975			
Year	Meals and Dishwashing	Laundry	General Cleaning
1900	44	7	7
1925	30	5	9
1975	15	1	7

Table 22.2 Union Memberships, 1919–29

YEAR	TOTAL UNION MEMBERSHIP (in thousands)	TOTAL MEMBERSHIP AS A PERCENTAGE OF TOTAL LABOR FORCE	TOTAL MEMBERSHIP AS A PERCENTAGE OF NONFARM LABOR FORCE
1919	4,046	10.2%	14.8%
1920	5,034	12.2	16.3
1921	4,722	11.2	15.0
1922	3,950	9.3	12.4
1923	3,629	8.4	11.1
1924	3,549	8.0	10.6
1925	3,566	7.9	10.3
1926	3,592	7.9	10.3
1927	3,600	7.8	10.0
1928	3,567	7.6	9.7
1929	3,625	7.6	9.7

Source: Historical Statistics 1975, Series D4, D7, D8, and D940.

Immigration, 1910–29

YEAR	NEW ARRIVALS	YEAR	NEW ARRIVALS
1910	1,041,570	1920	430,001
1911	878,587	1921	805,228
1912	838,172	1922	309,556
1913	1,197,892	1923	522,919
1914	1,218,480	1924	706,896
1915	326,700	1925	294,314
1916	298,826	1926	304,488
1917	295,403	1927	335,175
1918	110,618	1928	307,255
1919	141,132	1929	279,678

Source: Historical Statistics 1975, Series C89.

High School Graduation Rates

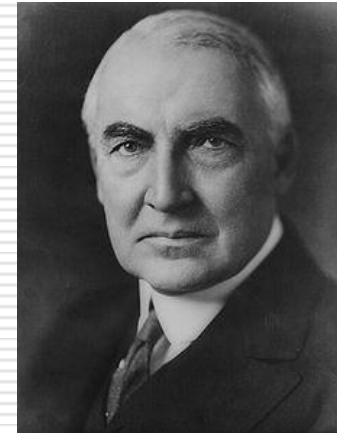
HIGH SCHOOL GRADUATES (as a percentage of children age 17)		
	48 STATES	32 NONSOUTHERN STATES
1910	8.6%	11.1%
1920	16.2	19.9
1928	27.0	32.1
1938	48.2	55.9

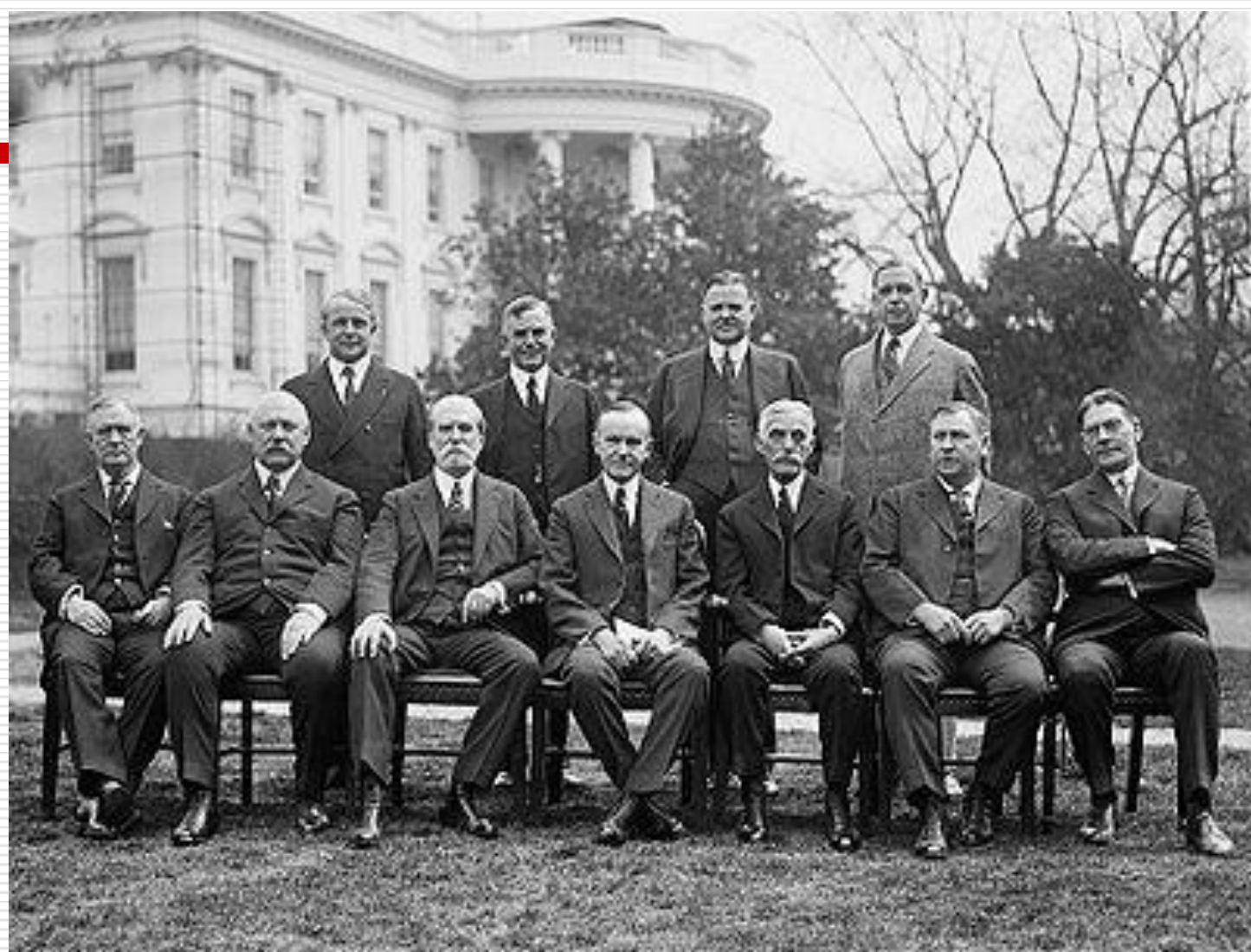
Source: *Derived from Goldin 1994a, Table 1.*

