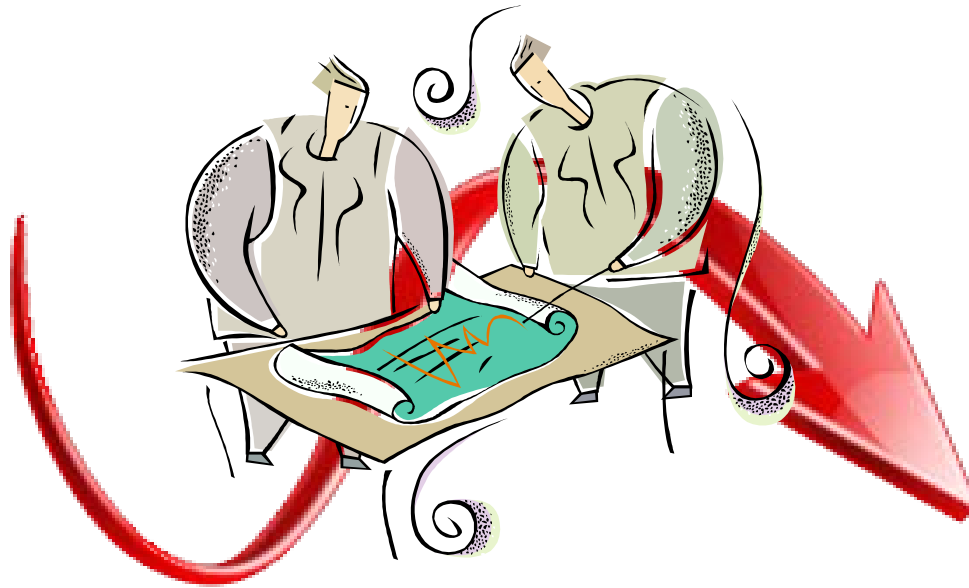




# *The Economic Outlook*



**Jeff Werling  
Inforum  
University of Maryland  
December 3, 2009**



## *The Short Run Overview*

- ✚ Recession was long, deep, and wide. But its over.
- ✚ Credit Crisis was potentially catastrophic, but bail-outs, while messy, have been largely successful. What's next?
- ✚ Massive fiscal stimulus is helping to spark recovery, but is due to run its course in 2011/12.
- ✚ Because of slow personal consumption growth, recovery will be very slow.



## *Longer term forecast (to 2030):*

We think the current crisis will greatly accelerate a transformation of growth in the economy.

- ❖ Lower labor force growth slows potential growth, Potential GDP growth between 2.0 – 2.5%.
- ❖ Weaker dollar, rising savings rate changes economic structure toward exports and away from consumption.
- ❖ Slower inflow of foreign capital will force external and government balances towards equilibrium.
- ❖ 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.



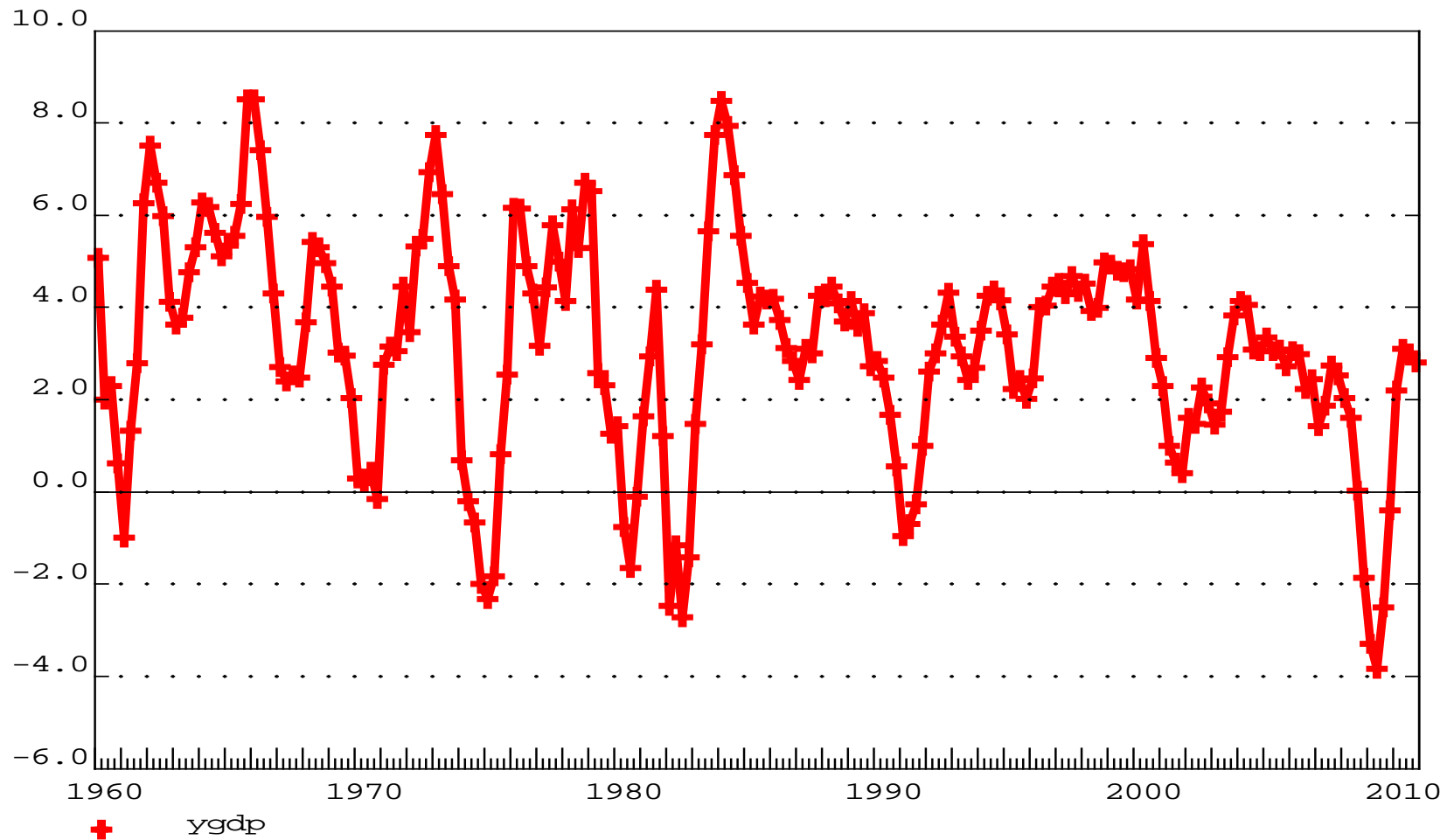
*Residential investment, at historic lows, is yet to revive.*





