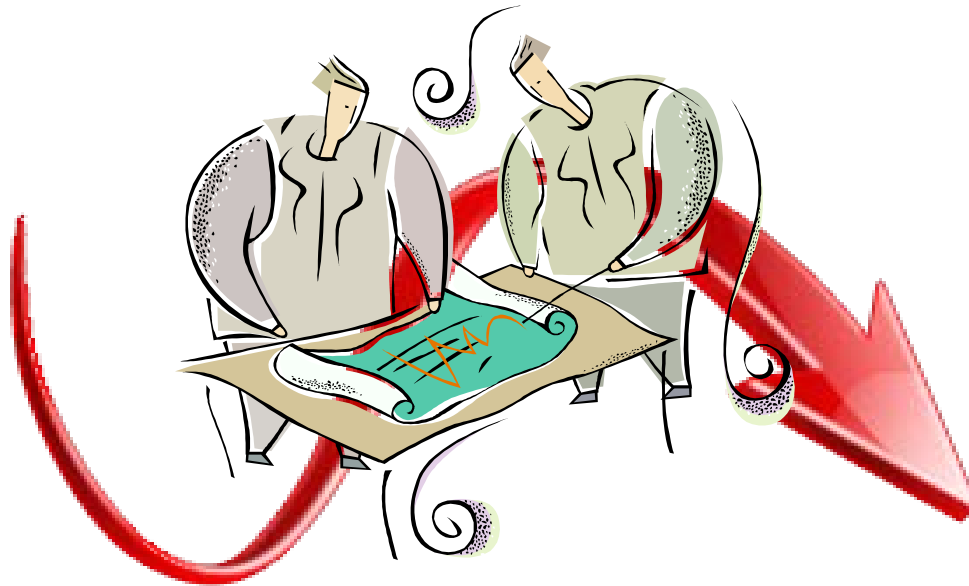




The Economic Outlook



**Jeff Werling
Inforum
University of Maryland
December 14, 2010**



Why Model?

- ✦ Economic and social data -- raw material for reports and studies – in comprehensive databank used for analysis.
- ✦ Building models assists and test economists' understanding on how the economy works.
- ✦ Assist the economic forecasting *process*. Leverage the historic record to detect future trends. Provide a *comprehensive and consistent* framework to assess assumptions and structures of an economic forecast.
- ✦ Simulate “counterfactual” to produce alternative scenarios and/or to evaluate policy measures or exogenous economic shocks.

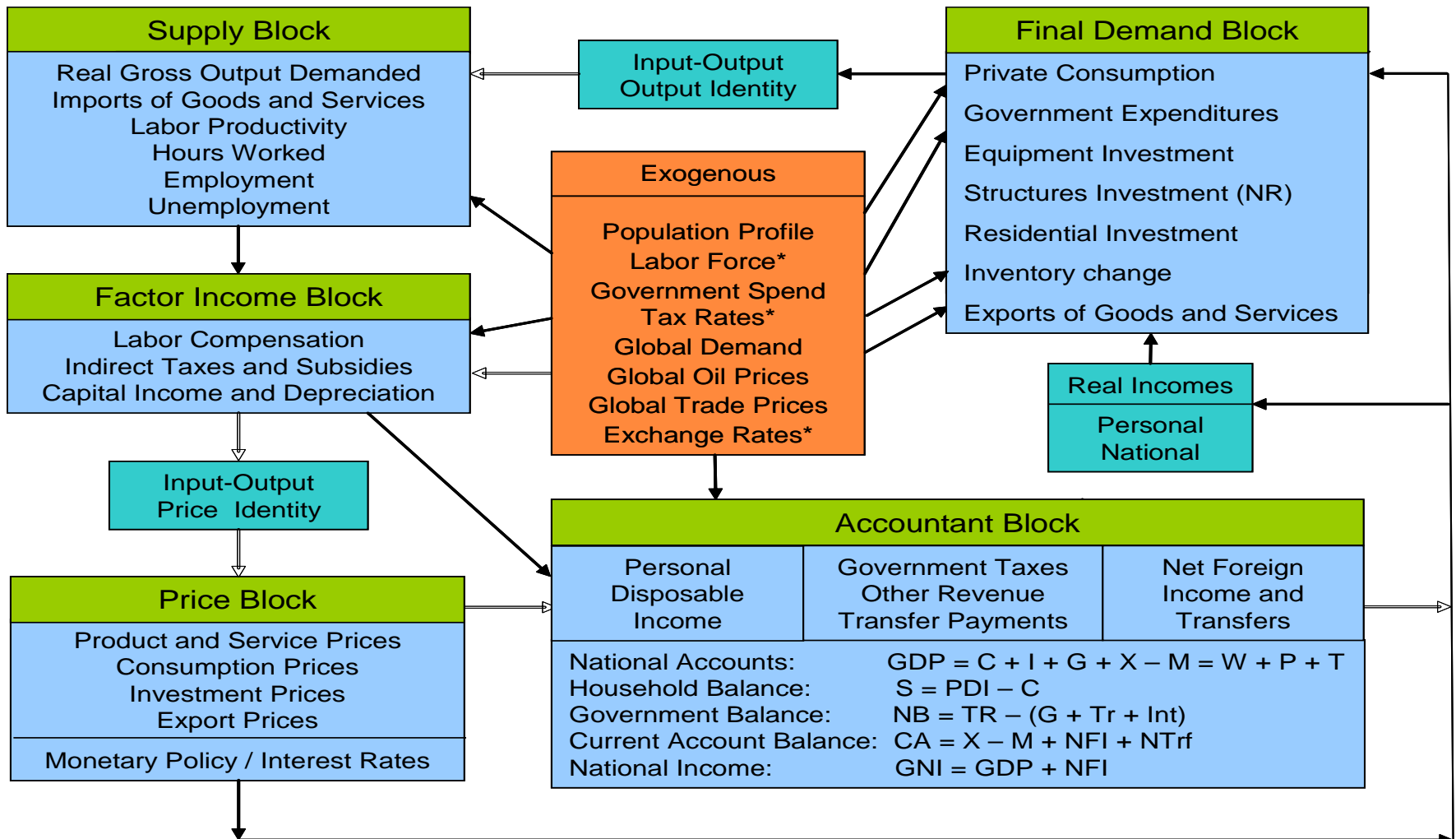


Why would you want to forecast over 25 years?

- ✦ Policy makers need a tool to examine plausible economic growth paths, evaluate the sustainability of current policies, and illustrate impacts of changes in assumptions or policies.
 - Social Security and Medicare (SSA, CMS to 2085)
 - Energy Technology and Climate Change (DoE to 2035)
 - Infrastructure Investments (highways, education)
- ✦ Structural economic models provide *context* and *consistency* needed to organize assumptions about the future.
- ✦ We emphasize consistency of real demand and supply, prices, and nominal balances across the long run.
- ✦ Provides stable and plausible base line for scenario analysis.



LIFT Interindustry Macro Model Schematic





The Short Run Overview

- ✦ Growth prospects for 2011-12 are improved (3%), partly because 2010 was so restrained.
- ✦ QE2 and new budget-busting stimulus will work together to boost recovery over the next two years.
- ✦ Yet, foreclosure/bad debt overhang will continue to dampen growth.
- ✦ Consumers will continue to “delever” because of high unemployment and low net worth -- and new expectations concerning looming retirement.



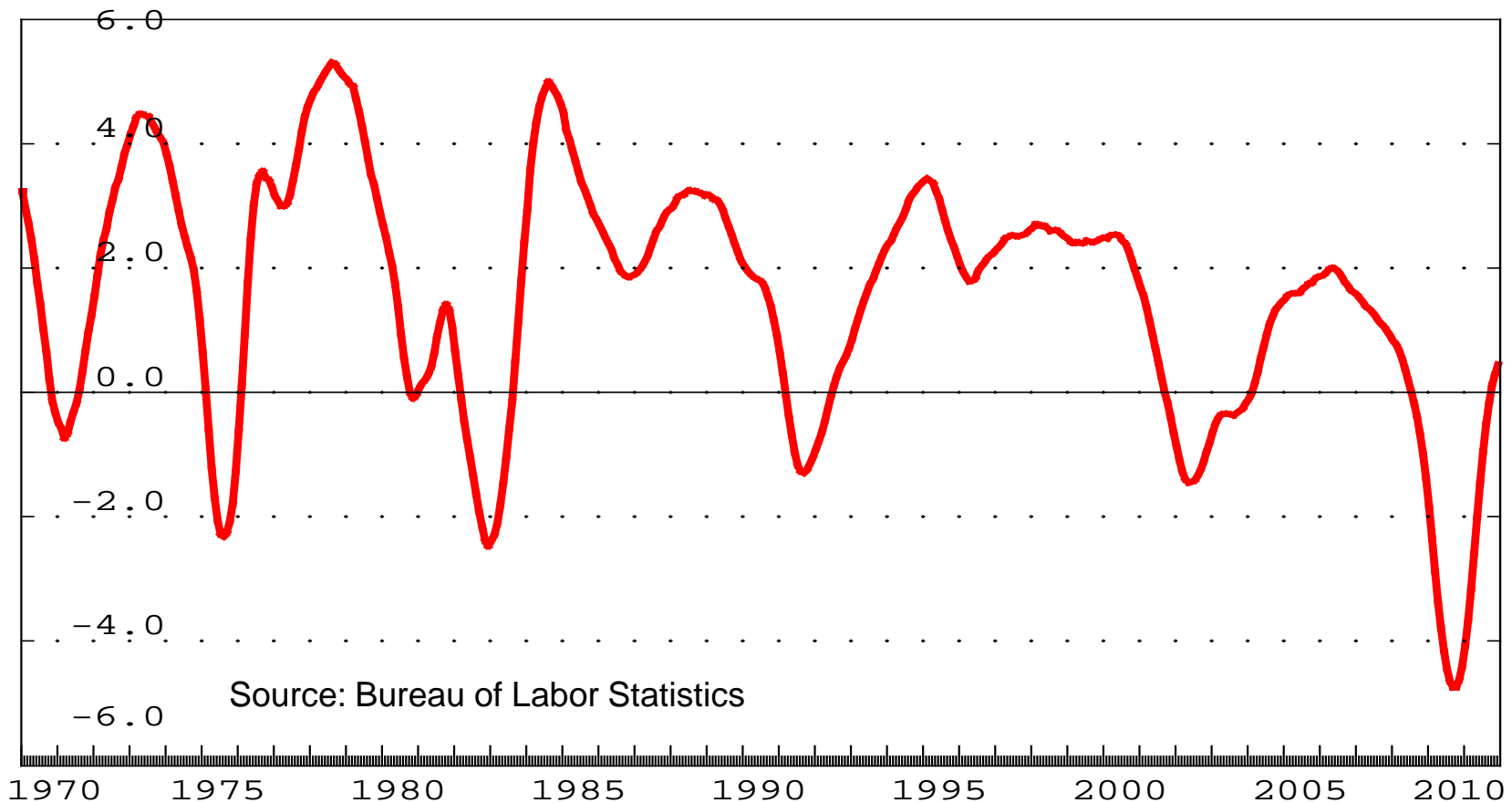
Longer term forecast (to 2035):

- ❖ Potential GDP growth between 2.0 – 2.5%.
- ❖ Forecast assumes gradual rebalancing of private, government and external accounts.
- ❖ Weaker dollar, rising savings rate changes economic structure toward exports and away from consumption.
- ❖ Long run consequences of current fiscal recklessness will be a larger long term debt ratio.
- ❖ Health care spending (with or without reform) will dominant future of government spending and domestic production growth.
- ❖ All roads lead to tax reform. To pay for entitlements, government revenues will have to rise. How this is accomplished is important.



