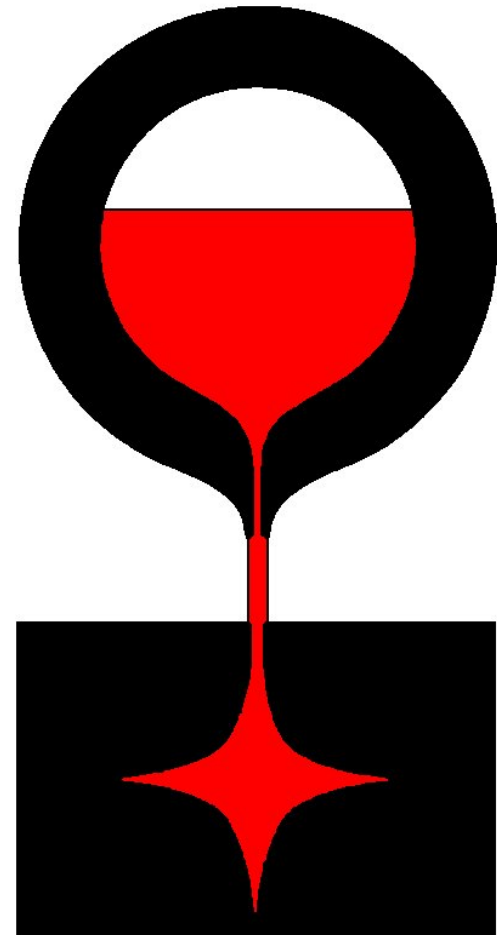


Future of Industry

Raymond Monroe

815-455-8240

monroe@sfsa.org



U.S. Manufacturing

- 2008 manufacturing was \$1.4 trillion
- 9th largest economy/ size of Canada
- 70% R&D \$147 billion 90% of patents
- \$1.00 produces \$1.37 of activity
- 3.4%/year productivity for 20 yrs compared to 2.2%/yr for others
- 22% higher wages than services
- http://www.connstep.org/files/file/20091216-manufacturing-framework-final_embargoed.pdf