# *Worst Post-War Recession in GDP Terms*

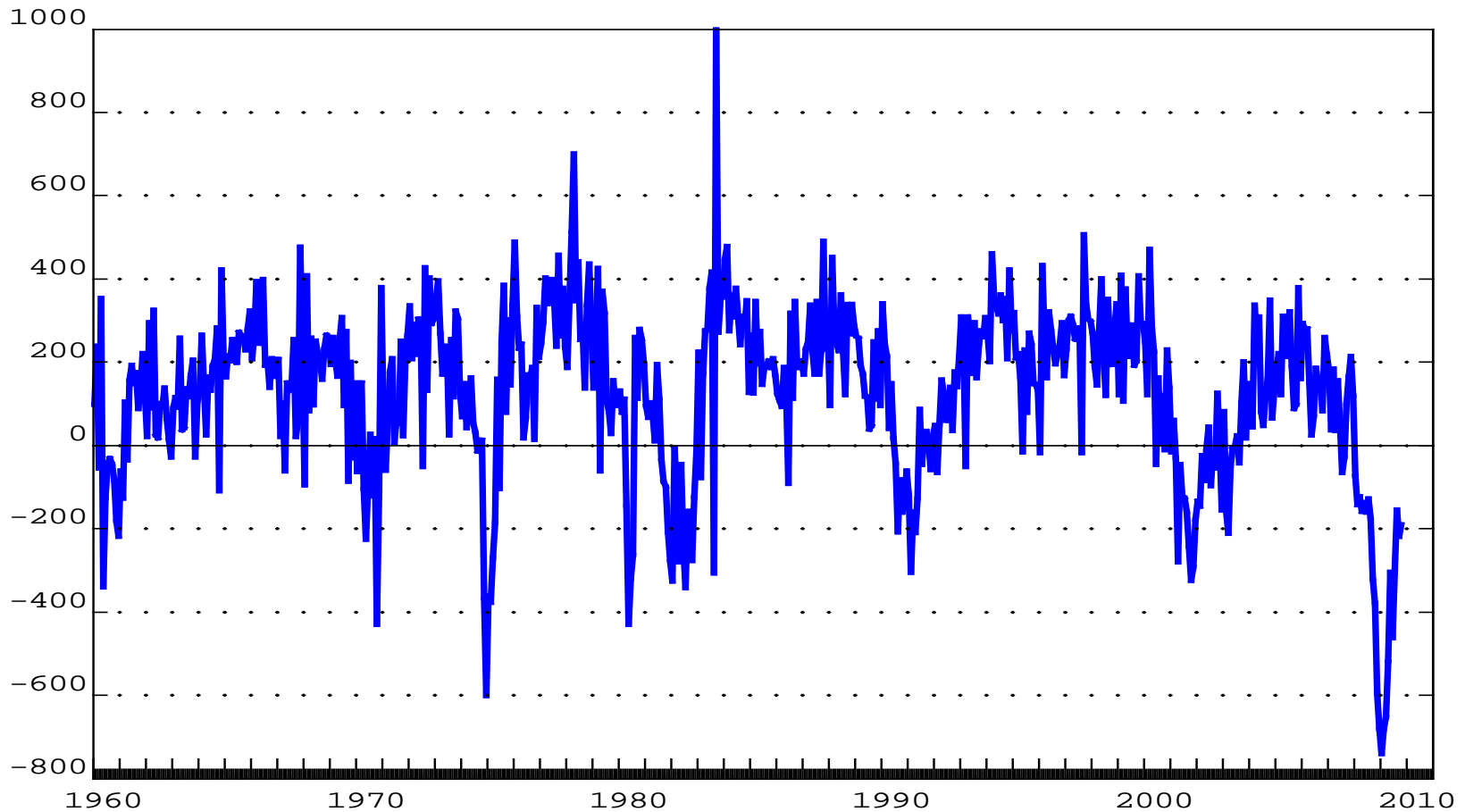
Real GDP year-on-year growth





*Thankfully, worst of job losses appear to be over*

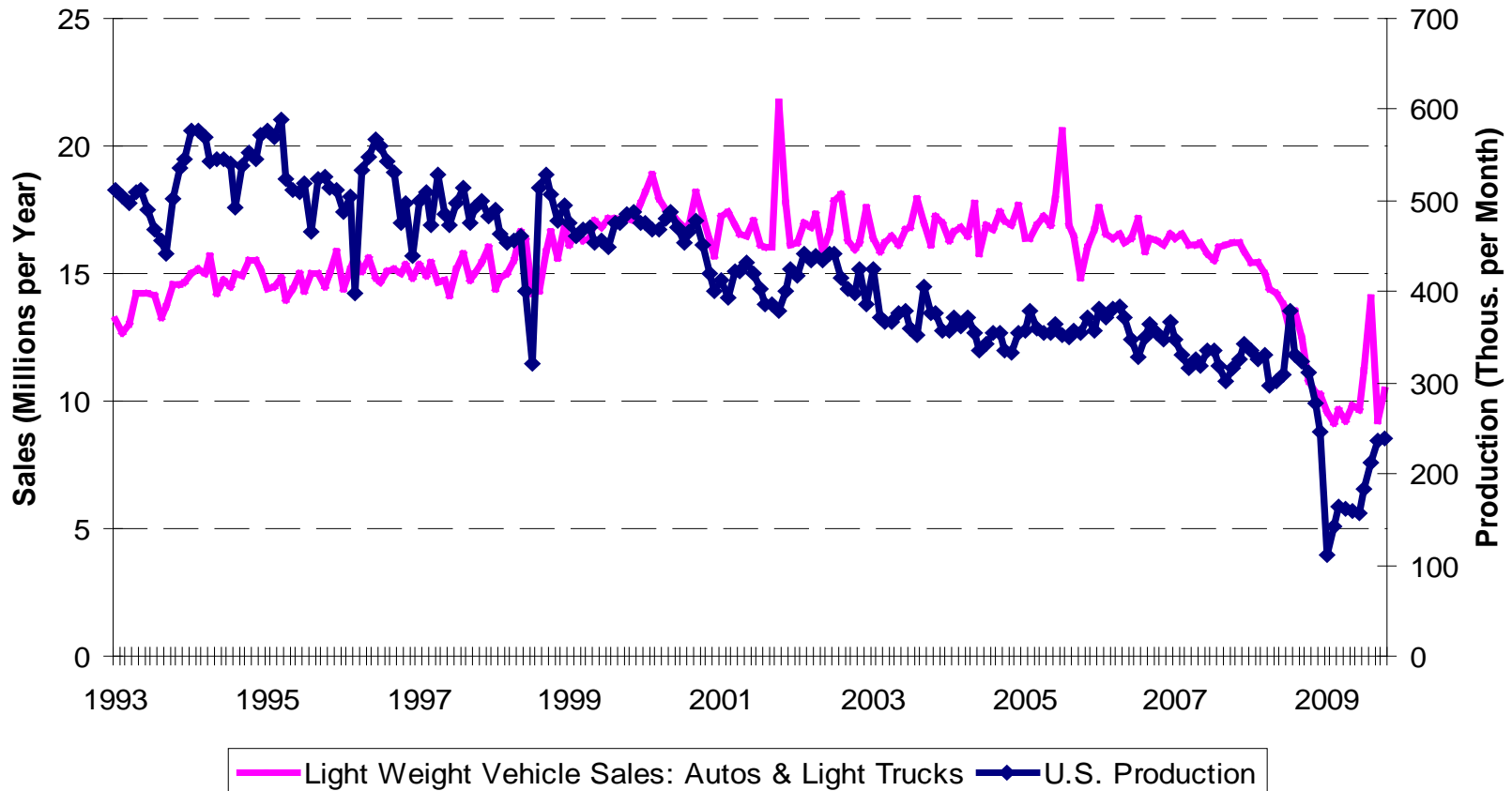
Net job creation, payroll survey, thousands