Deepest Post-War Recession in Employment

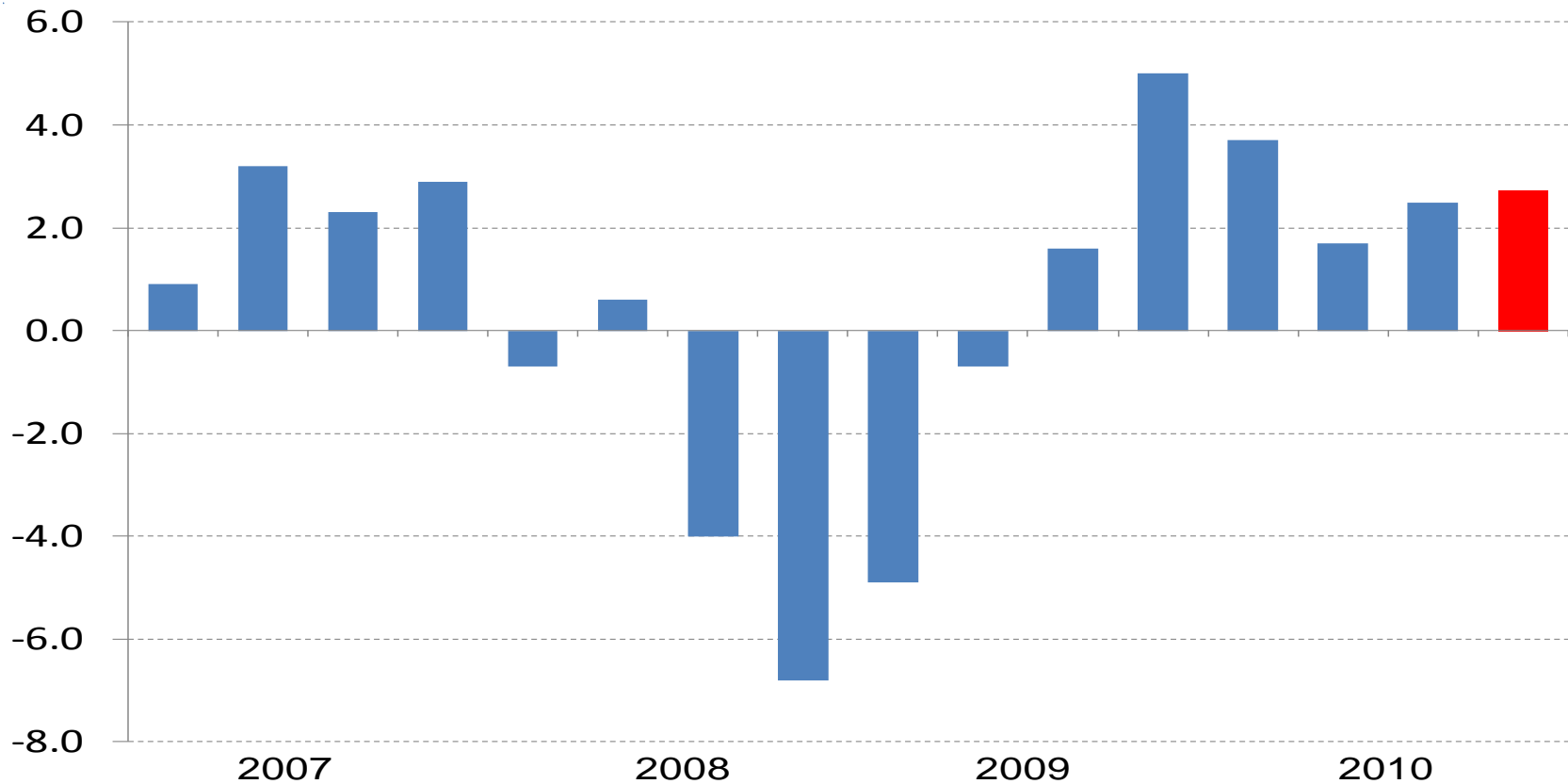
Employment year-on-year percentage growth





So Far, An Uneven Recovery

Real GDP year-on-year growth





Short-term Outlook Overview

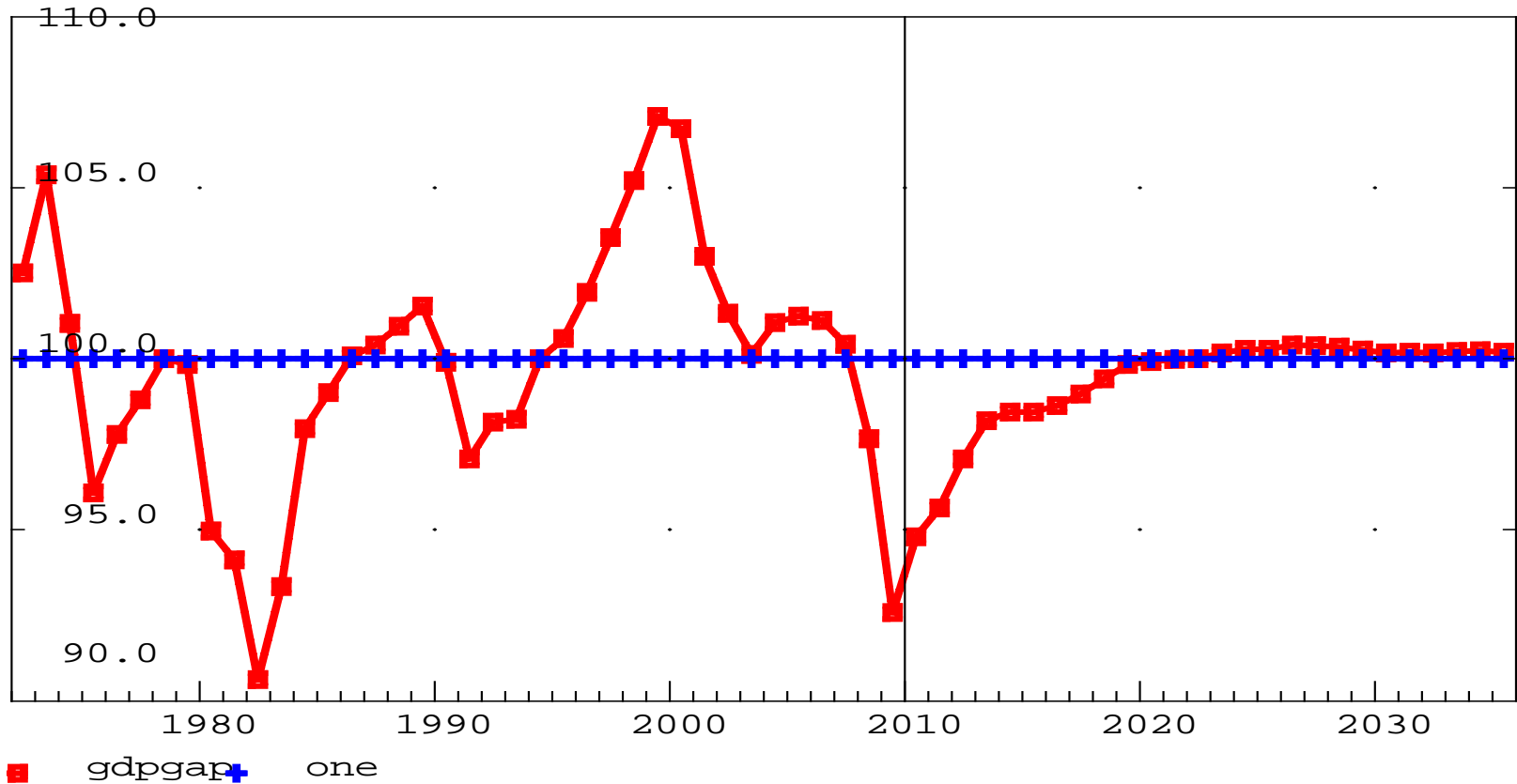
Real (Inflation-Adjusted) Quantities, Average Annual Growth Rates, Percent

	<u>00-08</u>	<u>08-09</u>	<u>09-10</u>	<u>10-11</u>	<u>11-12</u>	<u>12-13</u>
Gross domestic product	2.1	-2.7	2.8	3.0	3.2	3.1
Personal consumption	2.5	-1.2	1.7	2.9	2.6	2.5
Nonresidential structures	0.7	-20.4	-13.4	9.1	10.3	11.0
Equipment investment	2.4	-15.3	13.8	13.2	12.4	8.5
Residential investment	-3.3	-22.9	-2.1	11.2	10.7	9.9
Exports	4.2	-9.5	11.3	10.2	6.6	3.7
Imports	3.5	-13.8	12.7	9.3	6.0	3.6
Government	2.2	1.6	1.0	0.4	0.2	1.1
GDP deflator	2.6	0.9	0.6	1.0	2.4	2.6
Consumption deflator	2.5	0.2	1.6	1.0	2.5	2.5
	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Unemployment rate (%)	5.8	9.3	9.7	9.1	8.4	7.9
Current account (\$ billions)	-675	-386	-433	-453	-503	-573
Federal net borrowing (\$ bill)	-762	-1506	-1512	-1408	-1185	-1167



In a big hole: long recovery ahead.

Inforum's annual GDP Gap



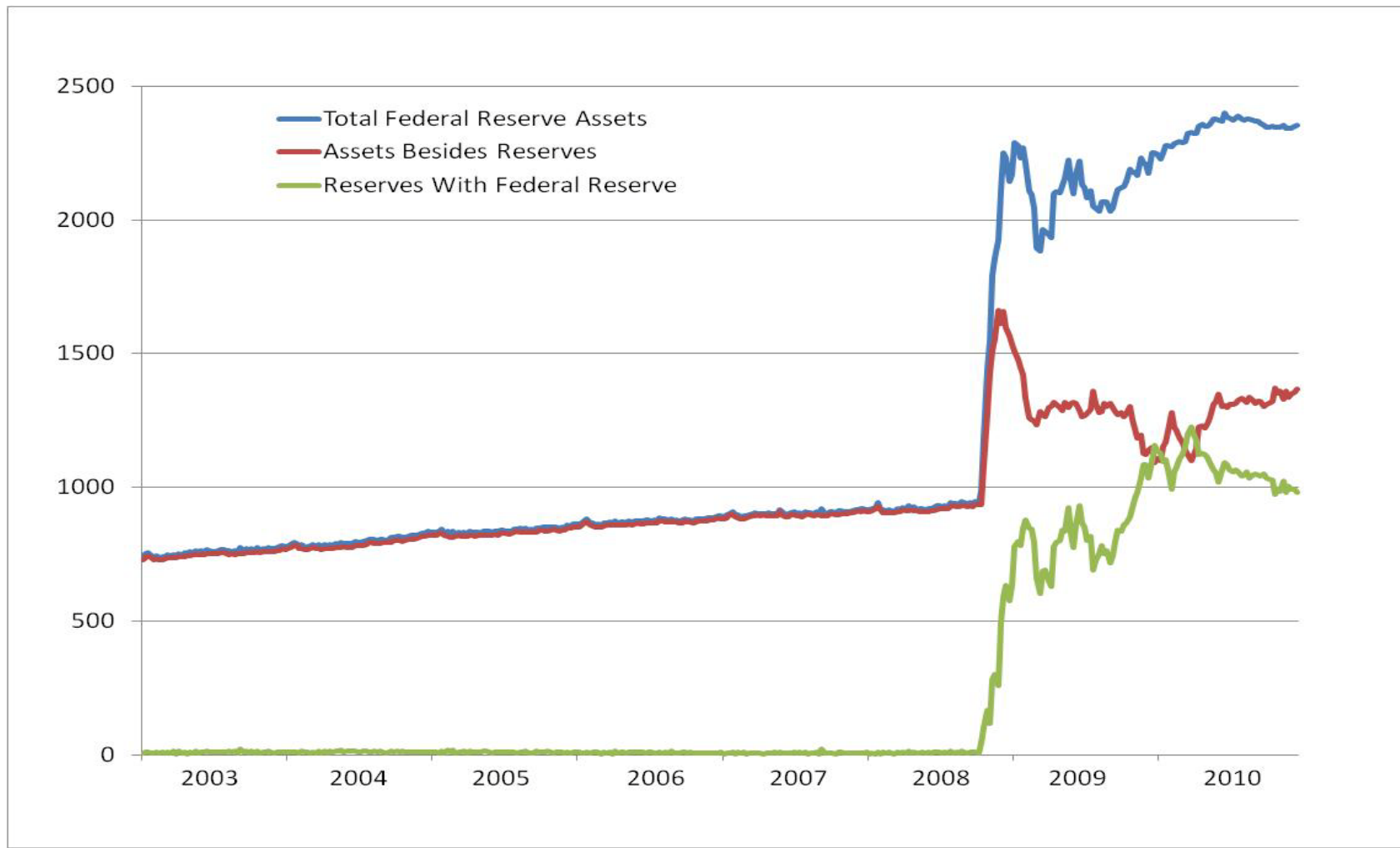


Monetary Policy : QE2

- ✚ At 0.1 interest rates, normal open market operations pushing on a string, liquidity trap.
- ✚ QE buys longer maturity bonds to lower LT interest rates.
- ✚ Effectiveness depends on signaling and expectations, results can be perverse.
- ✚ Need 2 instruments for 2 targets: Need pull as well as the push. QE would be much more effective with fiscal stimulus.
- ✚ But rising deficits raise doubts about long run debt. (Economy between a rock and a hard place)



So far bank reserves remain piled up.





Fiscal Policy: Stimulus 2

- Effectiveness muted given poor long-term budget outlook. Could be enhanced with credible medium-term deficit reduction and/or comprehensive tax restructuring.