Share of total employment in manufacturing and services sectors, 1965 and 2005

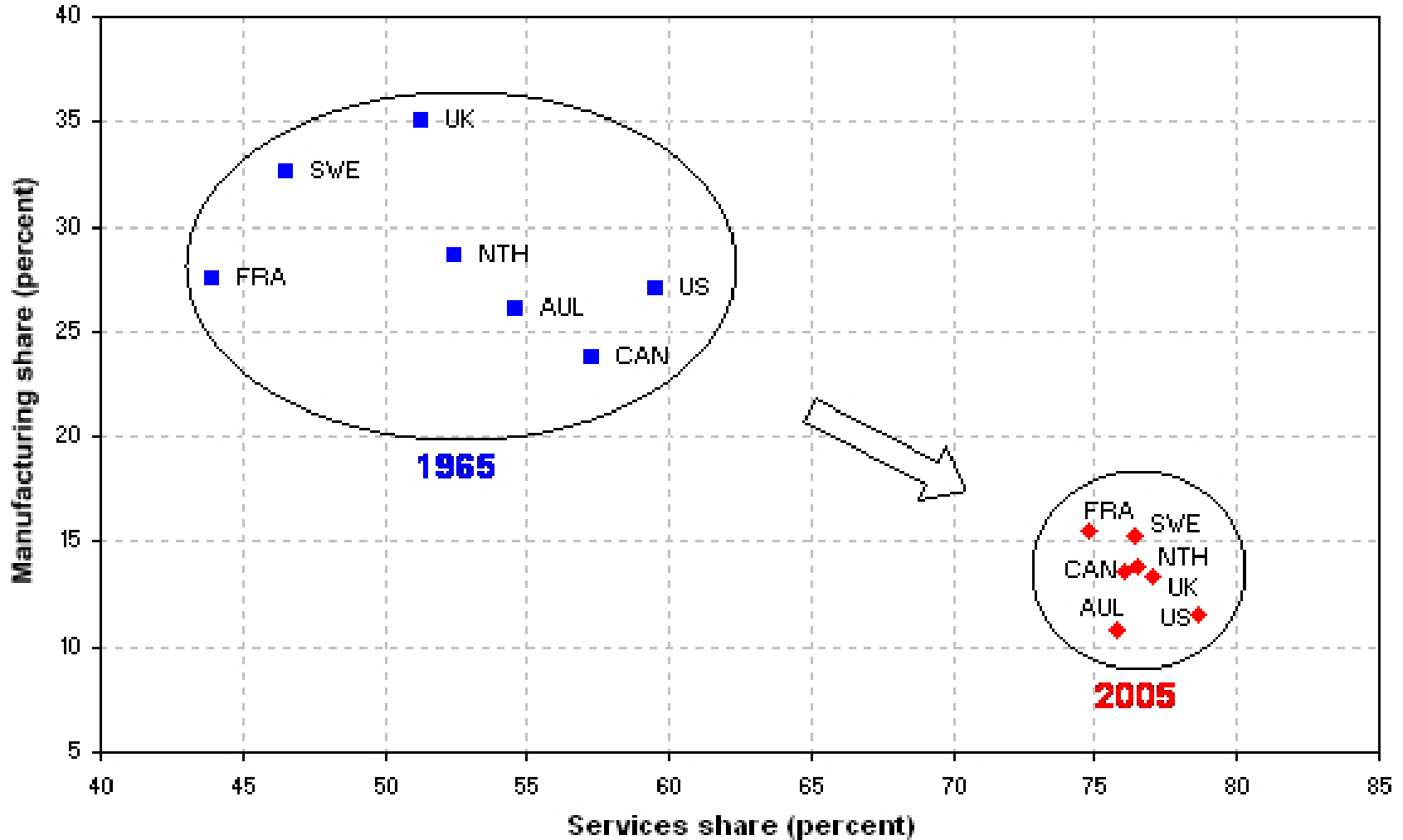
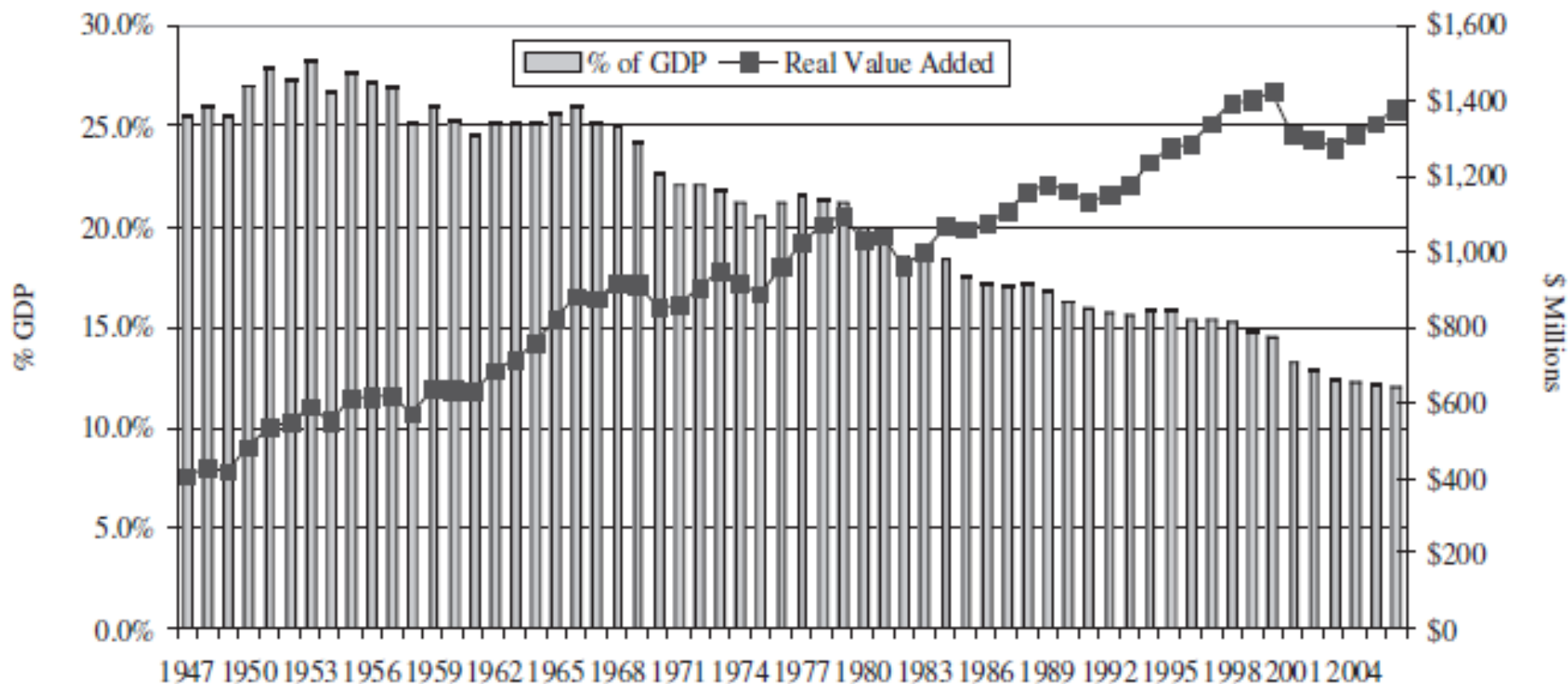


Figure 2
Manufacturing Value Added, % of GDP and Real Value Added(1947–2006)



Source: Bureau of Economic Analysis, GDP-by-Industry Accounts, http://www.bea.gov/industry/gpotables/gpo_action.cfm.