## *Pent up demand for clunkers?*

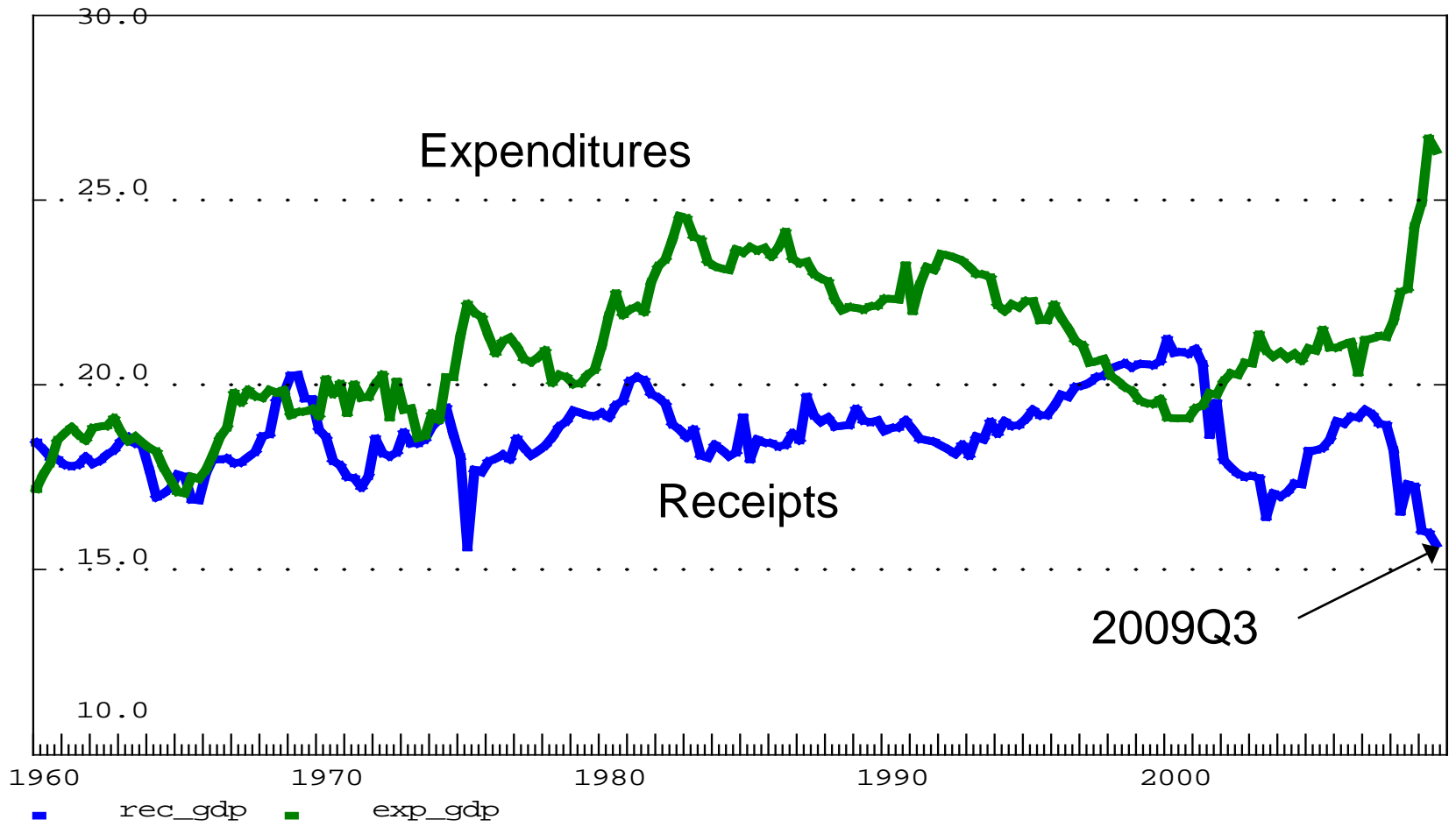
### U.S. Auto Industry





# *Fiscal Situation Deteriorates...*

## Federal Receipts and Expenditures, Percent of GDP

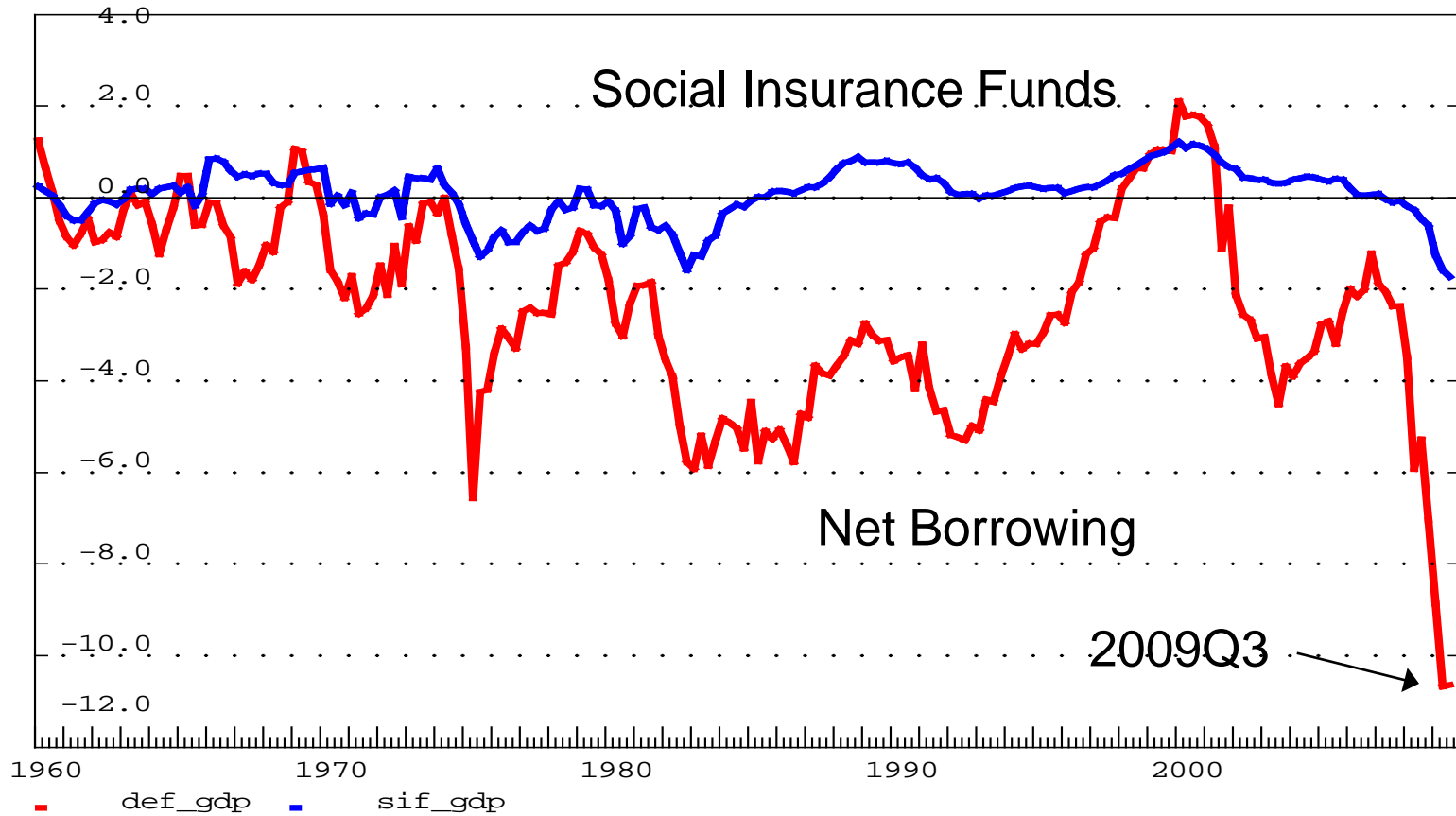






*...Alarminglly*

## Federal Net Borrowing, Percent of GDP



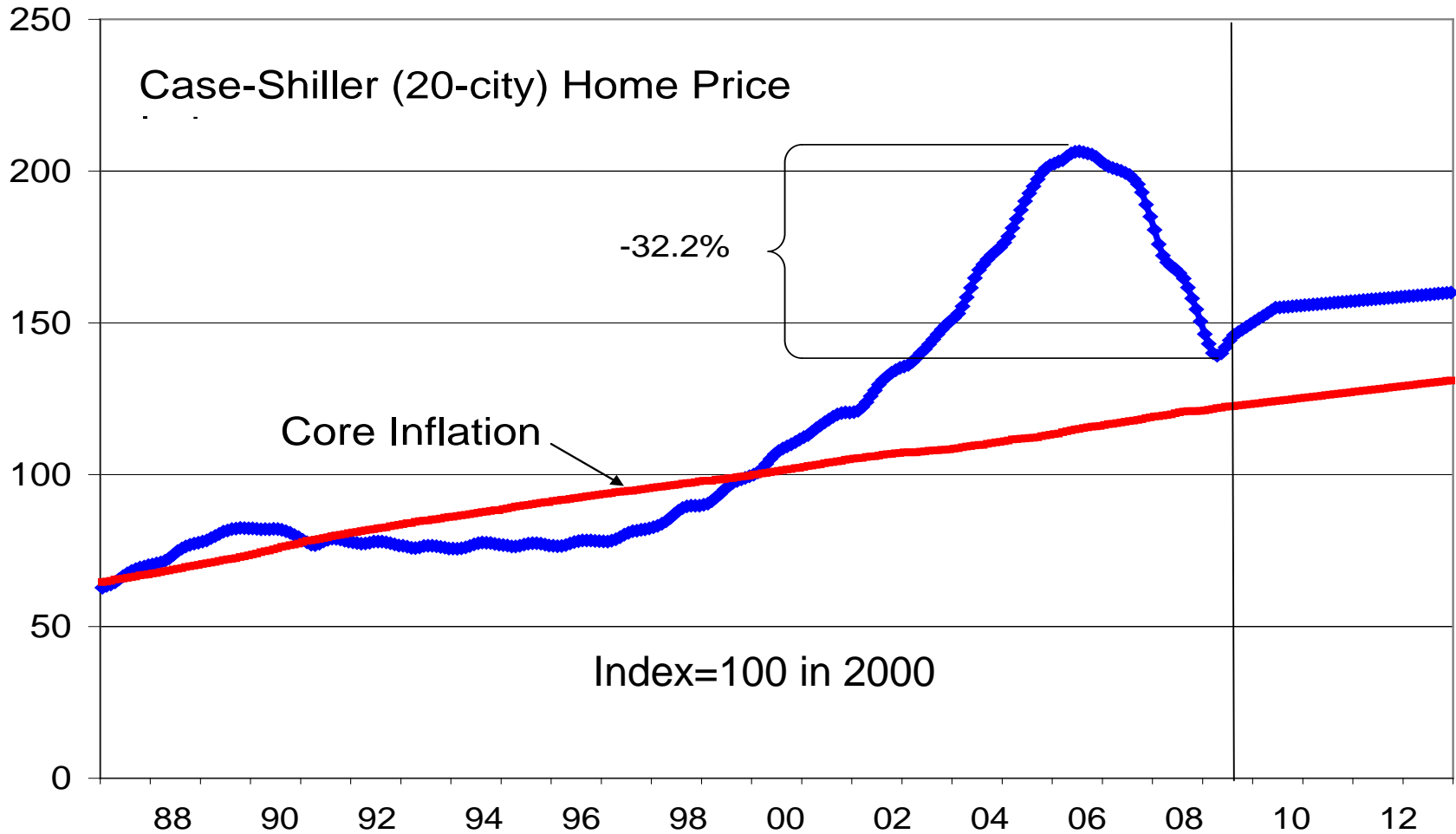


## Short-term Outlook Overview

	00-06	06-07	07-08	08-09	09-10	10-11	11-12
Gross domestic product	2.4	2.1	0.4	-2.5	<b>2.8</b>	1.8	3.4
Personal consumption	3.0	2.6	-0.2	-0.6	<b>2.2</b>	1.4	2.0
Nonresidential structures	-2.2	14.9	10.3	-18.0	<b>-9.8</b>	0.3	13.5
Equipment investment	3.0	2.6	-2.6	-14.5	<b>0.2</b>	5.5	14.7
Residential investment	3.6	-18.5	-22.9	-20.2	<b>13.8</b>	8.7	10.5
Exports	3.0	8.7	5.4	-11.3	<b>3.5</b>	7.7	10.0
Imports	4.6	2.0	-3.2	-14.4	<b>4.1</b>	7.0	7.1
Government	2.3	1.7	3.1	1.6	<b>1.4</b>	1.0	0.6