CBO score for the Tax Relief, Unemployment Insurance Reauthorization and Job Creation Act of 2010

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2011-15</u>
Change in Revenues				
Tax Rate Extension	-99.0	-149.1	-66.5	-330.5
AMT + Estate Tax Relief	-90.4	-95.6	-12.6	-204.2
Investment Incentives and Other	-80.8	-72.8	-1.8	-110.1
Payroll Tax Holiday	-67.2	-44.4	0.0	-111.7
Total	-337.5	-362.0	-80.9	-756.4
Change in Spending				
Tax Relief/Other	2.2	39.4	38.8	80.4
Unemployment Insurance Extension	34.5	21.6	0.0	56.1
Total	36.7	60.9	38.8	136.4
Net Change in Deficits	374.2	422.9	119.8	892.9



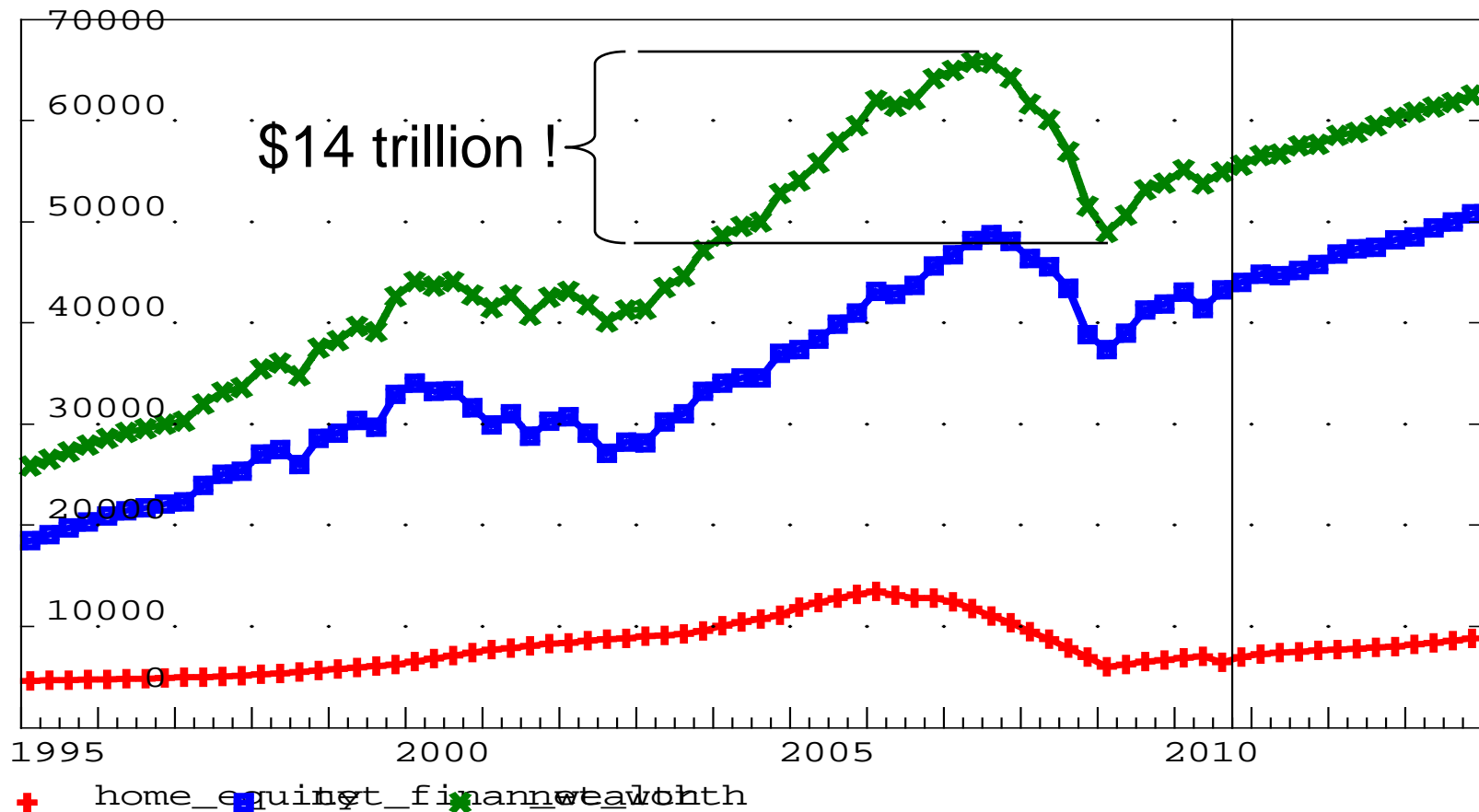
The most significant problem remains: Balance Sheet problems among consumers, banks and others

- ✦ Effectiveness of monetary and fiscal policy are still held back by deleveraging.
- ✦ Consumers still need to reduce their debt load considerably.
- ✦ Around 25% of mortgage holders are under water (NV-66%, AZ,MI,FL~50%,CA-42%).
- ✦ Loss of paperwork impedes attempts at workouts.
- ✦ Banks are reluctant to lend without a better feel for long-term liabilities for mortgage-backed bonds.
- ✦ Solution is not to reduce interest rates or extend payment term, but to (automatically?) reduce mortgage principal. Force write-offs.



Household Net Worth: Looking Up, Slowly

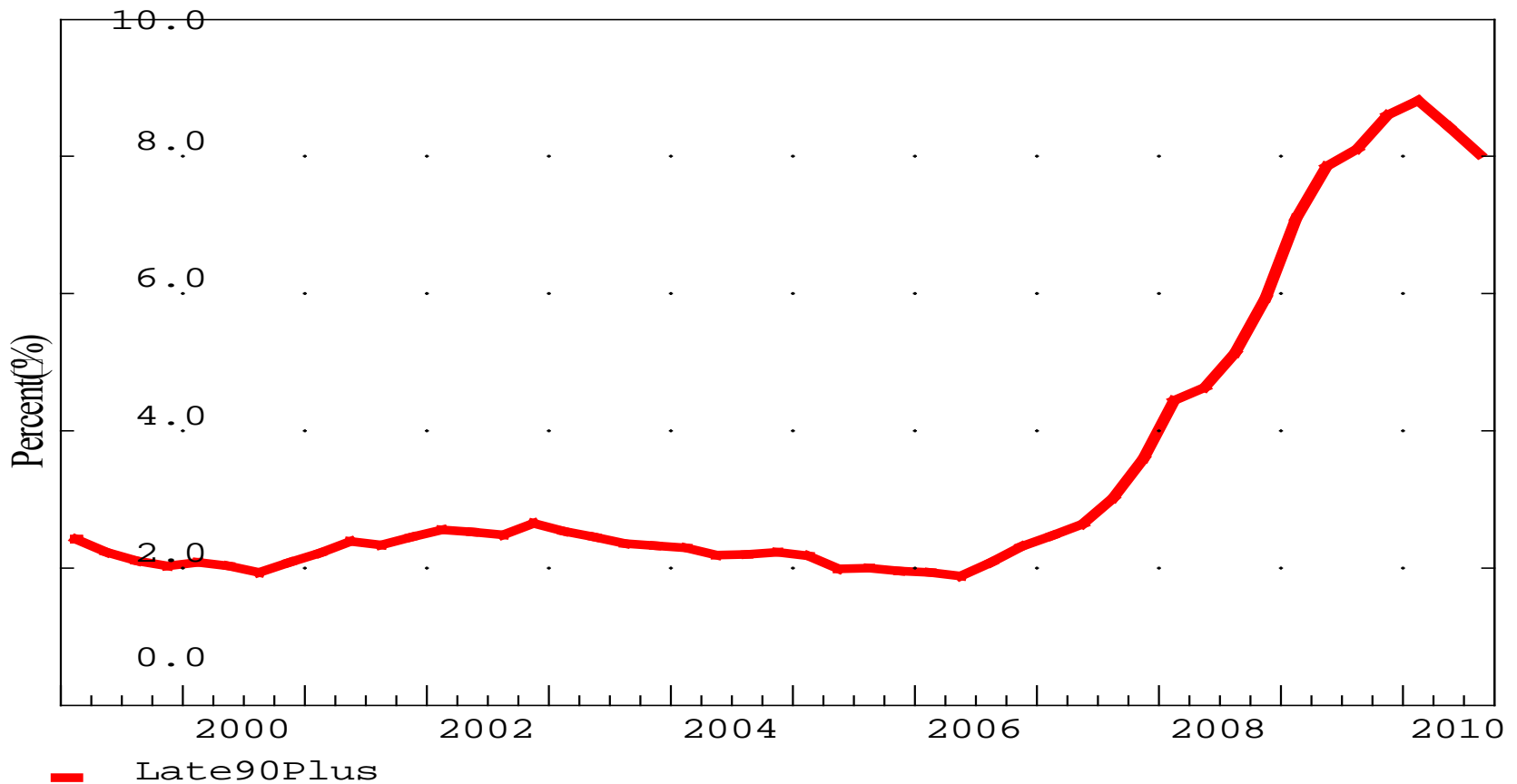
Household Net Worth, Billions of \$





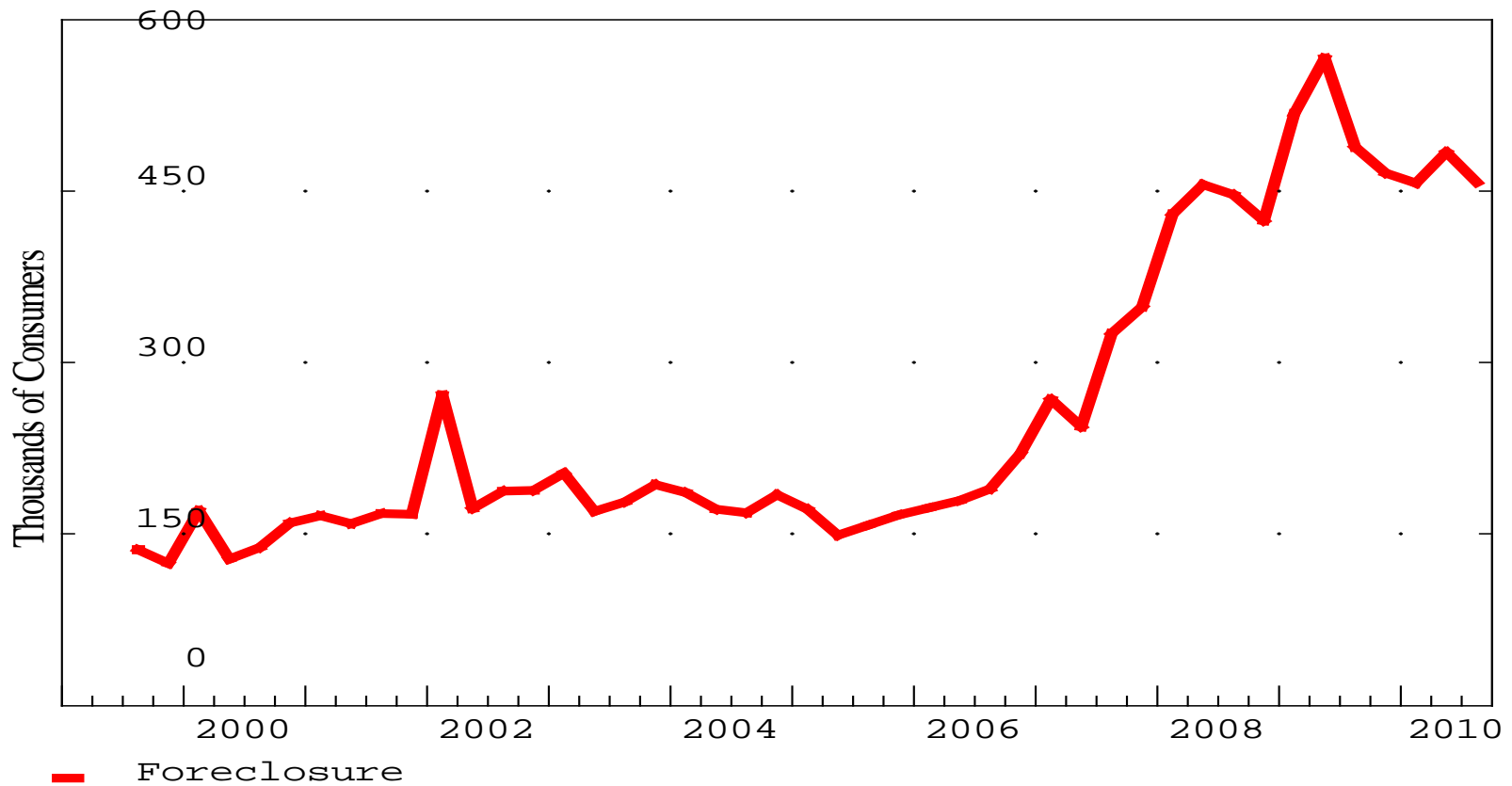
Total Balance by Delinquency Status

Percent Mortgage Balances 90+ Days Delinquent



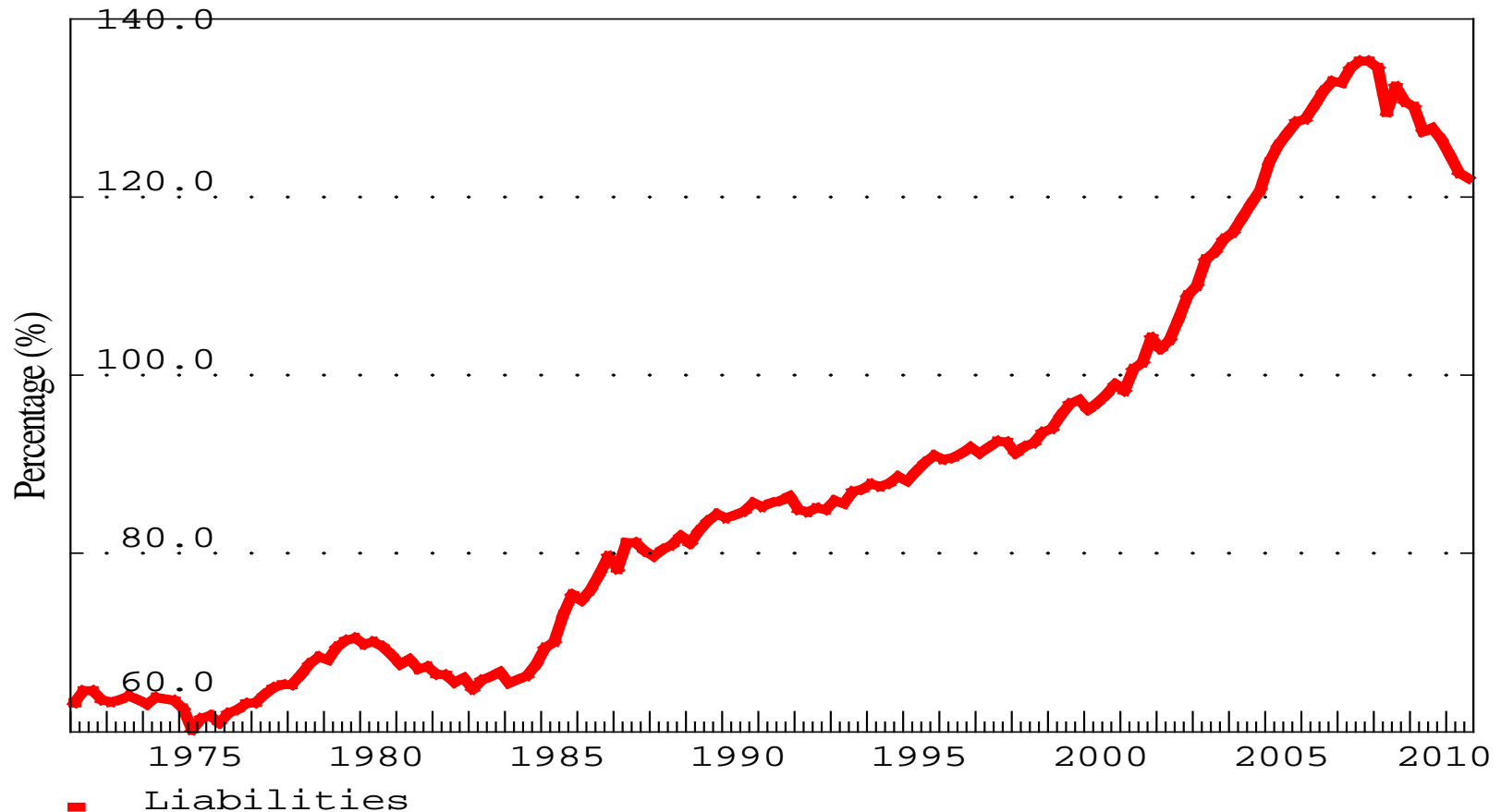


Number of New Foreclosures Thousands of Consumers





Household Liabilities Percent of Household Disposable Income





Longer term forecast (to 2035):