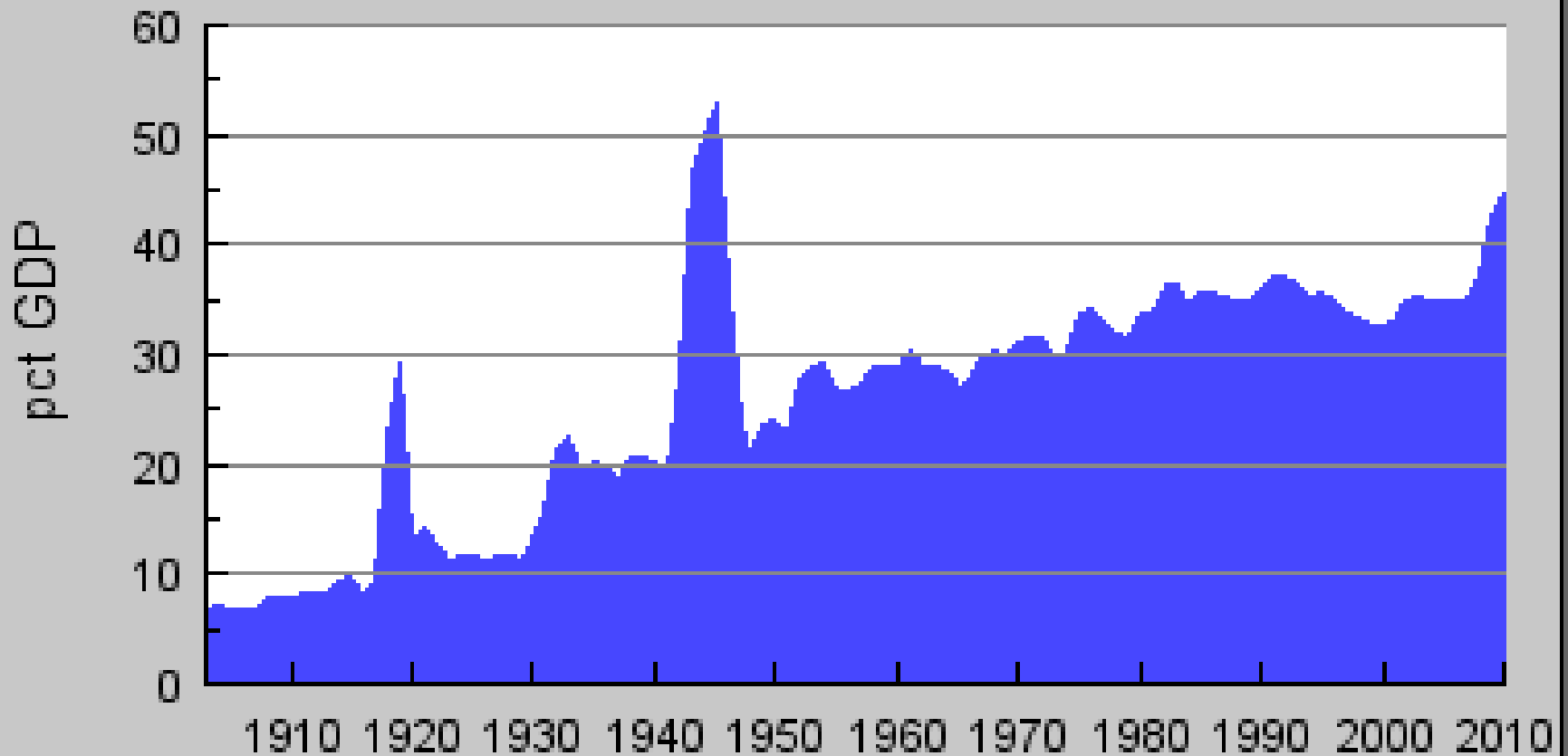


www.contraryinvestor.com

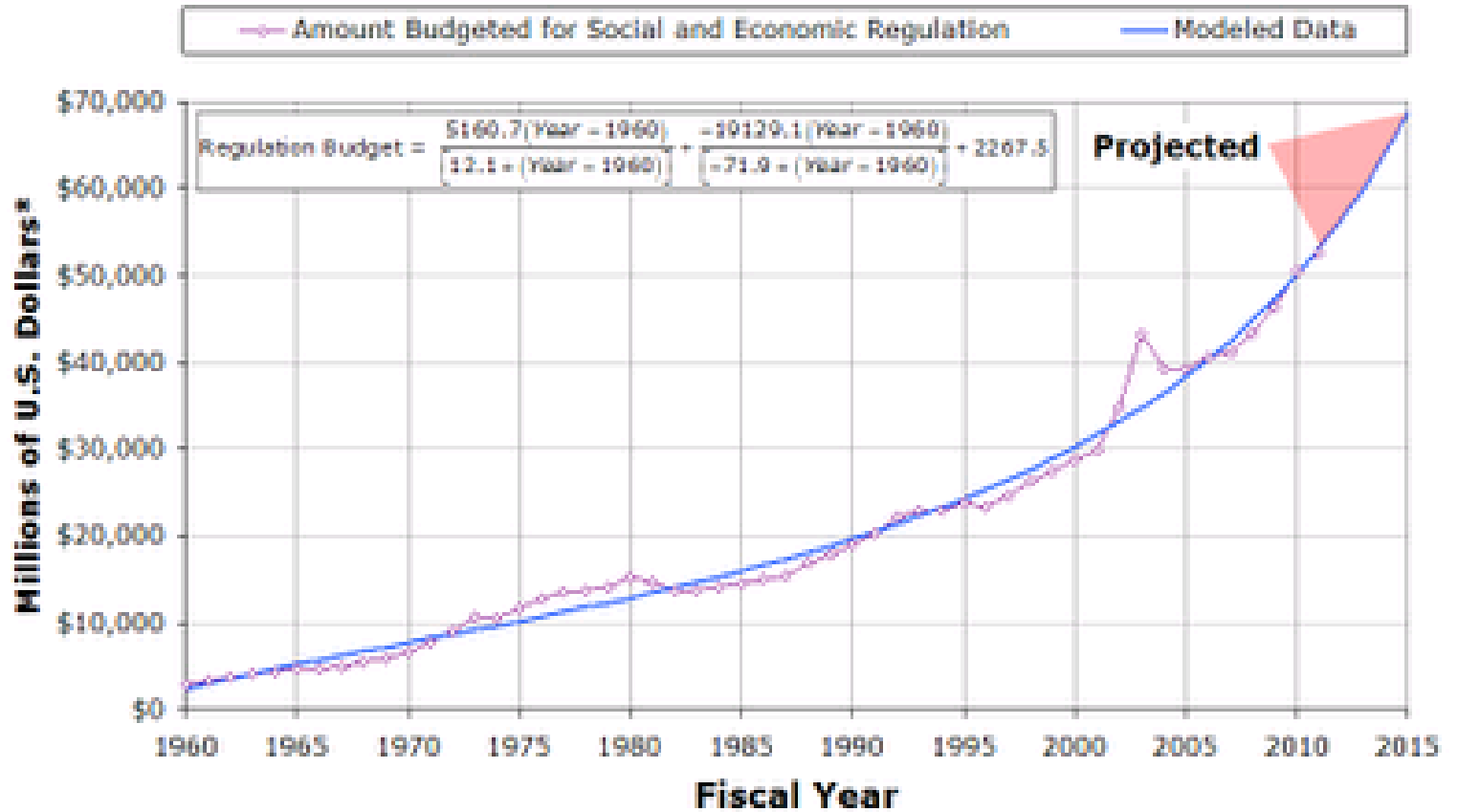
— Payrolls: Manufacturing And Construction (000)
— Payrolls: Government (000)