GDP deflator	2.6	2.9	2.1	1.0	<b>0.9</b>	1.6	2.0
Consumption deflator	2.3	2.7	3.3	0.9	<b>1.4</b>	2.1	2.3
	2000-06	2007	2008	2009	<b>2010</b>	2011	2012
Unemployment rate	5.1	4.6	5.6	9.3	<b>10.2</b>	9.7	9.0
Current account	-803	-729	-713	-439	<b>-599</b>	-646	-674
Federal deficit	-254	-313	-795	-1507	<b>-1490</b>	-1260	-1230



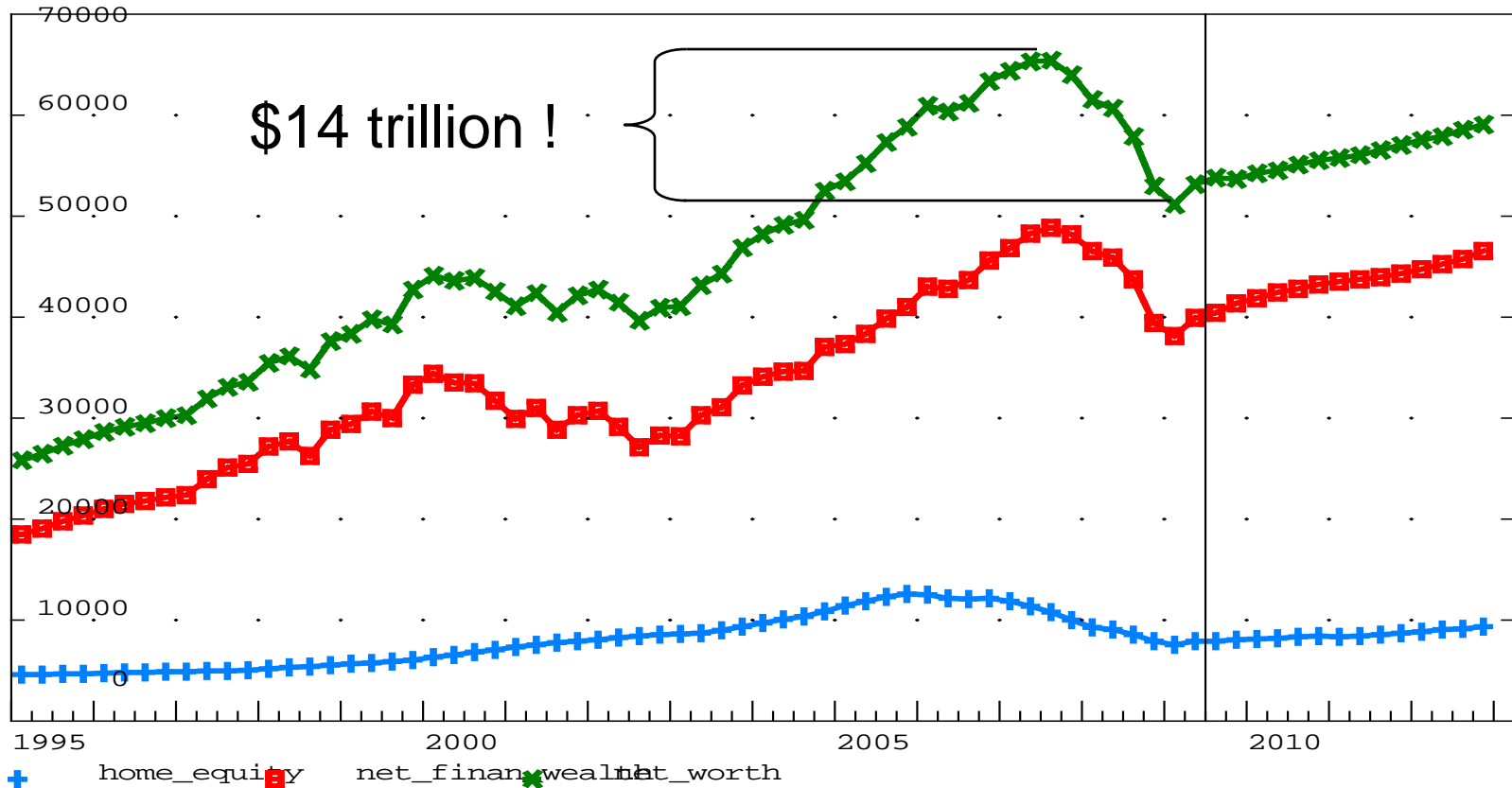
*Why Recovery will be slow:  
Housing prices back to 2004 level by end 2013*





# Household Net Worth: Looking Up, Slowly

## Household Net Worth, Billions of \$





## *Policy Overview*

- ⊕ Please distinguish between the TARP/QE and the Stimulus.
- ⊕ Both were messy, inefficient, and unfair.
- ⊕ Both were essential.
- ⊕ Public's ire appears greater against the "bailouts" (TARP).
- ⊕ But has the Stimulus really raised public's attention to long-term fiscal problem?