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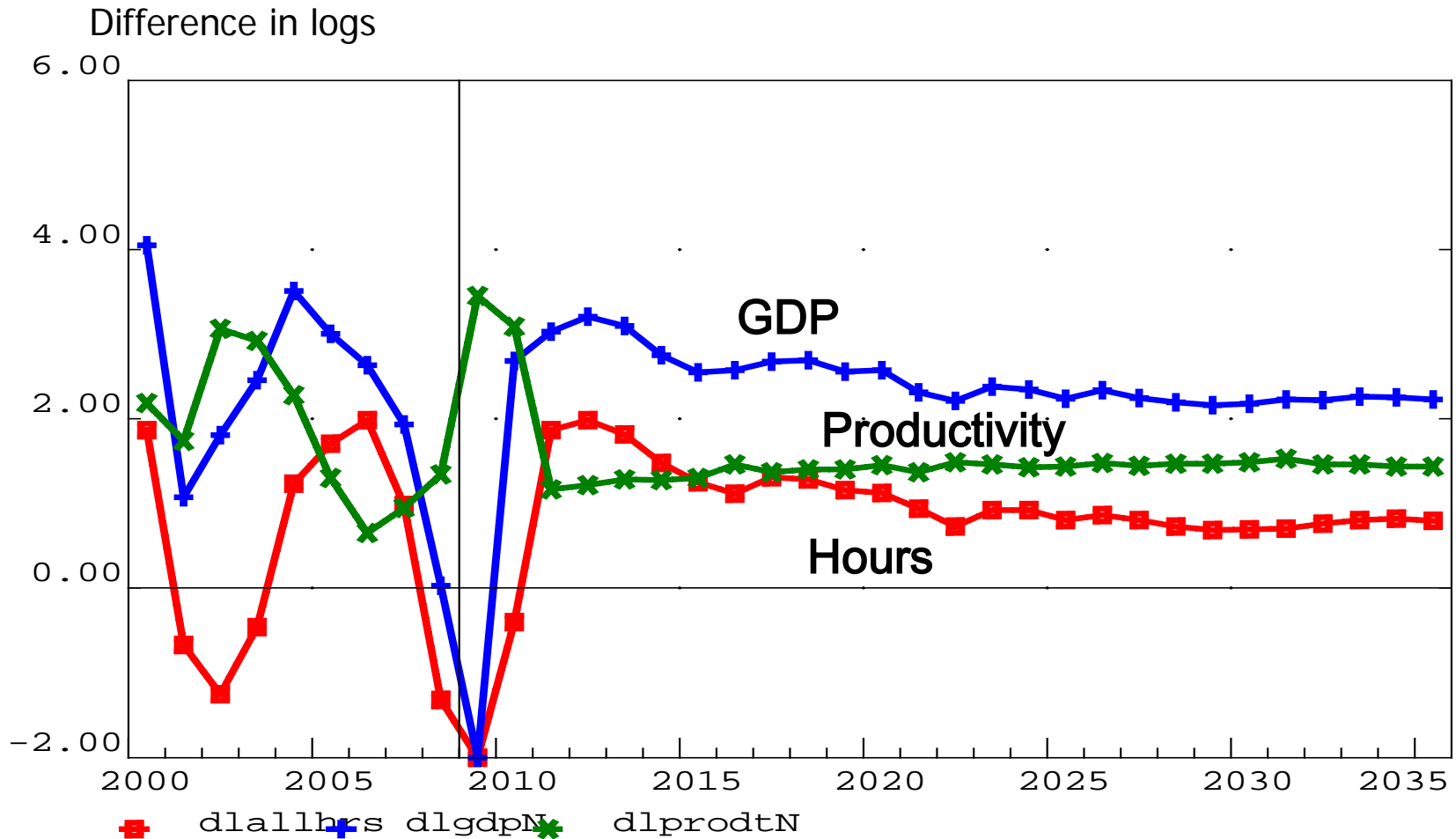
Long term overview

Real (Inflation-Adjusted) Quantities, Average Annual Growth Rates, Percent

	<u>10-15</u>	<u>15-20</u>	<u>20-25</u>	<u>25-30</u>	<u>30-35</u>
Gross domestic product	2.9	2.6	2.3	2.2	2.2
Personal consumption	2.5	2.2	2.1	2.1	2.1
Nonresidential structures	8.5	3.1	0.9	1.0	1.1
Equipment investment	7.5	3.5	2.8	2.5	2.7
Residential investment	9.5	5.1	2.4	2.3	1.7
Exports	6.5	5.7	5.0	4.4	4.2
Imports	4.9	3.1	3.0	2.7	2.6
Government	0.6	1.1	1.2	1.3	1.3
GDP deflator	2.4	2.3	2.2	1.9	2.0
Consumption deflator	2.6	2.5	2.4	2.1	2.2
	<u>10 15</u>	<u>15 20</u>	<u>20 25</u>	<u>25 30</u>	<u>30 35</u>
Unemployment rate (%)	8.3	6.4	5.4	5.2	5.3
Percent of GDP					
Current account	-3.1	-2.7	-2.0	-1.5	-1.1
Federal net borrowing	-7.6	-4.8	-3.7	-3.3	-2.7



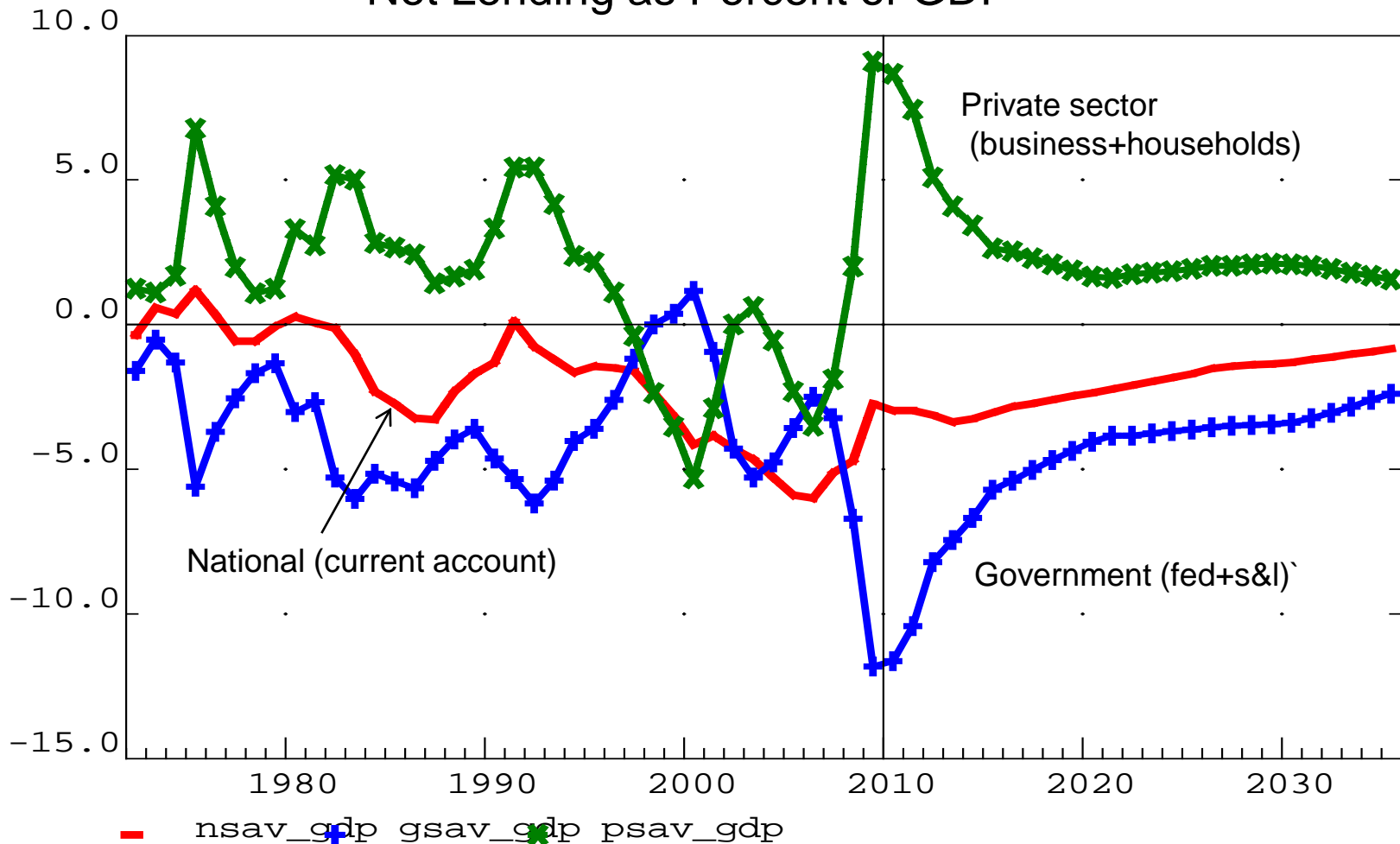
*Long term potential growth is just above 2.0%
(strong productivity, low labor force growth)*





Long Term Overview: Nominal Balances Converge to (almost) Zero

Net Lending as Percent of GDP

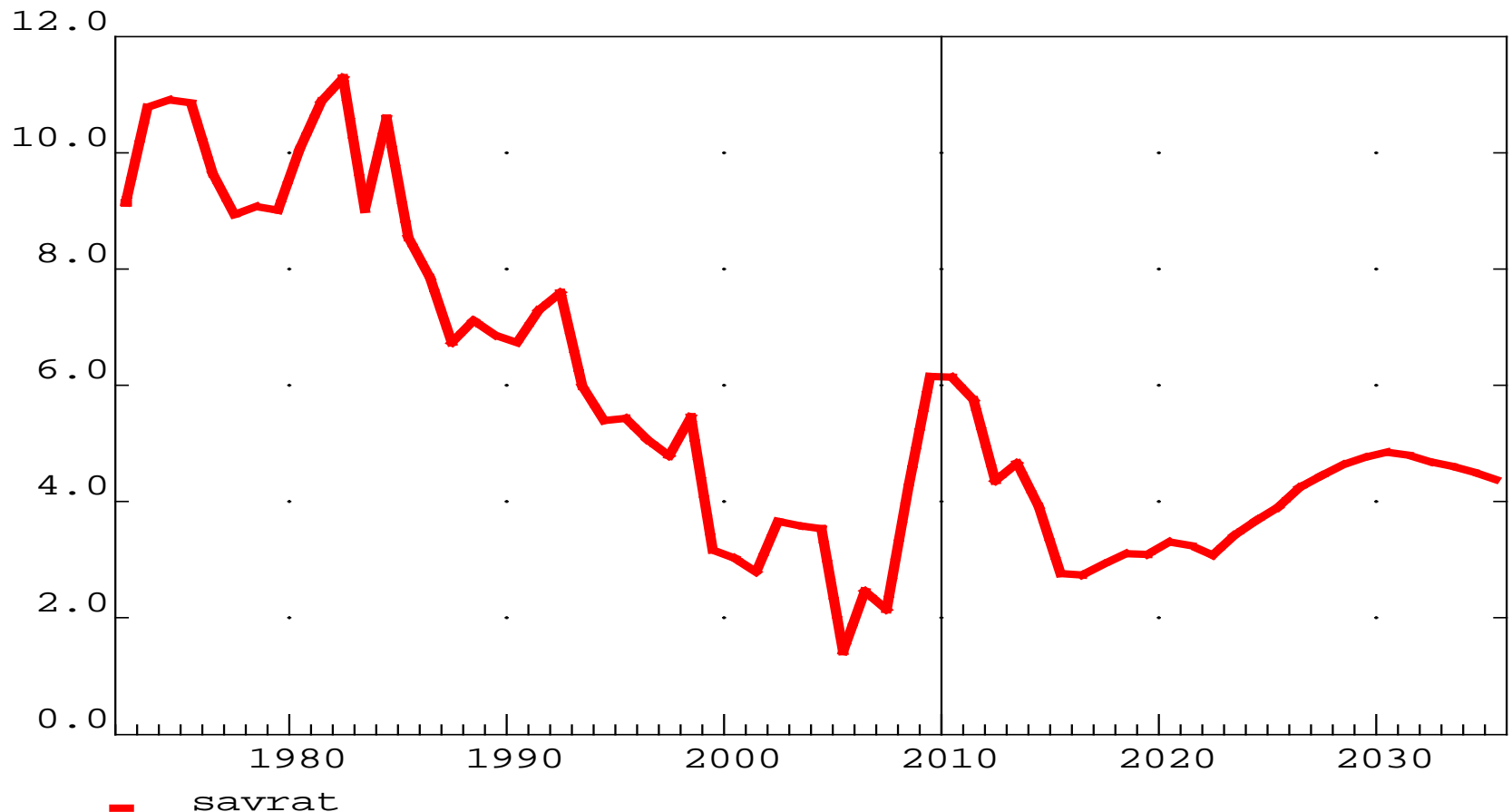




Household Savings Rate

Near term spurt because of deleveraging. More realistic expectations will drive slow consumption growth