US Government Spending As Percent Of GDP

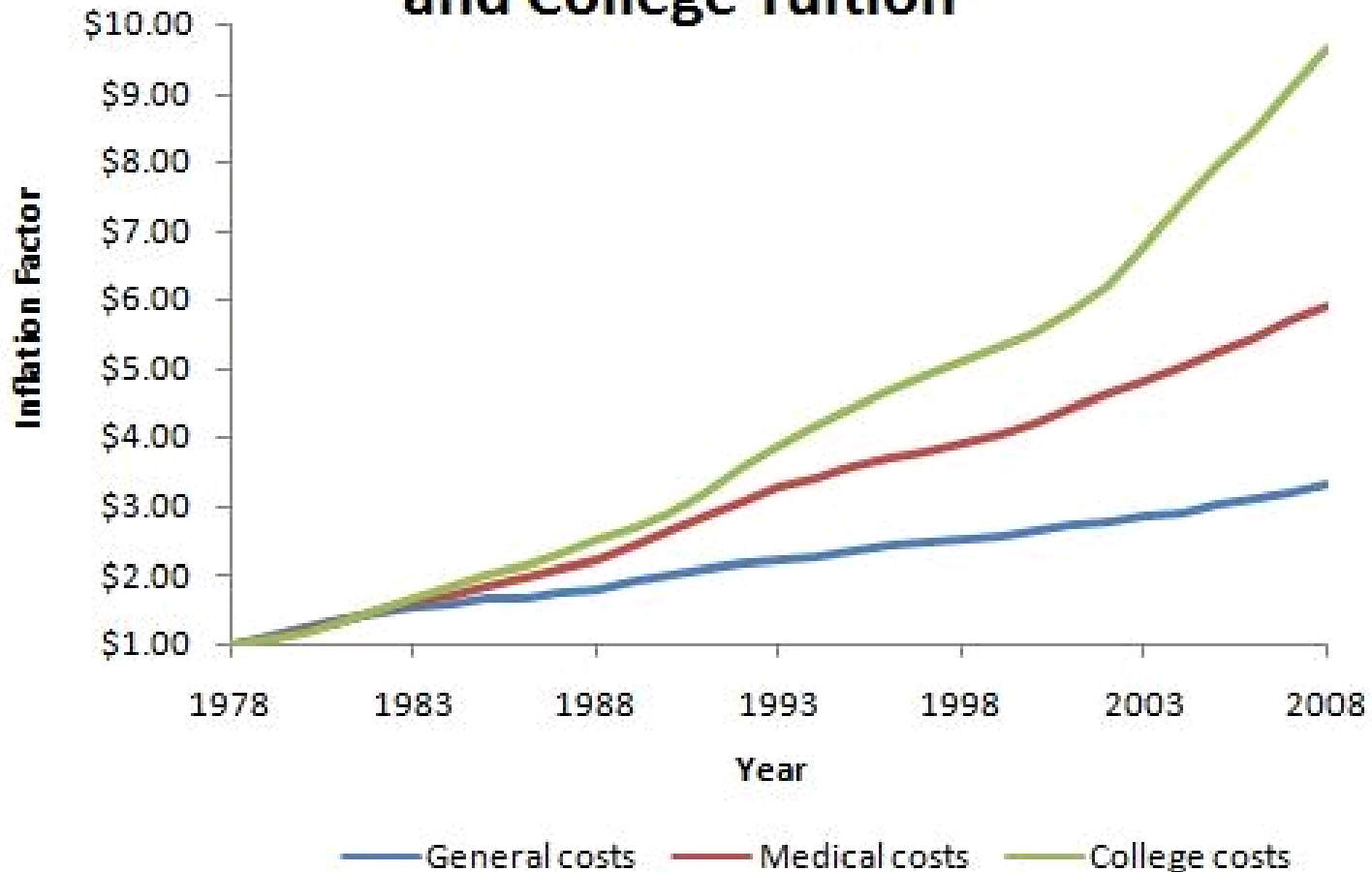
Government Spending in US from FY 1903 to FY 2010