## *Lags, lags, lags*

- ⊕ Monetary policy
- ⊕ Fiscal policy
- ⊕ Cost/Pricing
- ⊕ ER Pass-through
- ⊕ Asset balance adjustment  
(Ricardian Equivalence)
- ⊕ Useful to think in three-year (LIFT does)



## *Financial/Monetary Policy*

- ❖ Fed hopes to eventually drain liquidity without undermining growth. When and how?
- ❖ How and when can bank and auto equity be unwound?
- ❖ New and effective financial regulatory regime crucial for sustained economic health.
  - ❖ Regulate systemic risk vs. Eliminating too-big-to fail institutions.



## *Fiscal Policy*

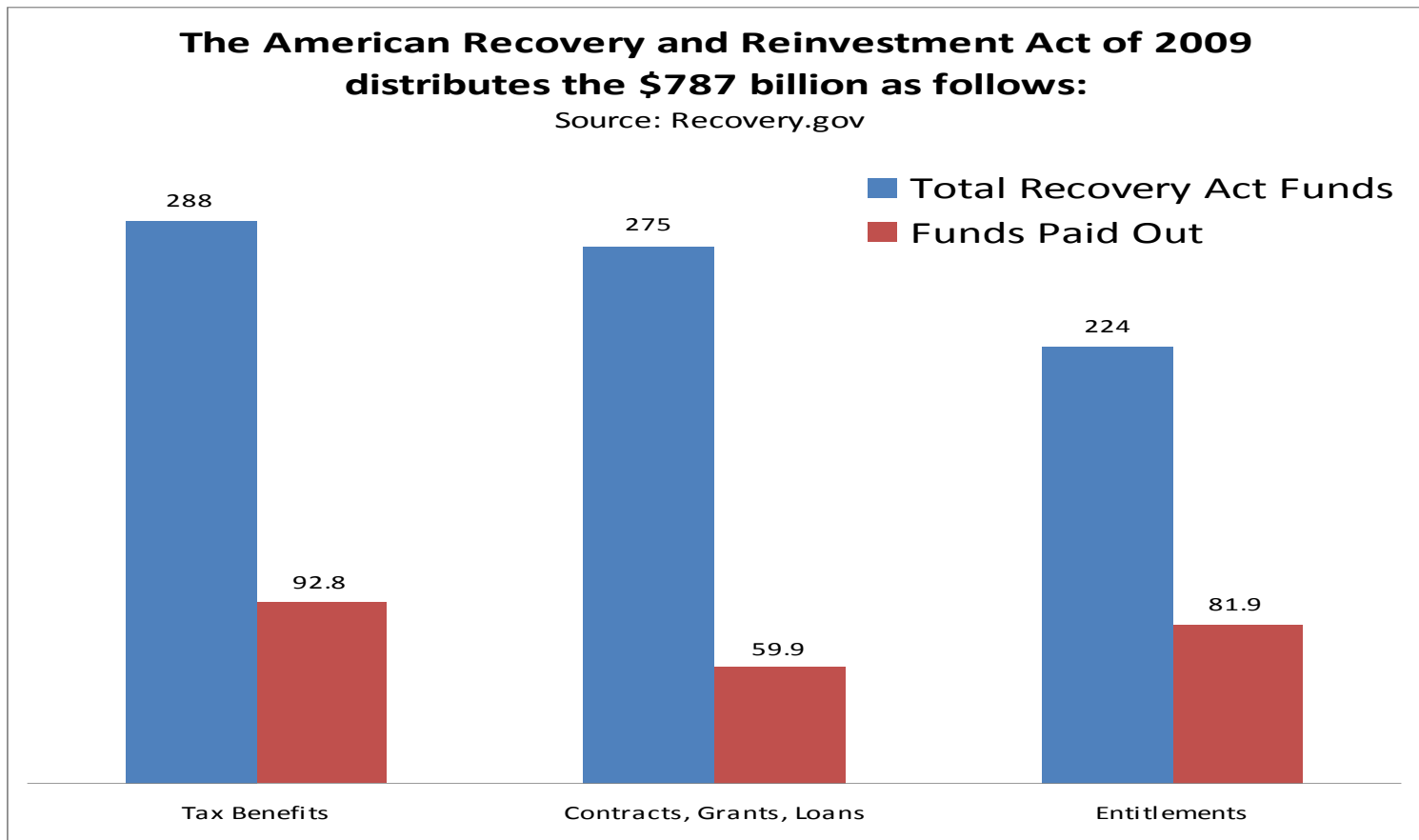
- ✦ Is the Stimulus working? Yes!
- ✦ It will be much more important over next 4-6 quarters.
- ✦ Short-term stimulus could be enhanced through credible medium-term deficit reduction program.
- ✦ Long-term growth would be boosted through comprehensive tax restructuring.





# *Is the Stimulus (ARRA) Working?*

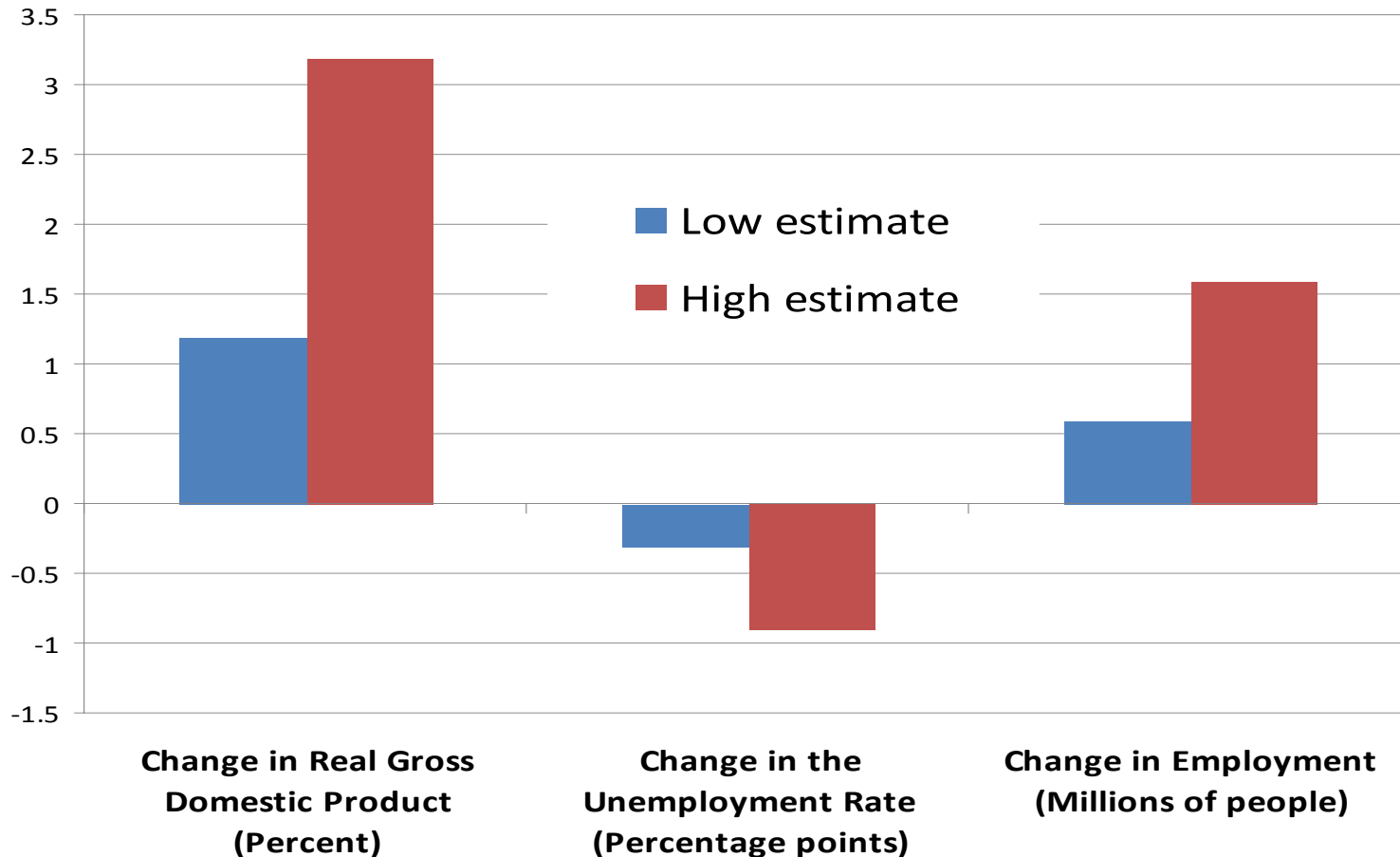
Only about 30% has been paid out so far (11/20/09).