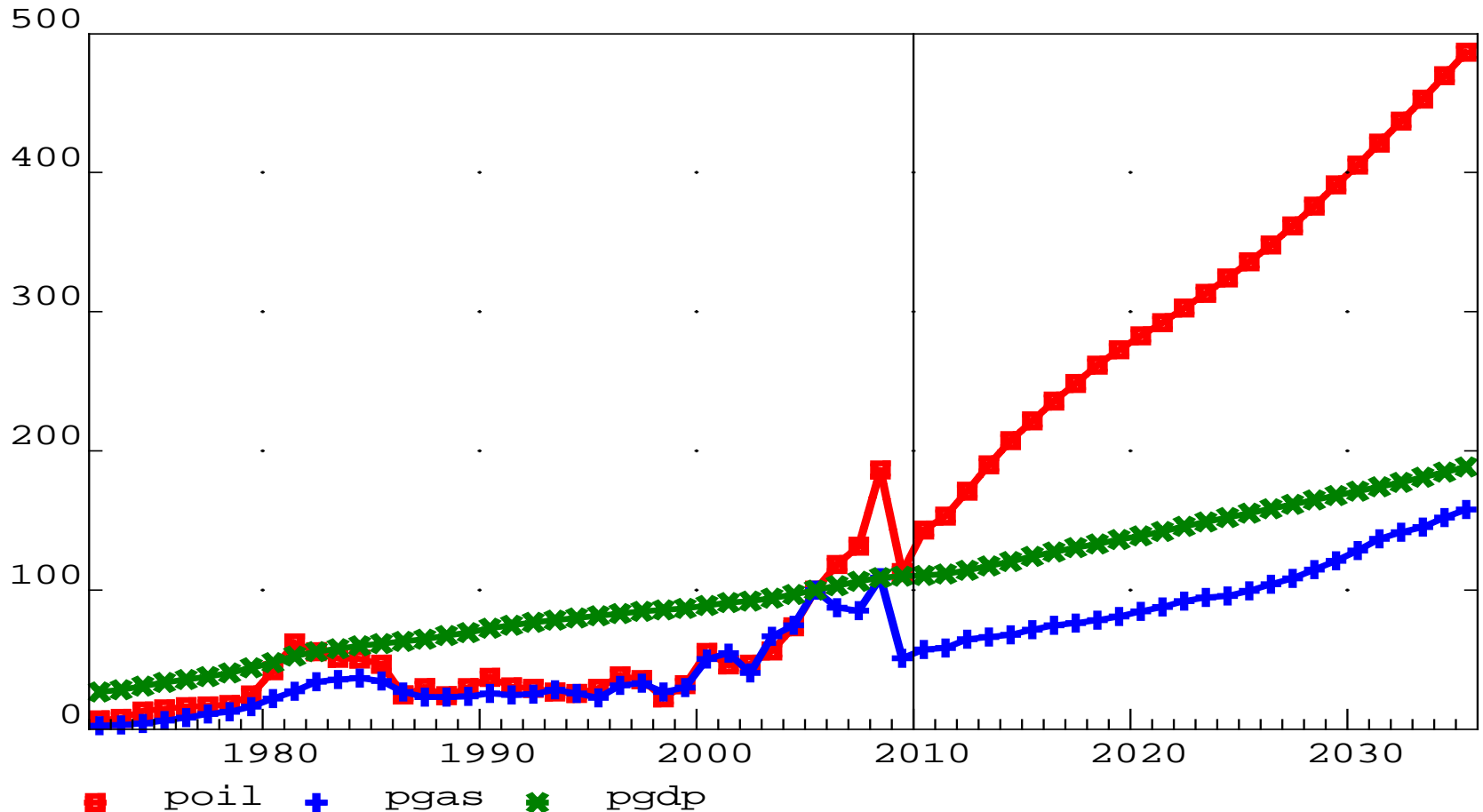
percent





Oil/natural gas prices steady in real terms

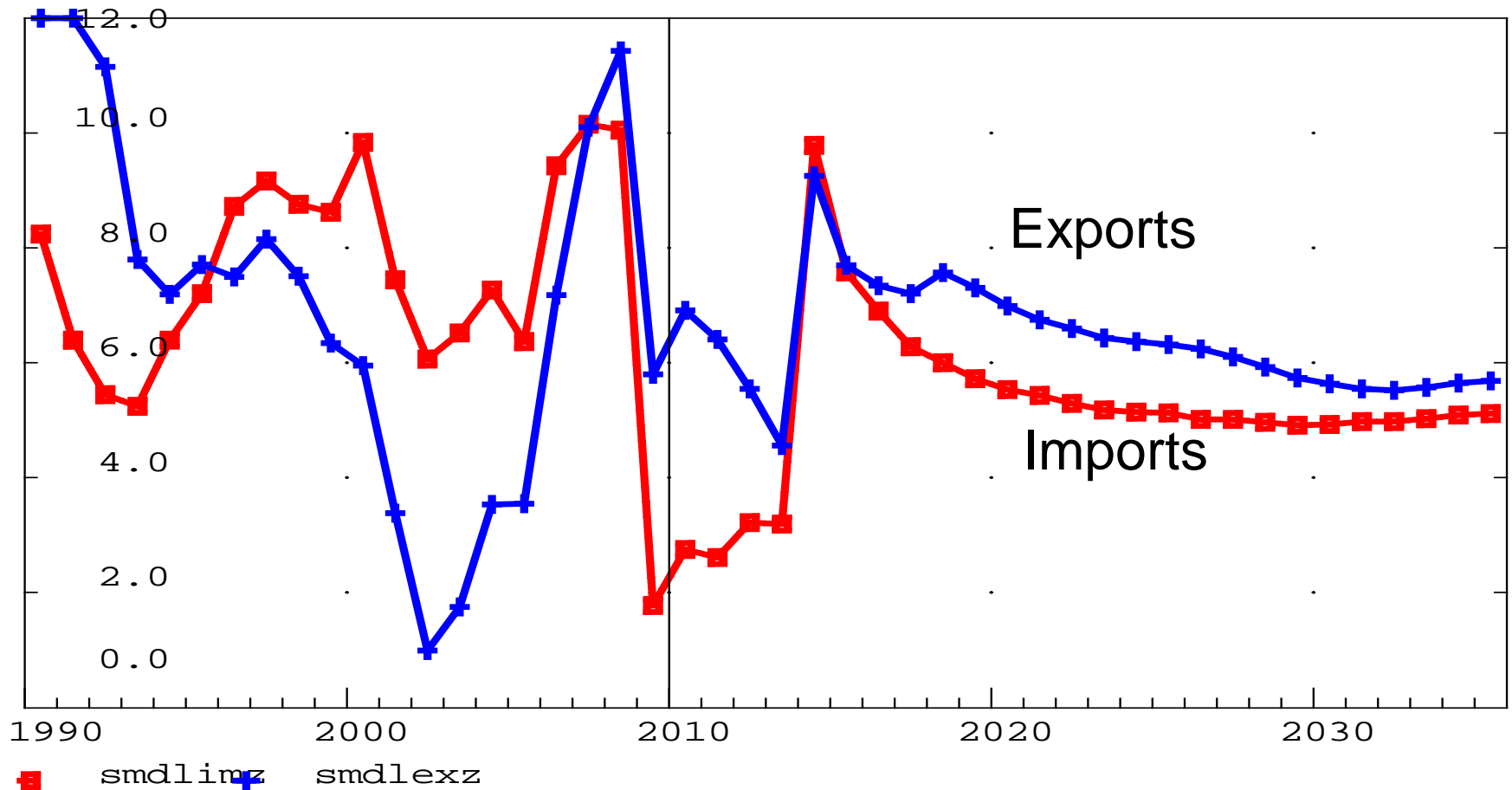
Nominal Price indices: 2005 = 100





Nominal import and export growth

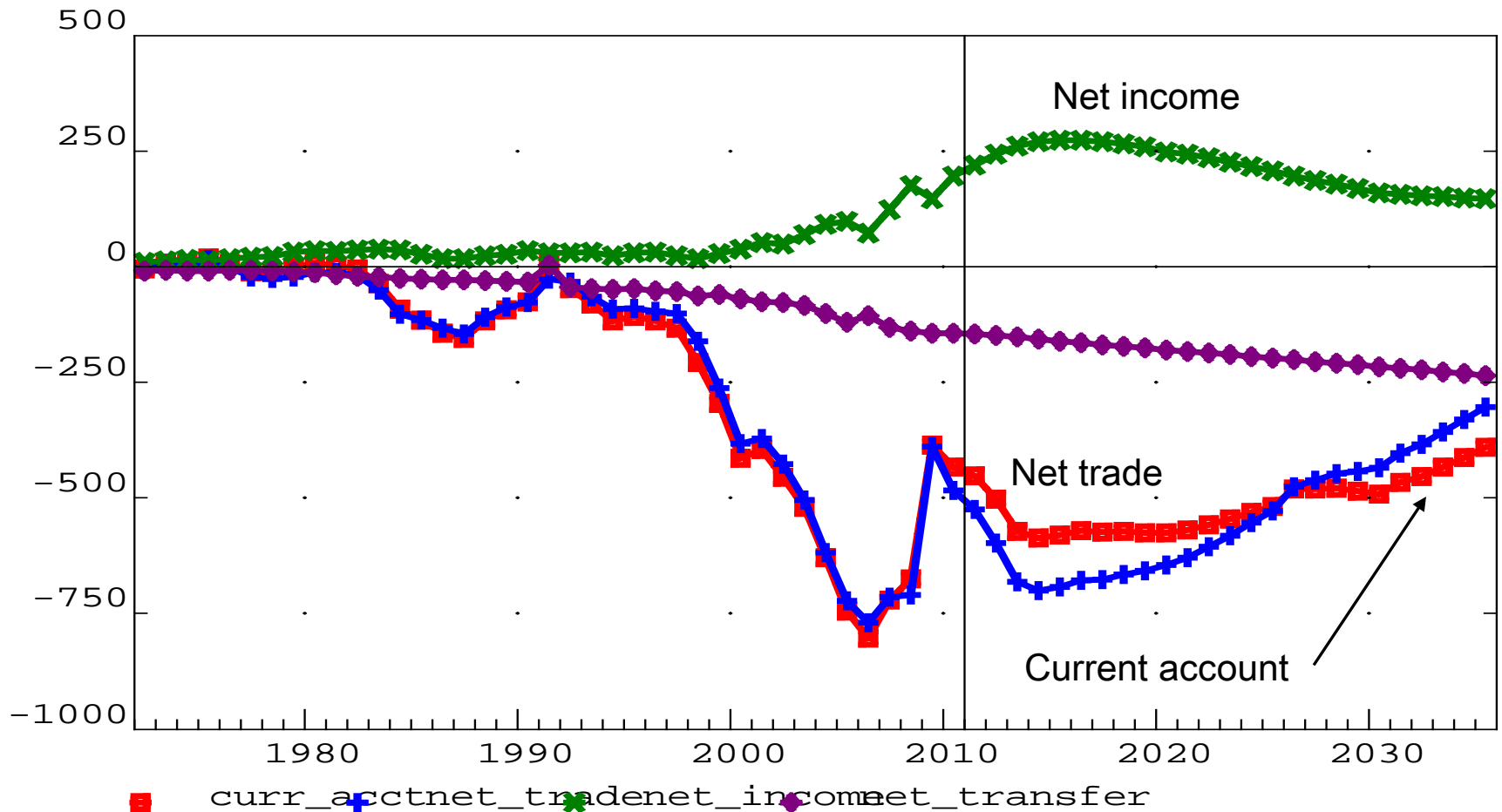
Percentage change of five year moving average