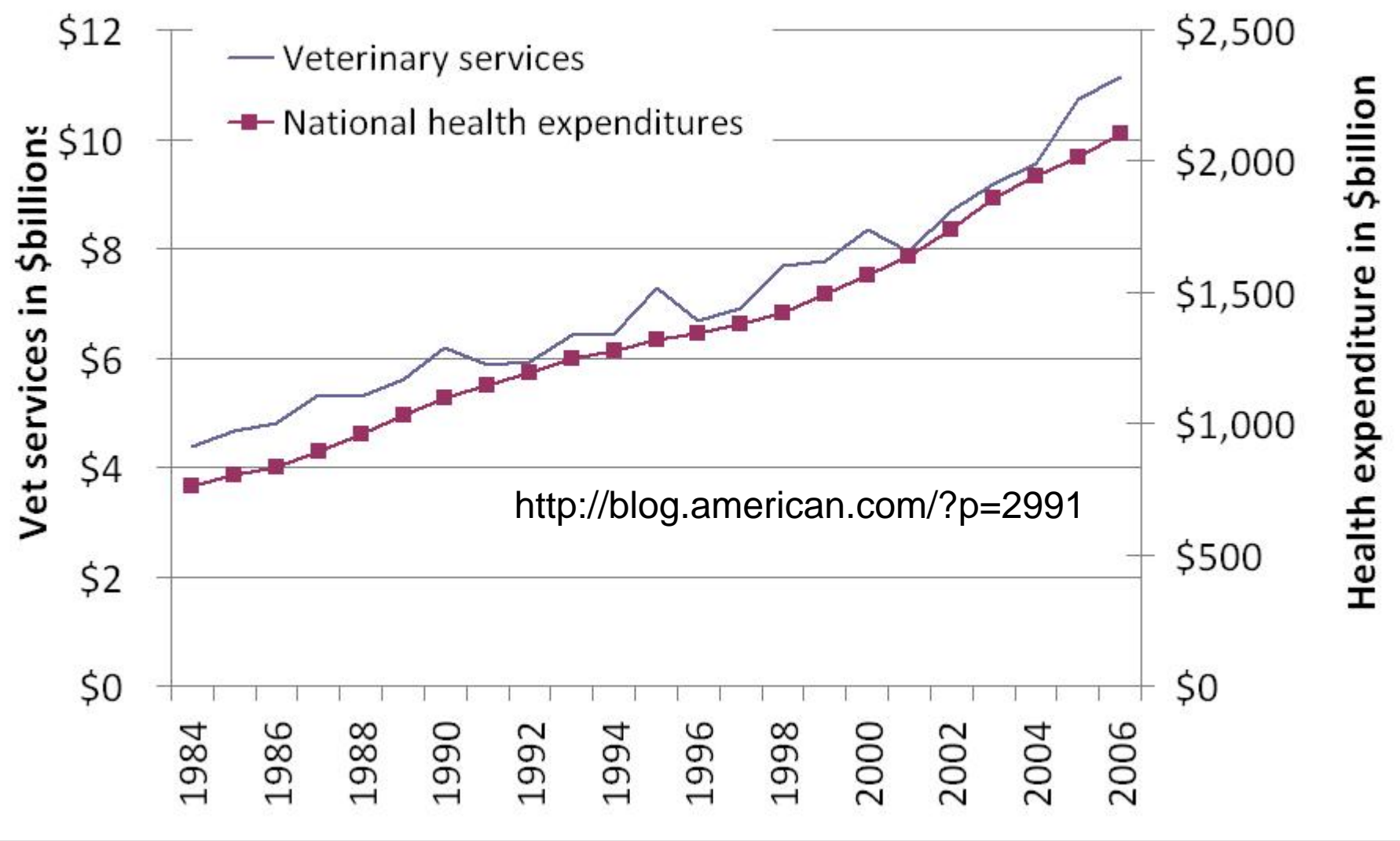
Growth of Federal Government's Budget for Social and Economic Regulation, Fiscal Years 1960-2011