# CBO Says its Working

## Impact of ARRA in 2009 Q3



Source: CBO, Estimated Impact of the ARRA on Employment and Economic Output as of September 2009

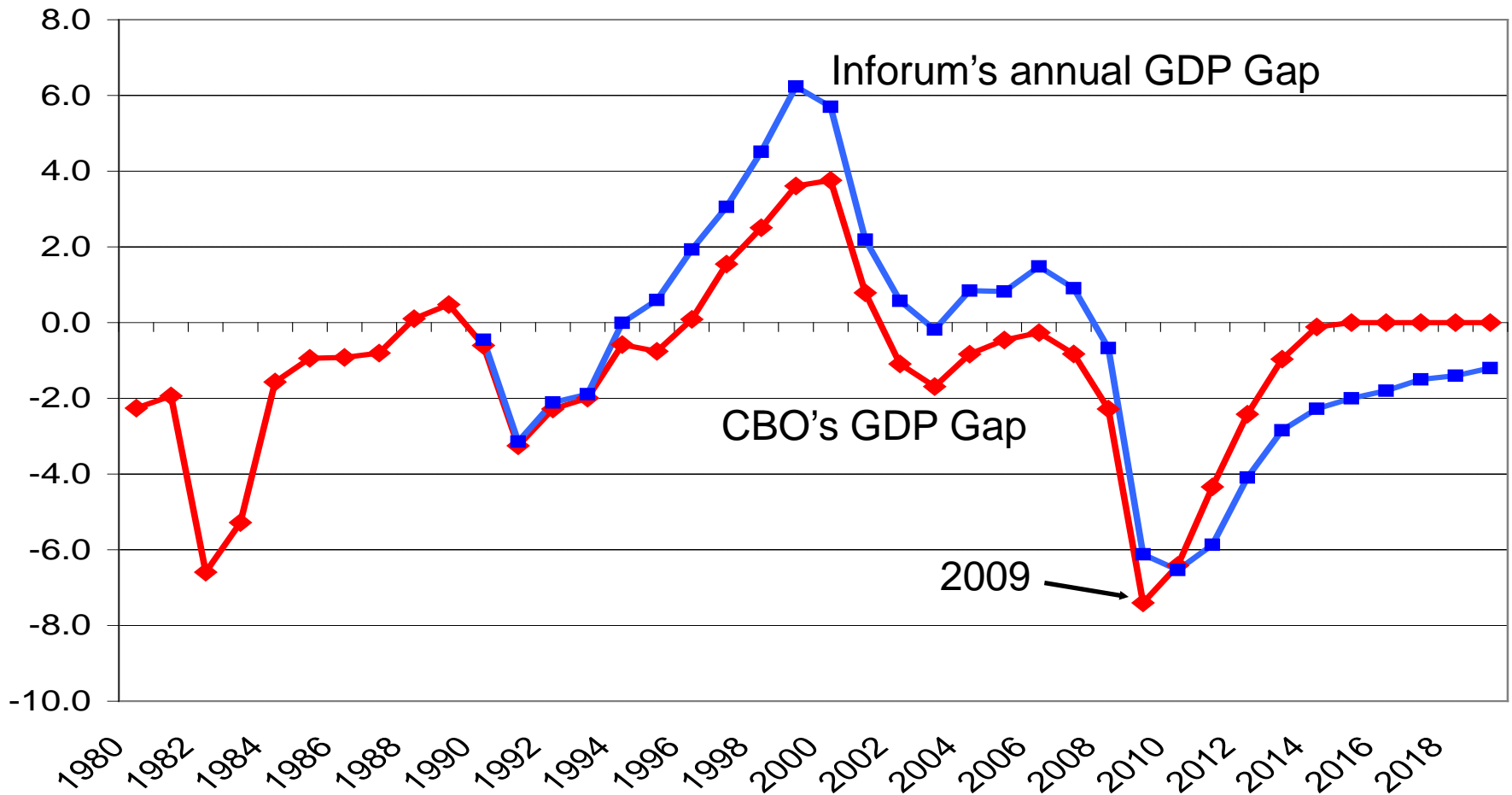


## *Predicting the Stimulus Impact*

- ✦ Alternative stimulus measures have different impacts.
  - ❖ Infrastructure
  - ❖ Other direct (health research, education, defense, etc.)
  - ❖ Transfers (unemploy, food stamps, health insurance, etc.)
  - ❖ Tax cuts (personal, AMT, payroll, corporate, etc.)
  - ❖ Grants to states (strings, no-strings, spending/taxes/savings)
- ✦ Dynamics of stimulus multipliers
  - ❖ What is the timing of the impacts? (impulse > 3 yrs.)
  - ❖ One/three year stimulus vs. permanent spending
  - ❖ Multipliers could be larger in slack economy.
  - ❖ Crowding-out usually occurs with a lag.
- ✦ Exceptional circumstances
  - ❖ Fed reaction during a liquidity trap.
  - ❖ Foreign investors reaction during massive deficit expansion.
- ✦ Longer-term impacts
  - ❖ Addition to and productivity of human capital/infrastructure.
  - ❖ "Green Investment": Energy efficiency and reduced oil dependence.



## *In a big hole: the GDP Gap*





## *Ricardian Equivalence*

- ⊕ Does enhanced govt saving (dissaving) lead to enhanced national saving (dissaving)?
- ⊕ Or, will private sector react, anticipating higher taxes, offsetting the change in government dissaving?
- ⊕ Cross country empirical studies show a .40 to .65 offset of government dissaving by private saving.
- ⊕ Does this apply in U.S.? Look at the graphs.
- ⊕ R.E. is important factor for analyzing the U.S. "twin deficits."