Laissez-faire

1920s' Republican Presidents

- ❑ **Republicans dominant, free-market philosophy**
 - **Controlled Congress, 1919-31**
 - **Republican Presidents...**
 - ❑ **Harding 1921-23**
 - ❑ **Coolidge 1923-29**
 - ❑ **Hoover 1929-33**
 - **Renewed industrial consolidation**
- ❑ **Prohibition, 18th Amendment 1920 (until 1933)**





The Great Bull Market

□ Stock Market Appreciation

	<u>S&P500</u>	<u>P/E</u>
1923	2.0%	16.8
1924	5.9	17.0
1925	23.1	19.3
1926	12.8	18.8
1927	21.3	21.0
1928	30.2	25.1
1929	30.3	28.7

Causes:

1. Consumer spending boom
 2. New technology, RCA
 3. Margin buying...and bank lending to brokers
 4. Frenzy, bubble esp. in 1927-28
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The Great Bull Market

Margin buying

$$\text{LMV} - \text{DR} = \text{EQ}$$

LMV, long market value of stock

DR, debit balance = amt. lent by broker

EQ, cash deposited

Example...

\$100 worth of McDonald's Corp.

\$50 loan

\$50 initial EQ, must be deposited

50% margin requirement

1928, share appreciation

...some top stocks...

RCA, +394.1%

Dupont, +69.3%

Montgomery Ward, +276.1%

Wright Aeronautic, +318.8%

Temptation of Leverage

- \$100 to invest
 - Buy \$100 of RCA stock
 - a) ...if stock rises by 20%
 - \$100 of RCA now worth \$120
 - \$20, or 20%, profit
 - b) ...if stock falls by 20%
 - \$100 of RCA now worth \$80
 - \$20, or 20%, loss
 - Buy \$200 of RCA stock with 50% leverage
 - IE, pay \$100 for 50% equity and borrow the rest
 - $LMV - DR = \text{Equity}$
 $\$200 - \$100 = \$100$
 - a) $240 - 100 = 140$
\$40, or 40%, gain
 - b) $160 - 100 = 60$
\$40, or 40%, loss
-

Macroeconomic Policies, 1920s

1. Fiscal Policy

- ❑ “Mellon Plan” was contractionary
- ❑ Fed. gov. spending cut...
 - ...from 4.9% of GDP in 1920
 - ...to 3.1% of GDP in 1929
 - tiny relative to economy
- ❑ Tax rates cut across the board
 - WWI taxes “normalized” and sharply reduced...
 - Excise taxes
 - Personal and corporate income taxes
 - Revenue increased
 - “supply side” policy
- ❑ Overall budget surplus maintained



Government Spending and Expenditures (in %)

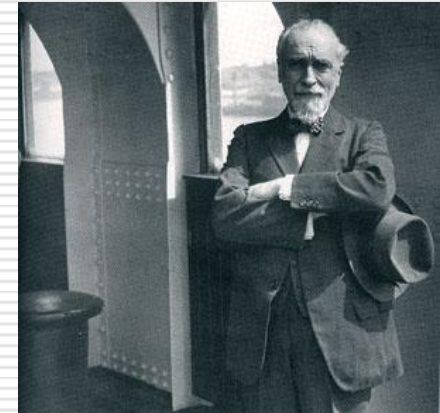
	1922	1927
Share of GNP		
Total government	12.6%	11.6%
Federal	4.9	3.5
State and local	7.7	8.1
Expenditure distribution by level		
Federal	39.2	30.4
State	11.7	12.9
Local	49.1	56.7

Source: Niemi 1975, 117.

Macroeconomic Policies, 1920s

2. Monetary policy

- Highly expansionary...
- Expansion of reserves/monetary base
- 1. Trade surpluses during WWI, plus...
- 2. Dysfunctional interwar gold-standard
 - US only industrial power to stay on gold through WWI
 - Retreated to isolationism
 - Unfortunate circumstances of UK £ “resumption” in 1924
 - Premature, £ overvalued...and more gold flowed to US banks
 - Bank of England urged Fed to “inflate”
 - Depression in UK and Europe in 1920s



Macroeconomic Policies, 1920s

2. Monetary policy

- Fed let money stock grow by 34% in 1920s...
 - ...most in mid-decade
 - Fighting to limit excessive money growth
 - ...didn't allow all gold inflow to monetize...
 - “sterilization” ...using open market operations
 - wanted to keep inflation flat...but asset bubble
 - By 1927-28, Fed became worried about stock market bubble
 - Raised discount rate from 4.5 to 5.5% in August 1929
 - Too late...“Lighted match into a tinder box”
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	M2 (\$bn)	Price Deflator (1929=100)	Real NNP (\$bn, 1929)
1920			
1921	2.6%	-4.9%	7.2%
1922	8.5%	2.3%	15.0%
1923	5.4%	-1.3%	2.9%
1924	9.0%	2.0%	2.4%
1925	3.9%	0.5%	7.1%
1926	2.4%	-2.6%	1.0%
1927	3.8%	0.7%	1.5%
1928	0.4%	-0.1%	6.3%
1929	4.5%	-0.4%	5.4%