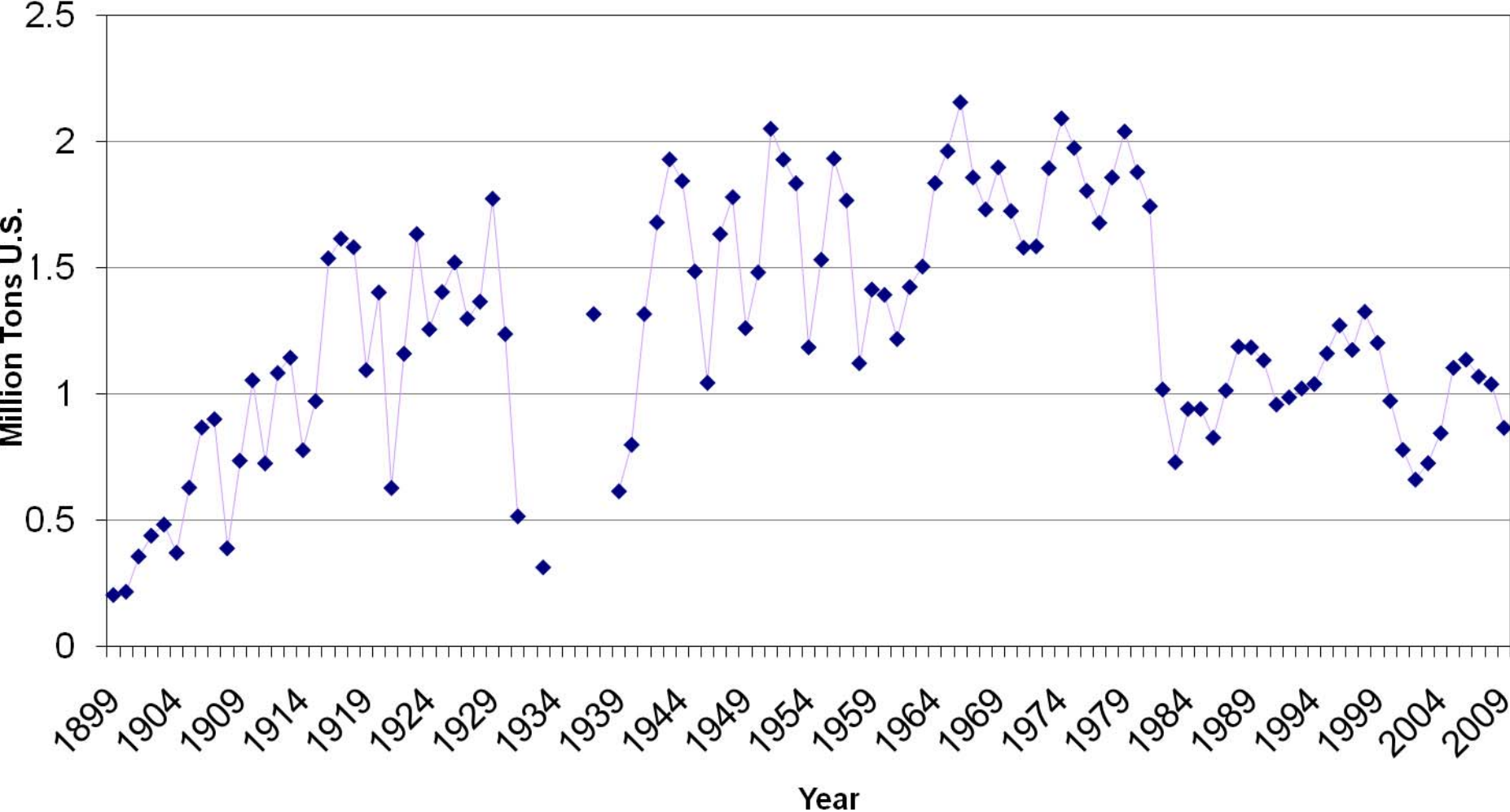
Inflation Factors: General, Medical, and College Tuition



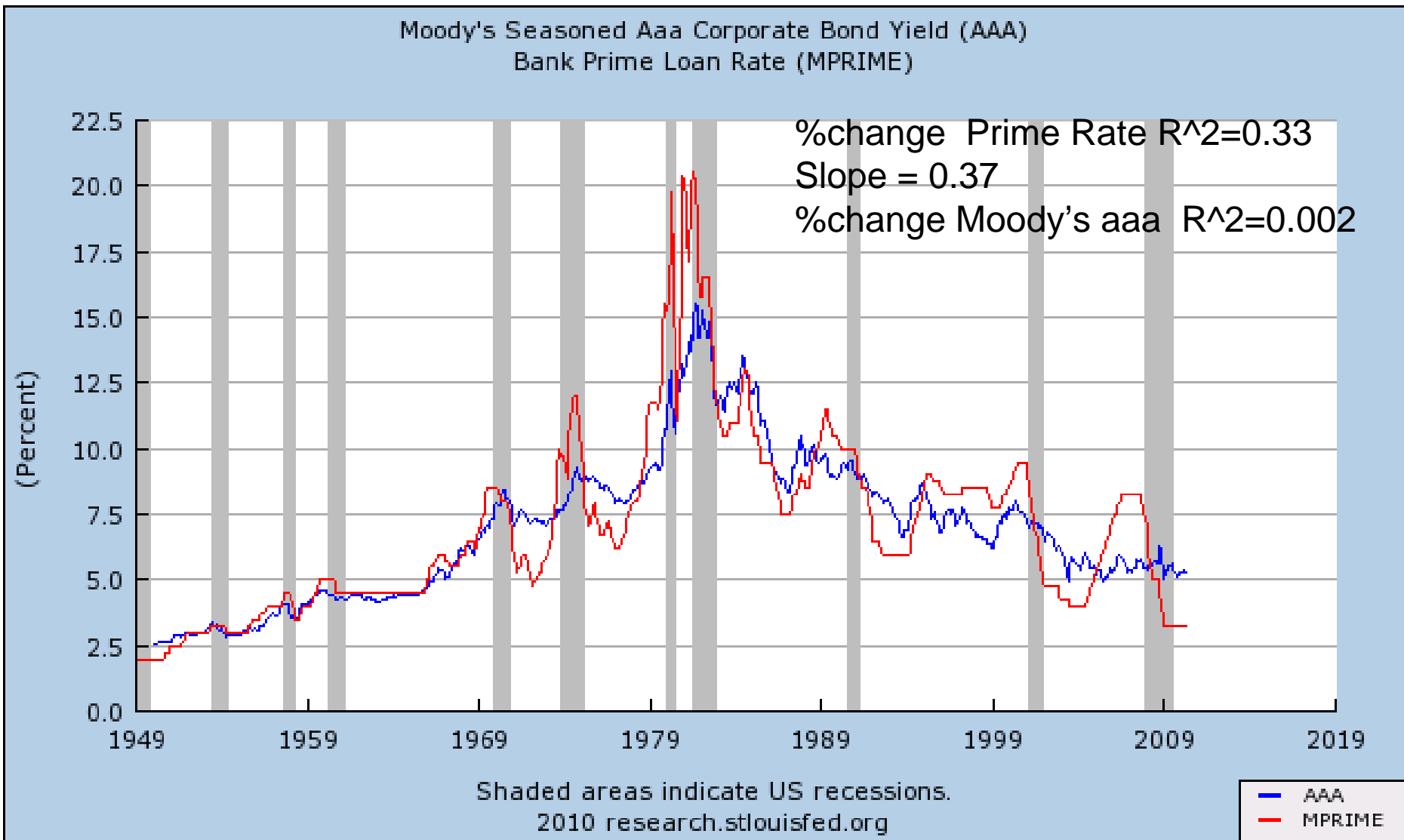
Health care spending: pets versus people