## *How Do we Measure Multipliers?*

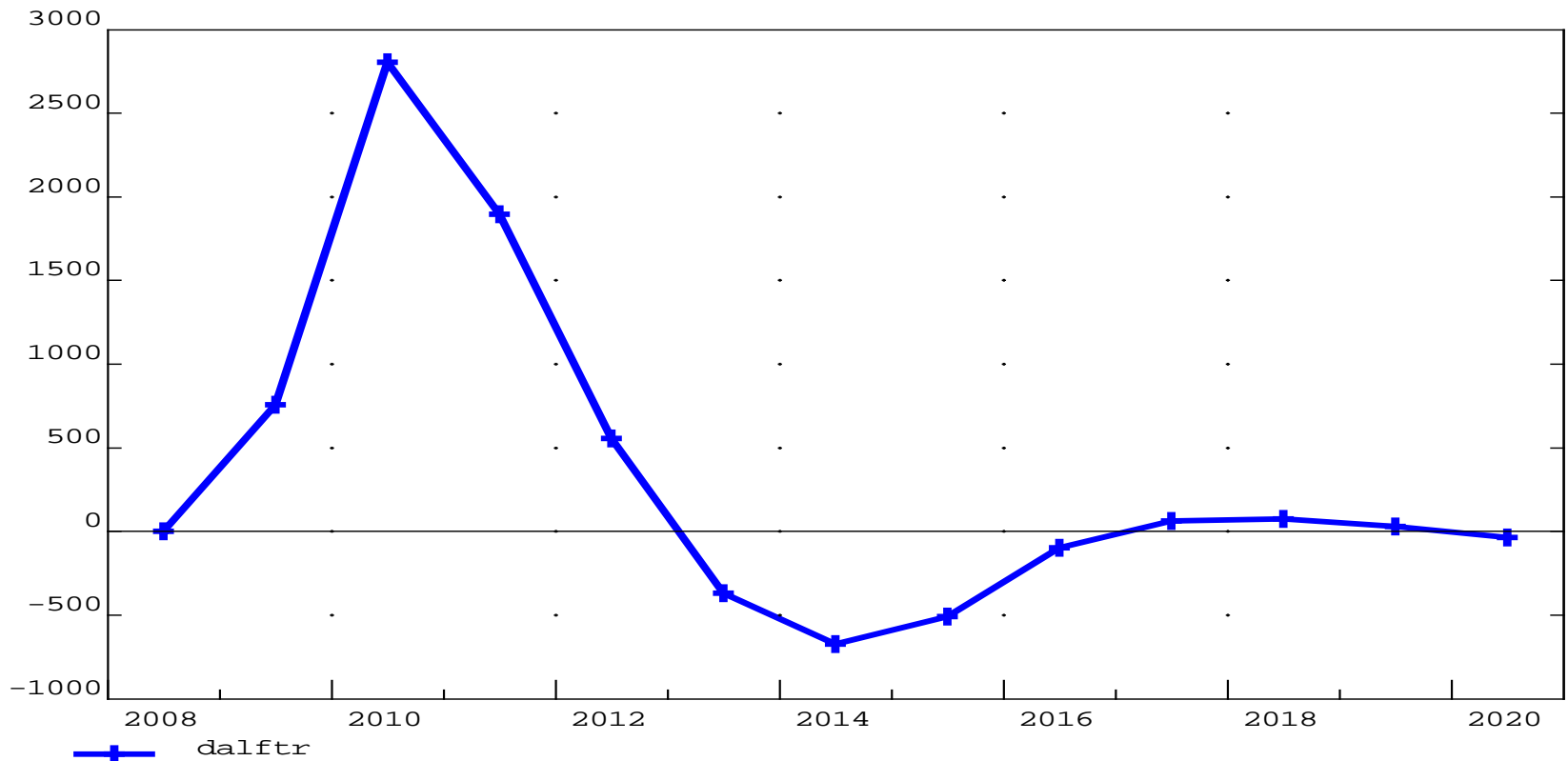
- The *impact* multiplier  $\left( \equiv \frac{\Delta Y(t)}{\Delta G(t)} \right)$ .
- The multiplier at some horizon  $N$   $\left( \equiv \frac{\Delta Y(t+N)}{\Delta G(t)} \right)$ .
- The *peak* multiplier, defined as the largest  $\left( \equiv \max_N \frac{\Delta Y(t+N)}{\Delta G(t)} \right)$  over any horizon  $N$ .
- The *cumulative* multiplier, defined as the cumulative change in output over the cumulative change in fiscal expenditure at some horizon  $N$   $\left( \equiv \frac{\sum_{j=0}^N \Delta Y(t+j)}{\sum_{j=0}^N \Delta G(t+j)} \right)$ .



# *LIFT says its working!*

Increase in Job-years due to ARRA (stimulus base vs. alternate)

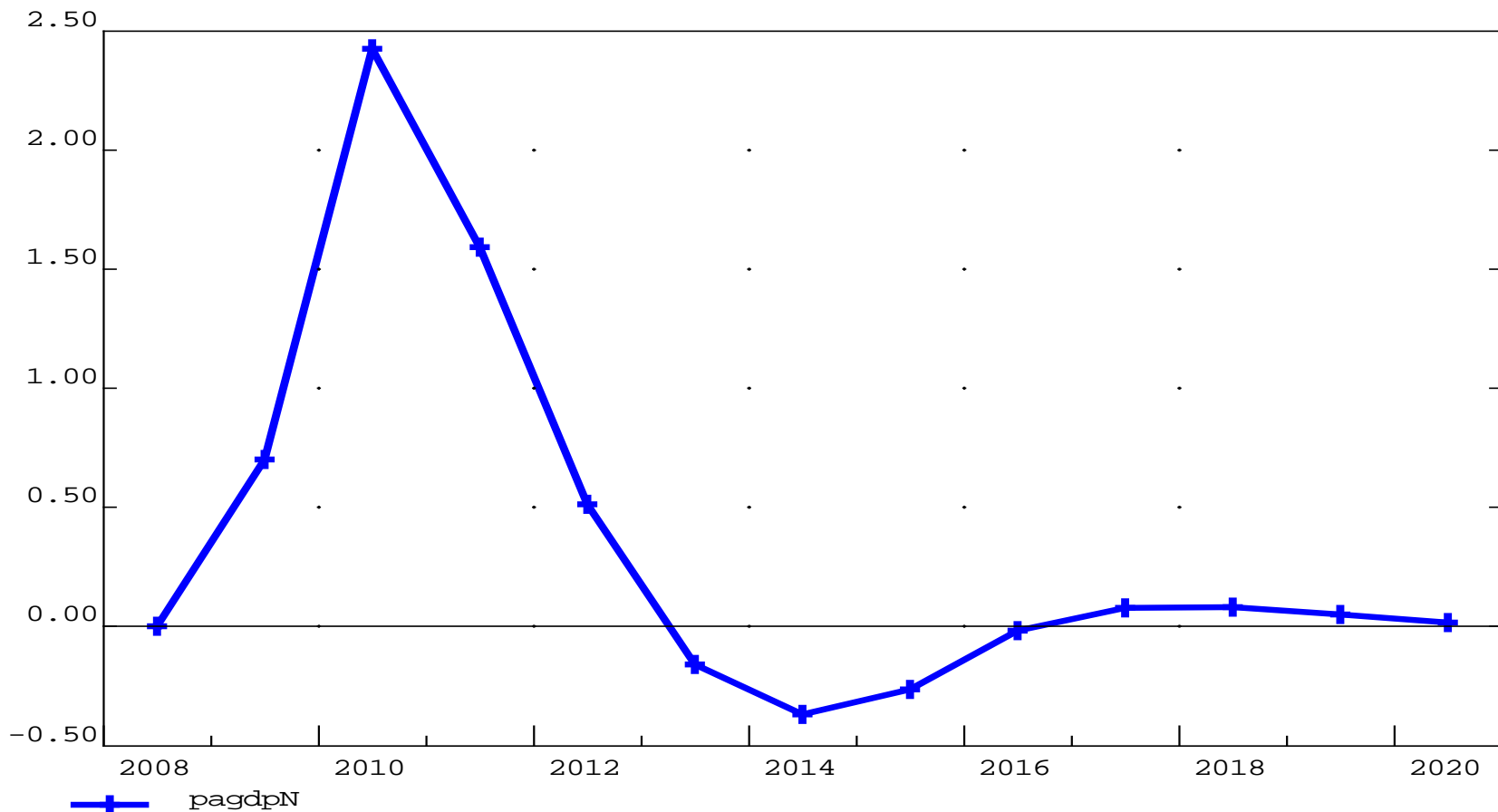
Thousands of jobs





# *GDP boosted by stimulus in short term*

Percentage Increase Real GDP (stimulus base vs. alternate)