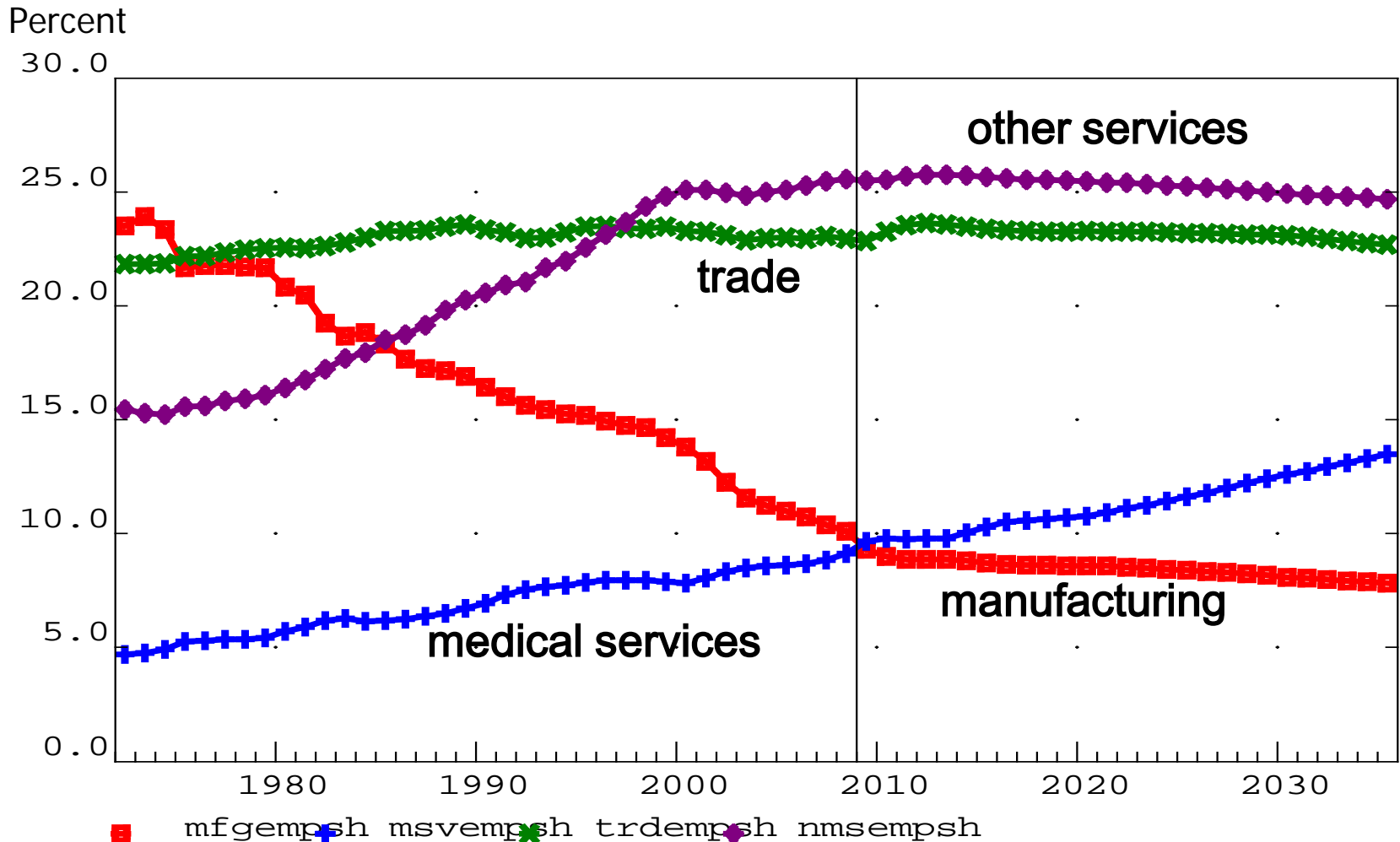
Current account deficit: soft landing

Billions of dollars





*Industry employment shares:
Productivity growth must come from all sectors*





Reducing The Federal Deficit

- *The Moment of Truth*, Report of the National Commission on Fiscal Responsibility and Reform, Dec. 2010. (Bowles-Simpson or NC).
- *Restoring America's Future, Reviving the Economy, Cutting Spending and Debt, and Creating a Simple, Pro-Growth Tax System*, Bipartisan Policy Center (Rivlin-Domenici or RD).
- *Choosing the Nation's Fiscal Future*, National Research Council and National Academy of Public Administration, January 2010 (NRC).
- *The Long-Term Budget Outlook*, Congressional Budget Office, June 2010 (CBO).



Reducing the Federal Deficit

Objectives and Method

- ✦ Stabilize debt/gdp (60% ?)
- ✦ Curtail discretionary spending growth, perhaps to level of inflation.
- ✦ Reform (reduce) entitlements.
- ✦ Comprehensive tax reform
- ✦ Cap expenditures/revenue at x% of GDP.
- ✦ Reform budget process.



Tax Reform: How can we tax labor and capital less and consumption more?

- ✦ Reduce/Eliminate tax expenditures, especially:
 1. Convert health care premium income exclusion to tax credit (voucher). (~\$160 billion in FY2010)
 2. Phase out mortgage interest deduction (~\$110 bill in 2010).
- ✦ Use proceeds to lower and flatten rates.
- ✦ Lower Corporate tax rates (phase out eventually)
- ✦ Unify rates across earned, dividends, capital.
- ✦ Higher energy taxes/Carbon tax
- ✦ National Sales (RD) or Value Added Tax.



Entitlement Reform: Social Security

- ⊕ Increase cap on payroll taxes.
- ⊕ Change COLA to better reflect inflation.
- ⊕ Reduce benefits for richest, strengthen safety nets for poorest.
- ⊕ Increase retirement age.
- ⊕ Cover new S&L workers.
- ⊕ Little sentiment for private retirement accounts.



Entitlement Reform: Medicare

- ✦ **Restrain Rising Health Care Costs**
 - ❖ Replace/cap employer-provided health benefits exclusion.
 - ❖ Reform medical malpractice laws.
 - ❖ Excise tax on corn syrup (RD).

- ✦ **Ryan-Rivlin plan for Medicare**
 - ❖ ST: More cost sharing by increasing premiums, copayments and coinsurance.
 - ❖ LT: "Premium Support" voucher system with catastrophic caps.

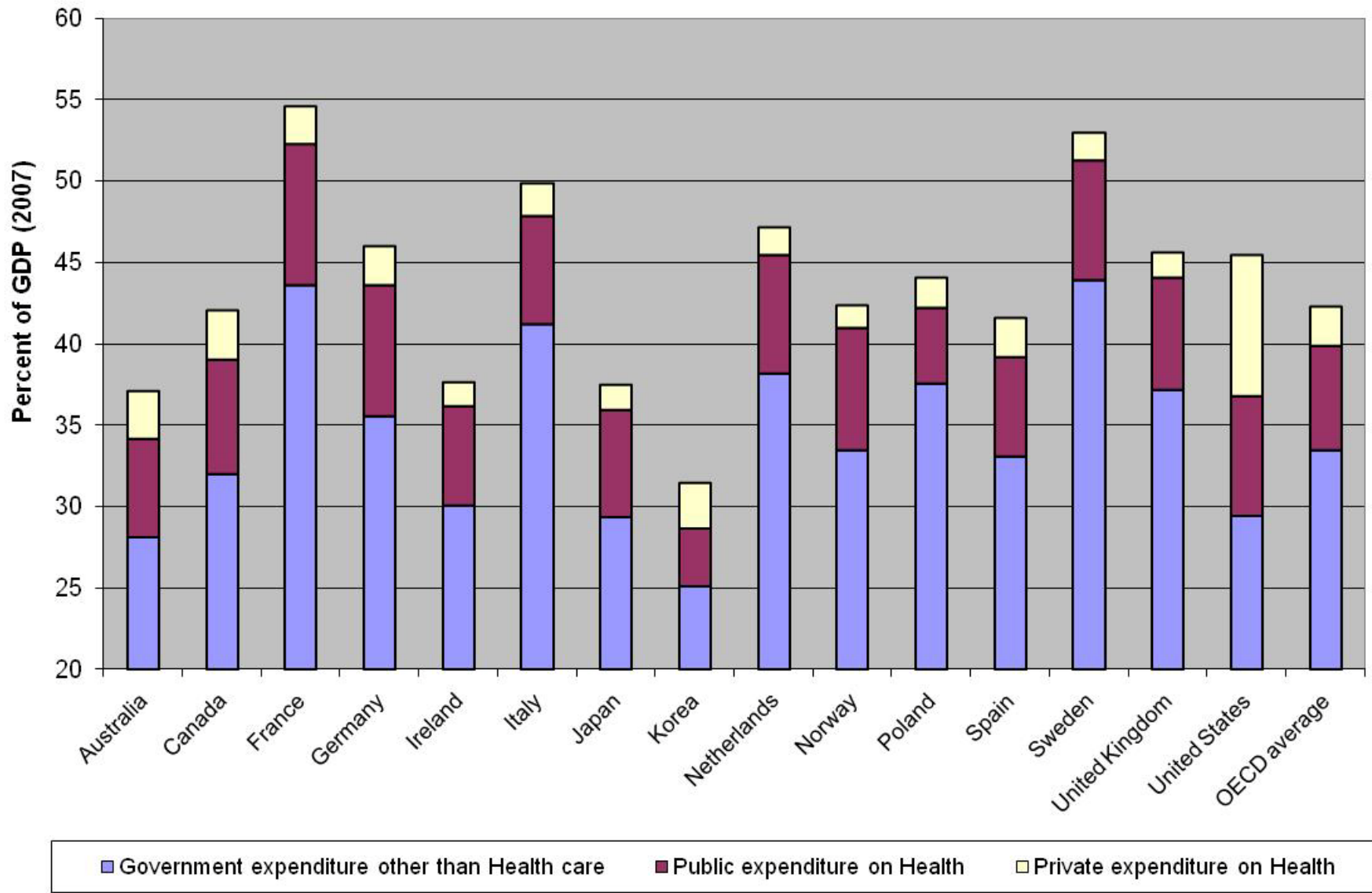
- ✦ **Cap Medicaid growth**



Worst idea of deficit reduction

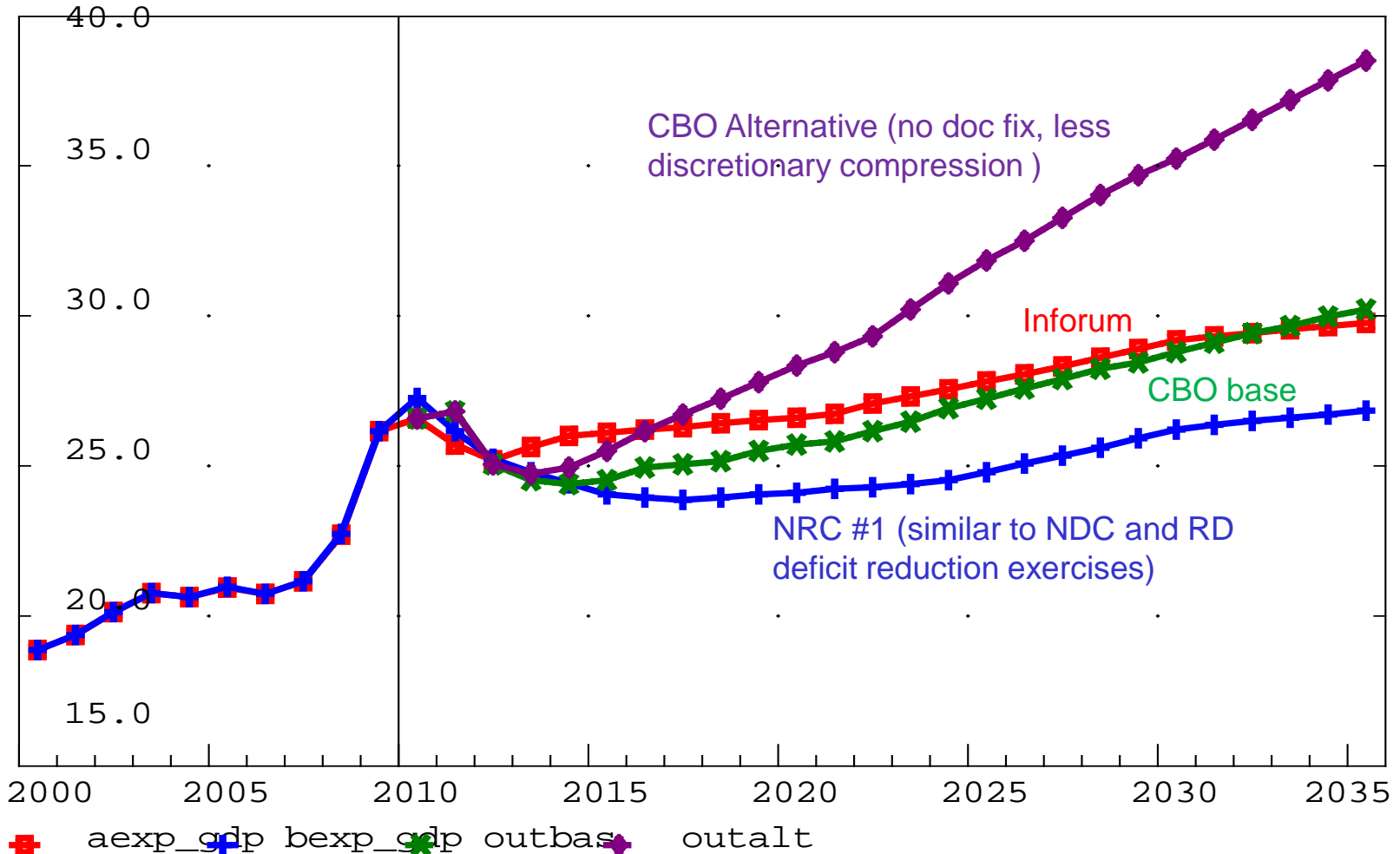
- ✦ Establishing an arbitrary cap on expenditures and revenue (21% in NC).
- ✦ Health care will grow as proportion of economy. Federal share of health care will increase.
- ✦ Baumol's Disease (Can it be cured?)
- ✦ Interest