Steel Casting Production in the U.S. million tons



Interest Rates



Economic Trends in US

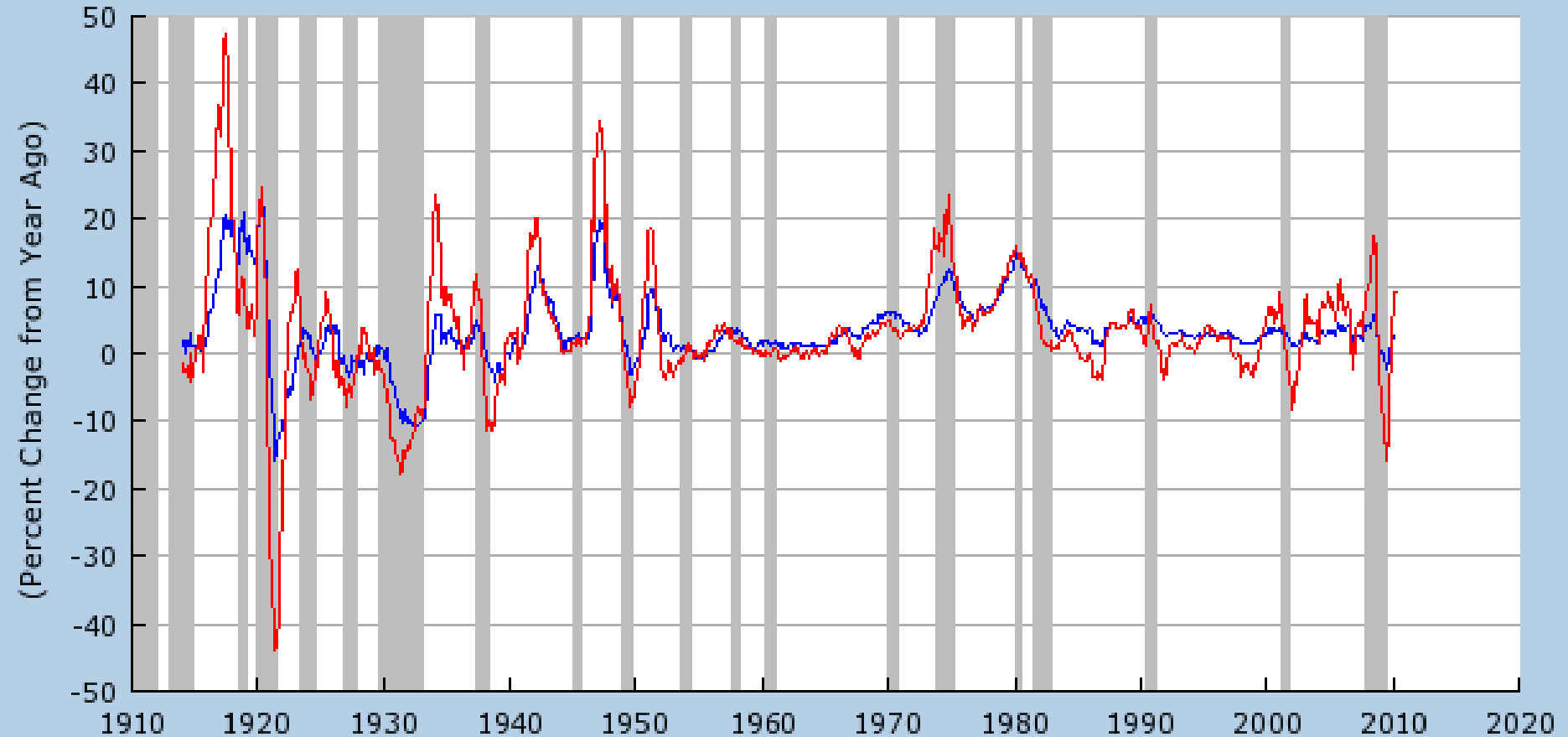
Capital Equipment Investment

15 to 40 years

- Excess Capacity
 - Prices stable or decline
 - Cost cutting required
 - Reduce inventory
 - Minimum staff
 - Low profitability
 - Liquidation of capacity
 - Low interest rates, inflation, inventories, lead times
 - Fewer captive operations
- Limited Supply
 - Prices increase
 - Production required
 - Inventory asset
 - Staff required
 - New products and processes
 - Increases in capacity