Government and Health Care Expenditure



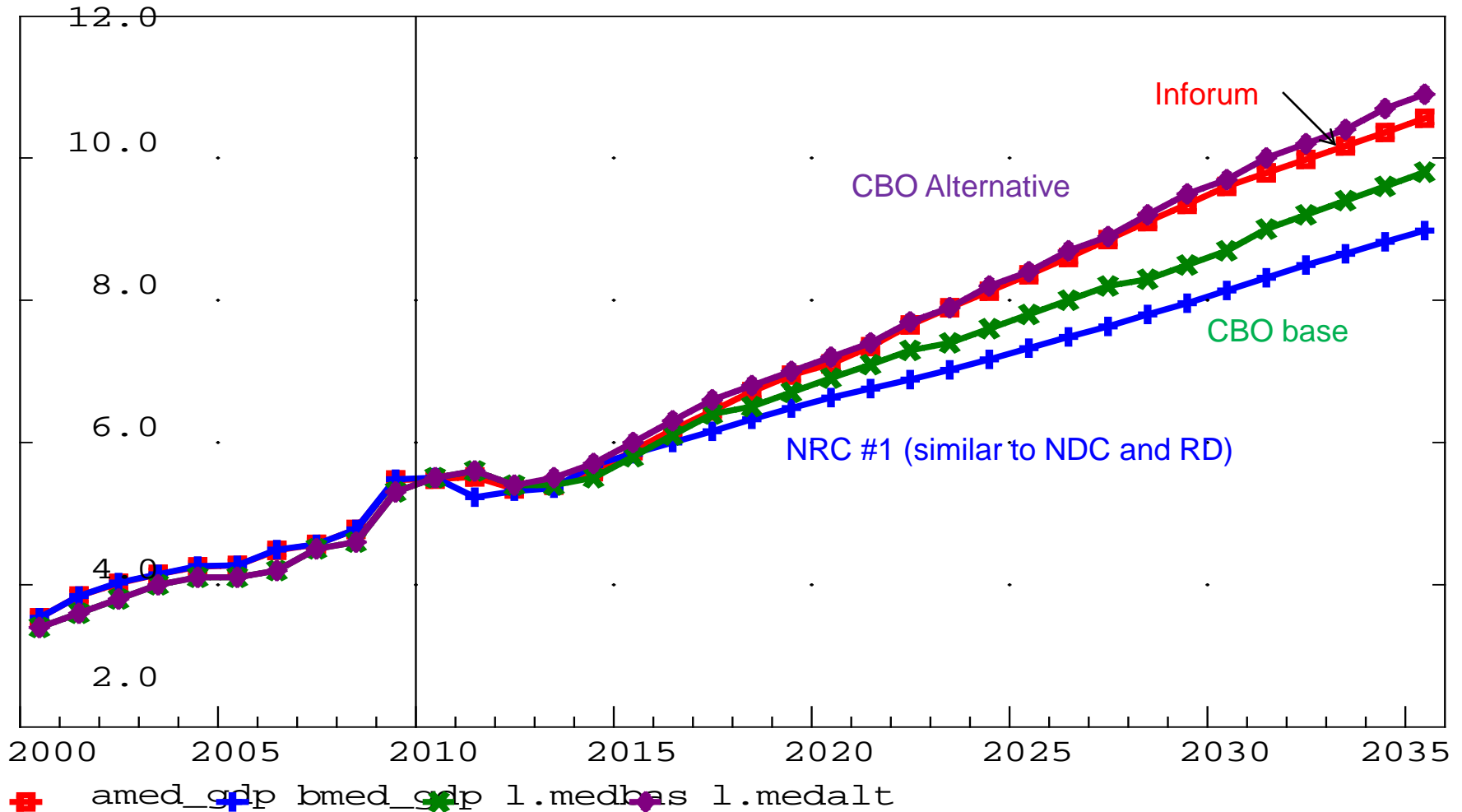


Federal expenditures as percent of GDP



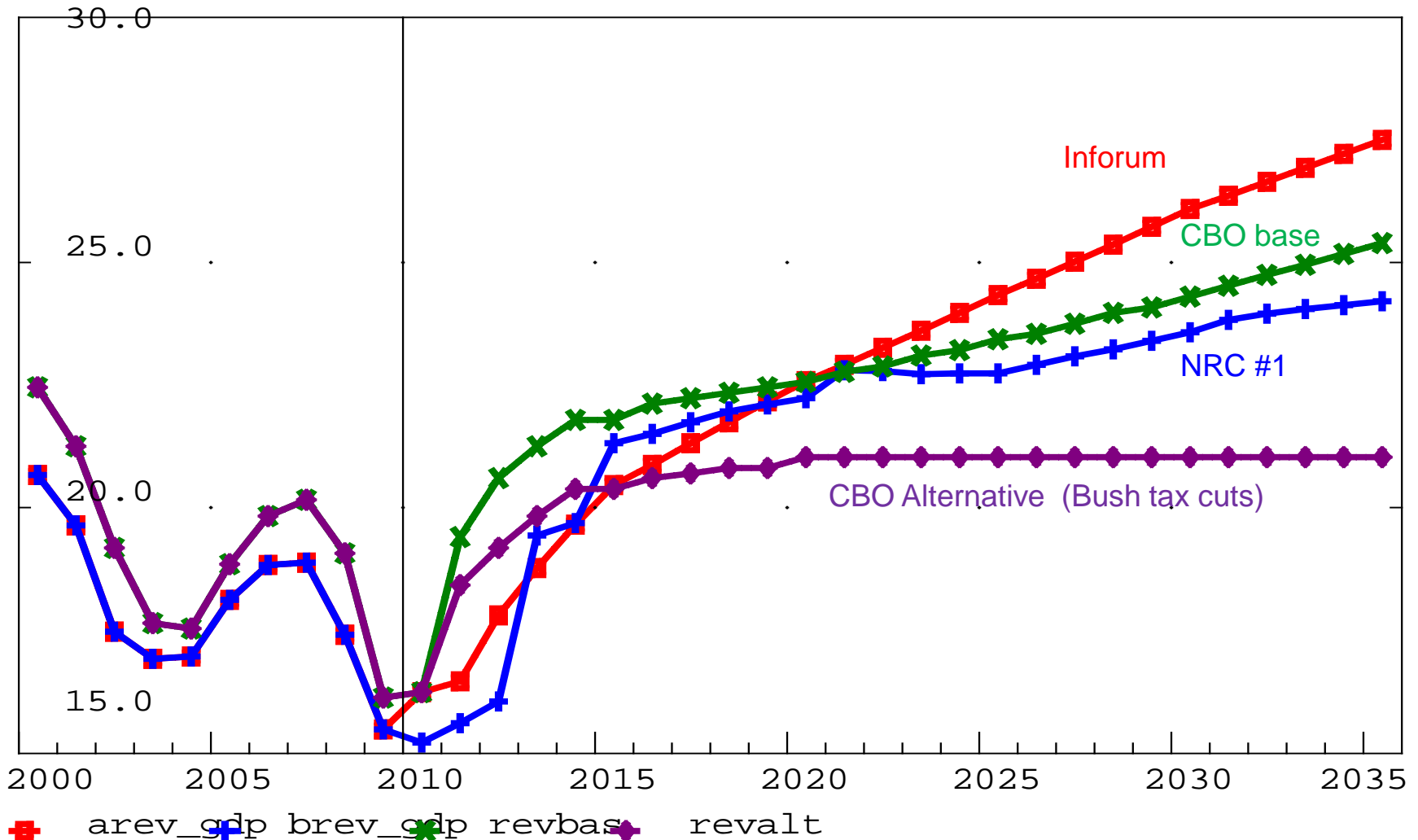


Fed Medical Expenditures as Percent of GDP



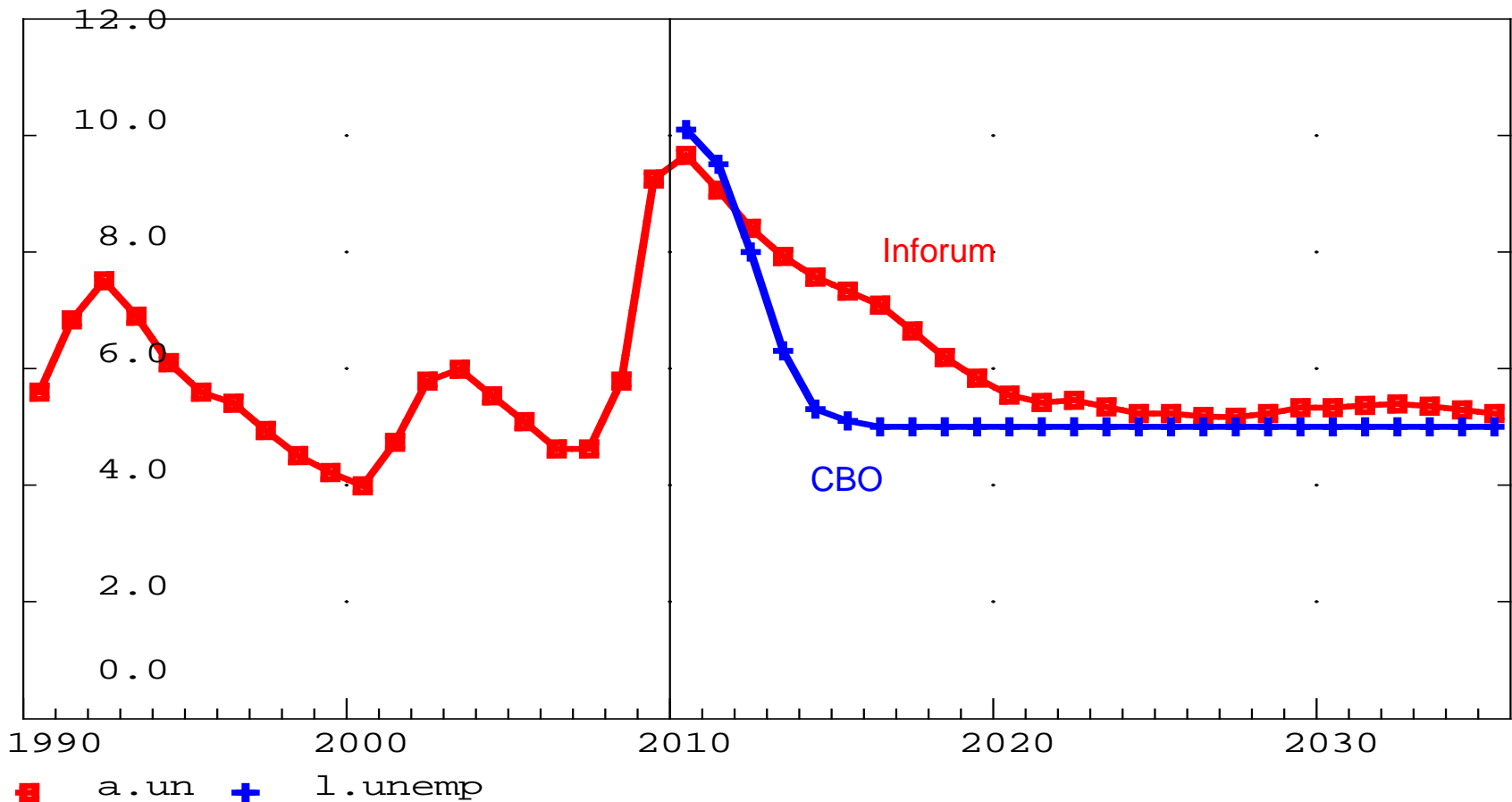


Federal Revenue as Percent of GDP



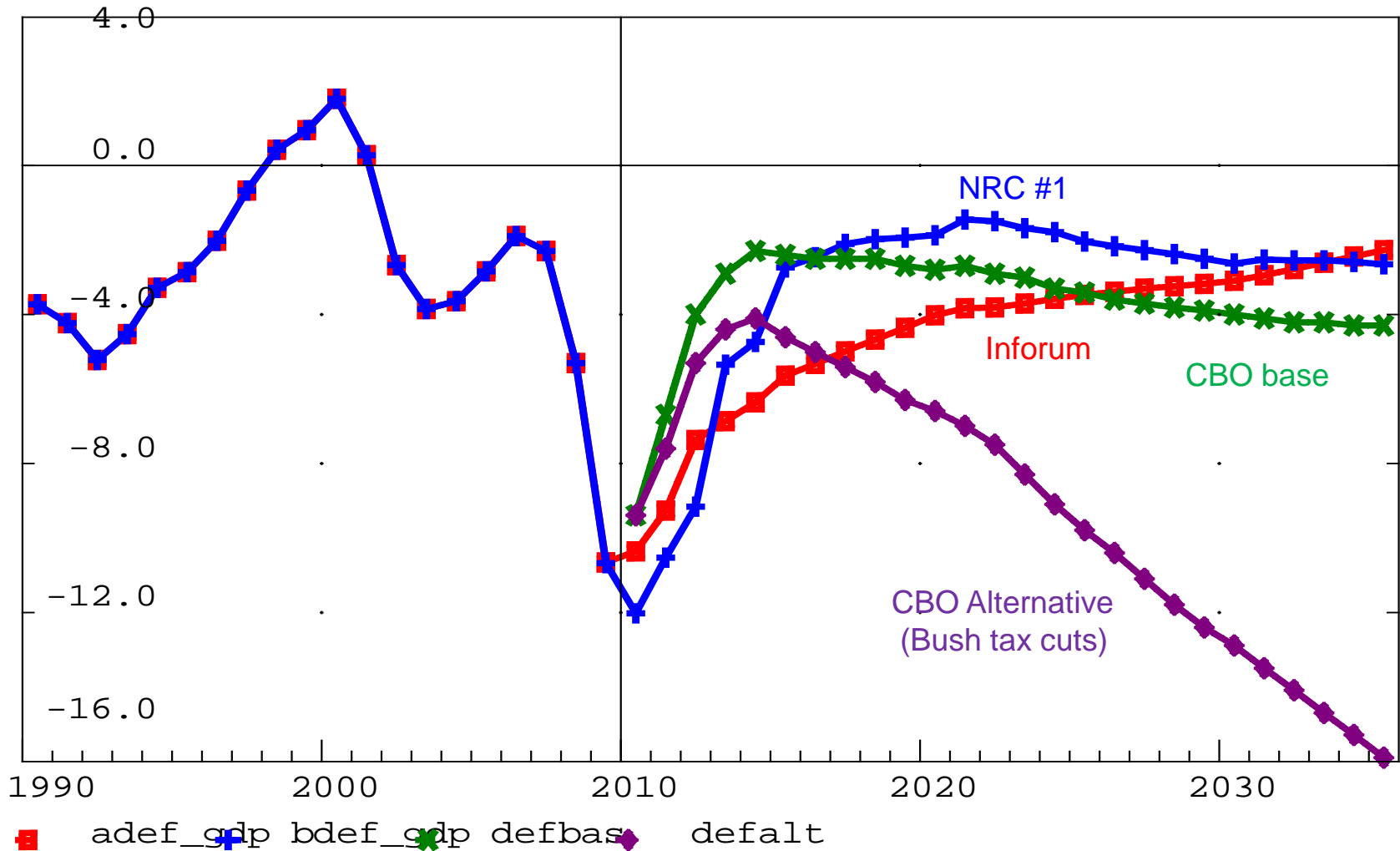


CBO sees faster recovery in growth and unemployment



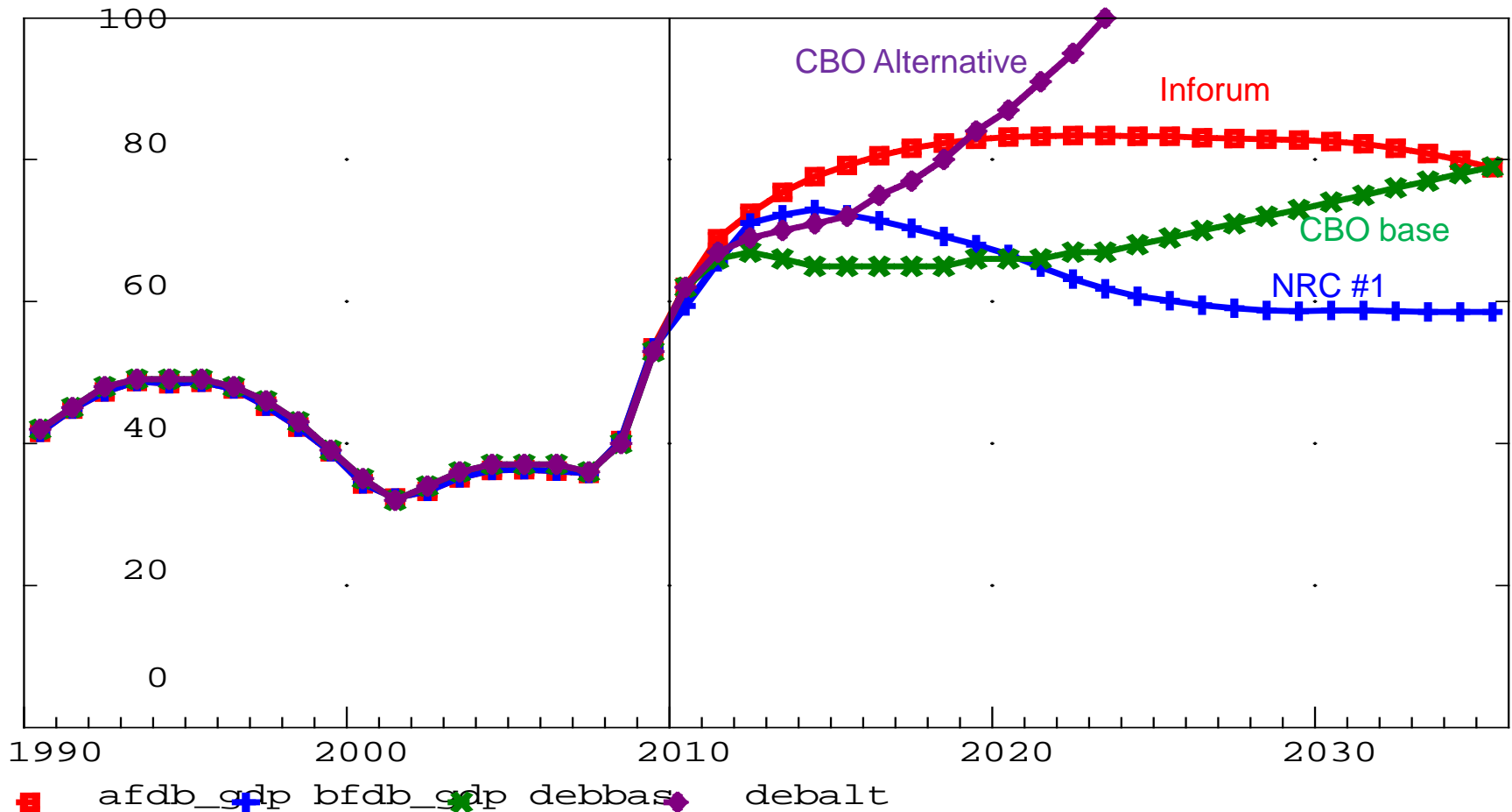


Federal Deficit as Percent of GDP





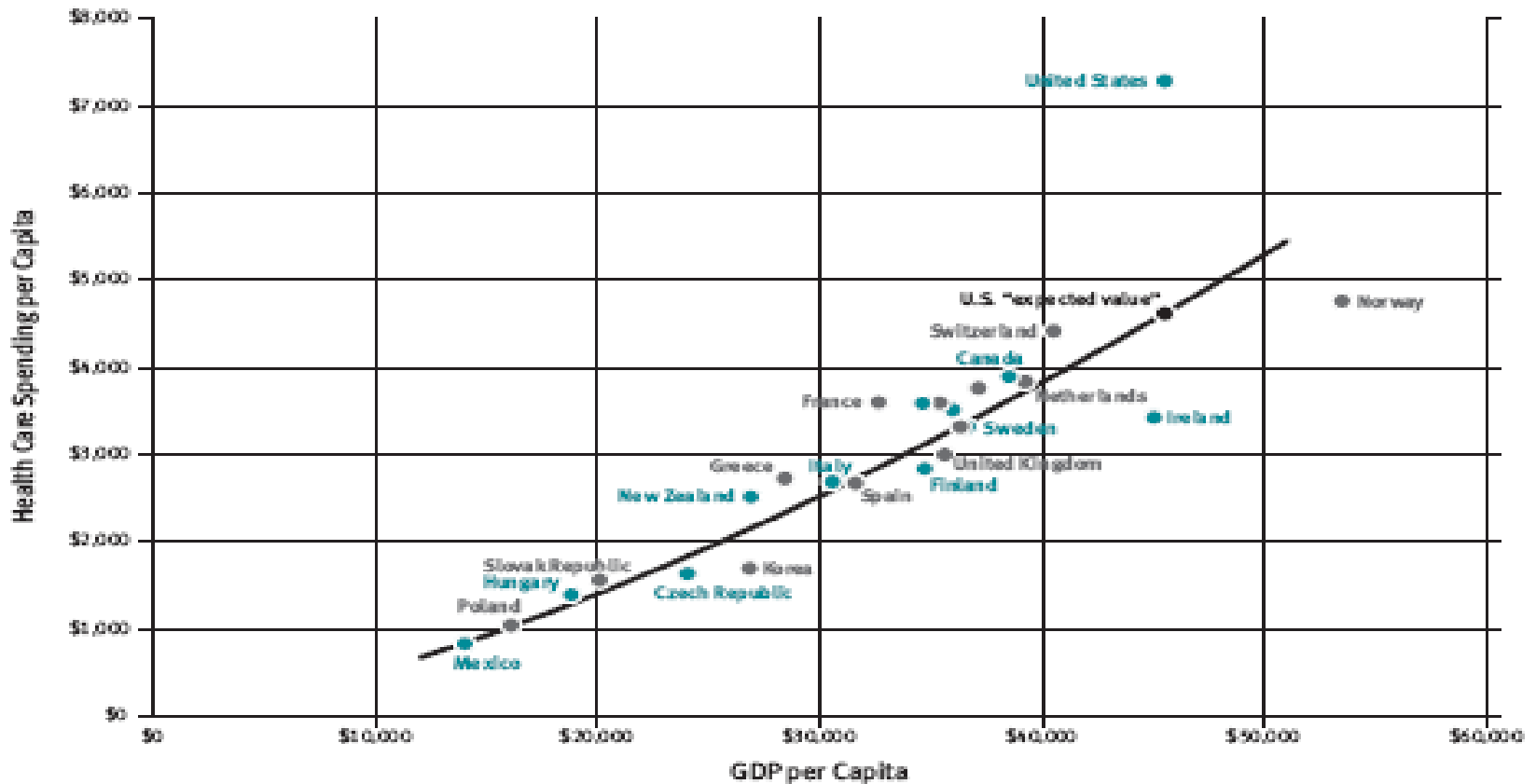
Federal Debt as Percent of GDP





The U.S. pays much more for Health Care...

Figure B-4: Relationship between national income per capita and health care spending, OECD Countries, 2007

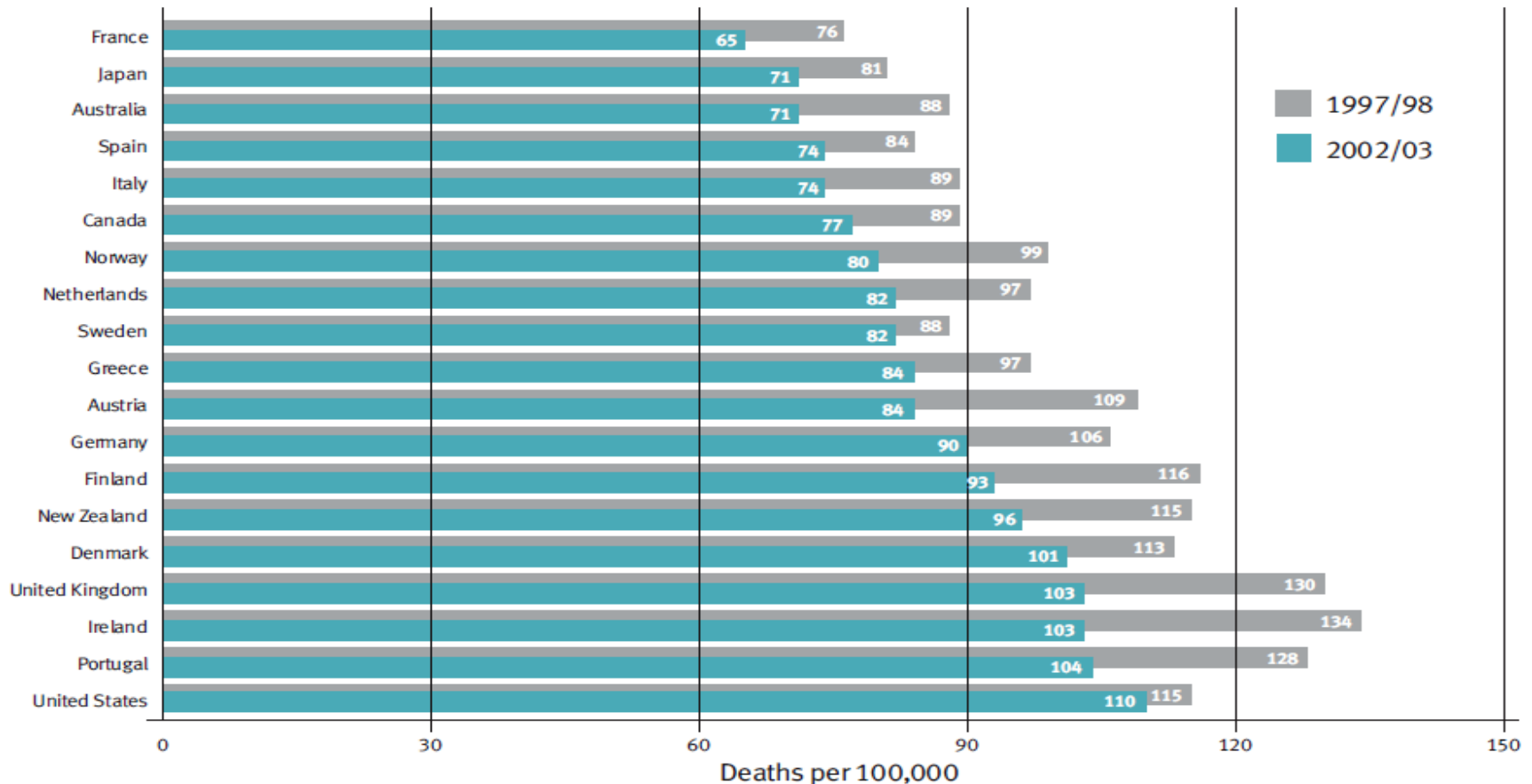


Source: OECD Health Data 2009



But health outcomes are generally inferior.

Figure B-3: Mortality amenable to health care, selected countries 1997 to 2003



Source: Nolte and McKee, 2008



“Business as usual” is not sustainable now.

U.S. Current Account Balance percent of GDP