 - Increases in interest rates, inventory, inflation, lead times
 - New captive operations

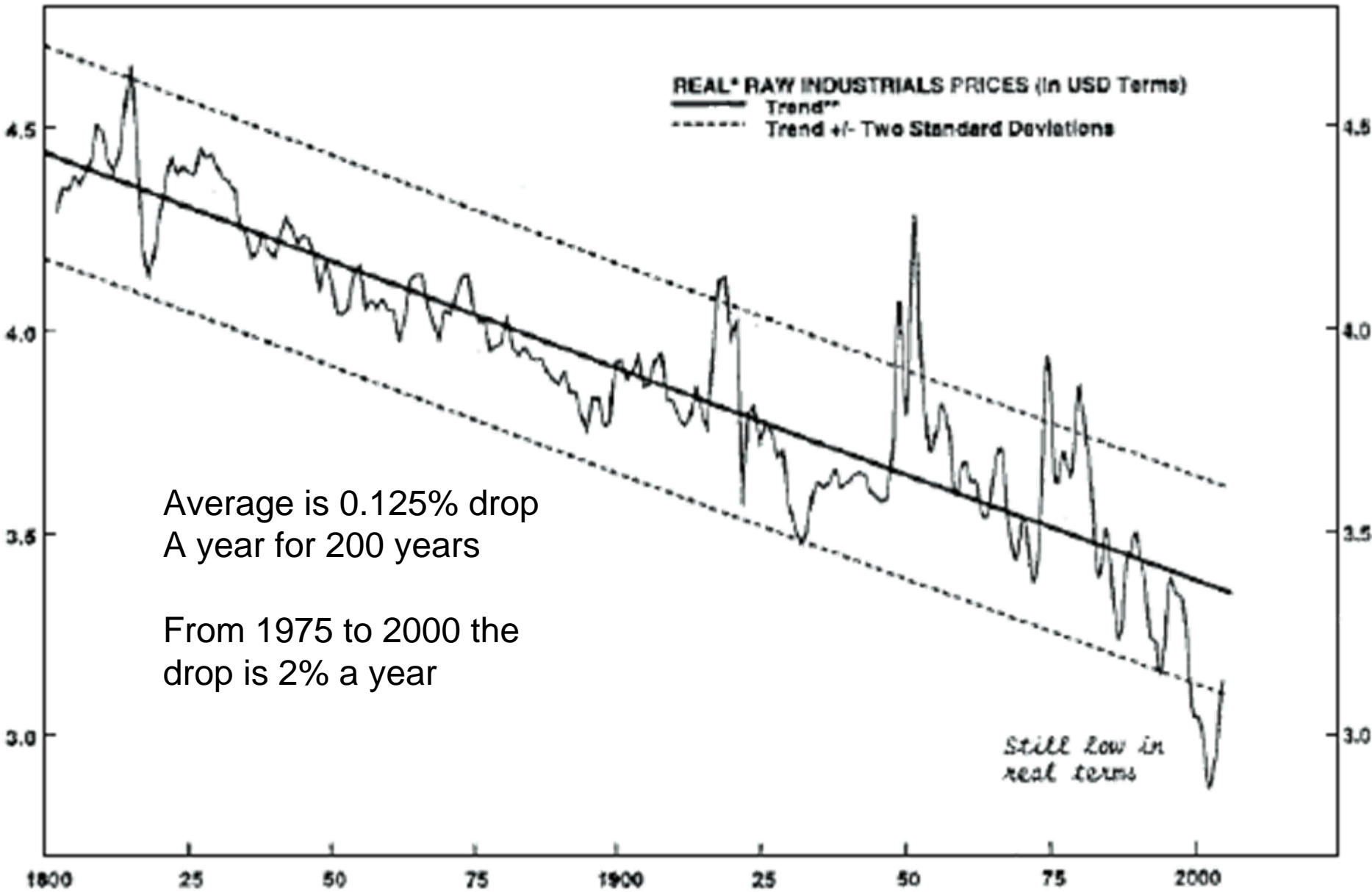
Price Index

Consumer Price Index for All Urban Consumers: All Items (CPIAUCNS)
Producer Price Index: All Commodities (PPIACO)



Shaded areas indicate US recessions.
2010 research.stlouisfed.org

— CPIAUCNS
— PPIACO



Average is 0.125% drop
 A year for 200 years

From 1975 to 2000 the
 drop is 2% a year

*Adjusted by the U.S. GDP Deflator.
 **Time trend from 1800 to 2004.

Thanks!
Questions?

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