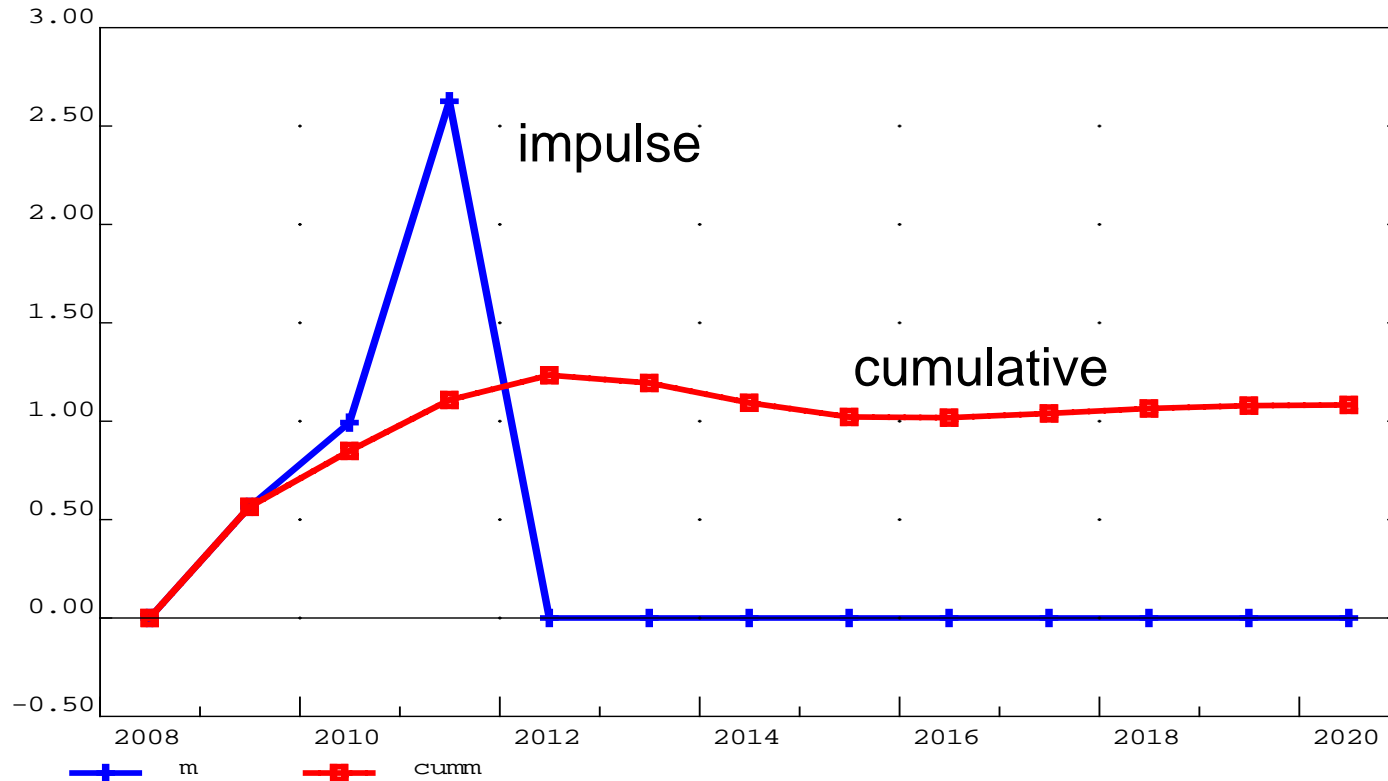






# Multipliers

Real GDP change over real stimulus spending





## *Longer term forecast (to 2030):*

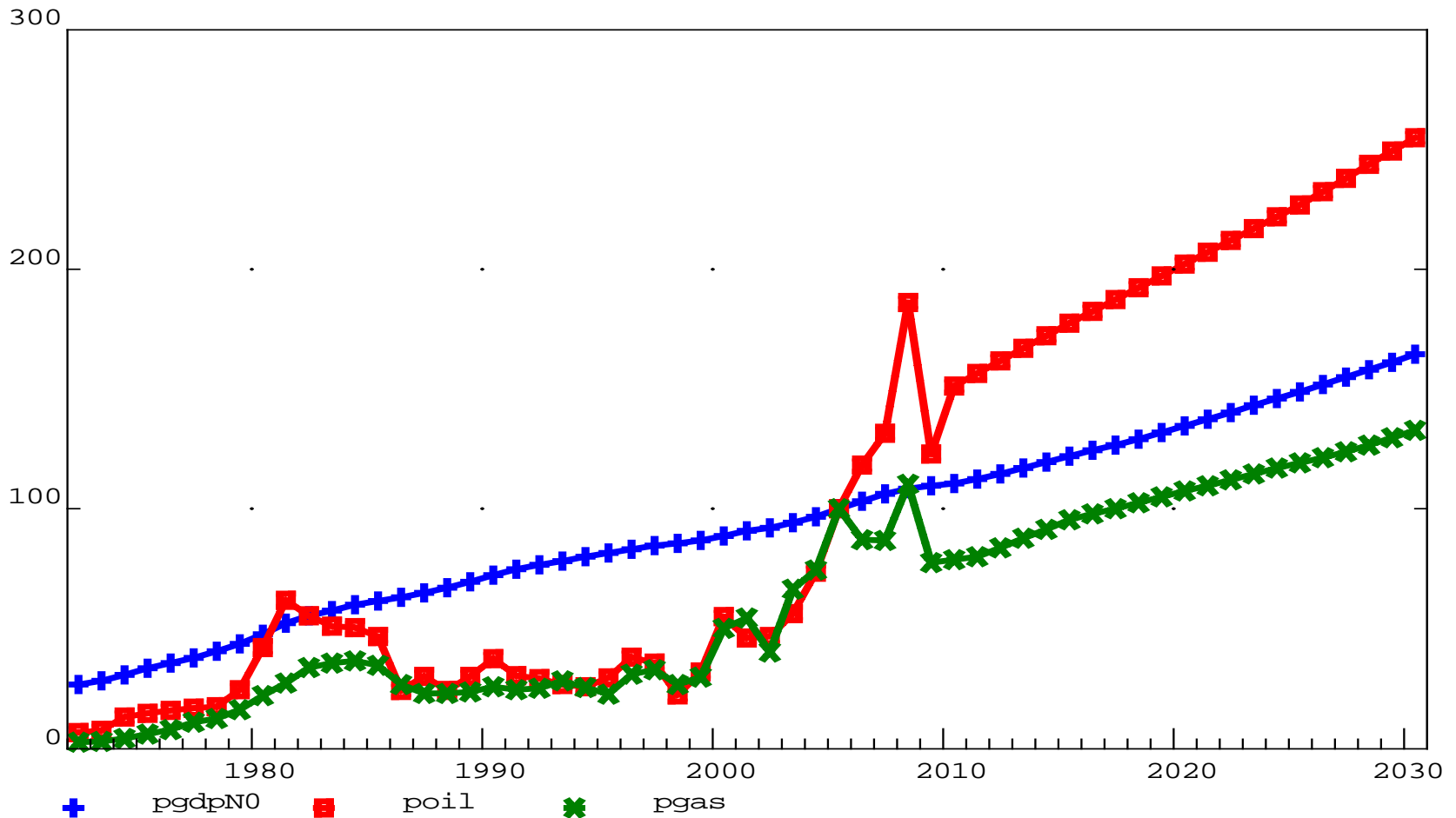
We think the current crisis will greatly accelerate a transformation of growth in the economy.

- ❖ Lower labor force growth slows potential growth, Potential GDP growth between 2.0 – 2.5%.
- ❖ Weaker dollar, rising savings rate changes economic structure toward exports and away from consumption.
- ❖ Slower inflow of foreign capital will force external and government balances towards equilibrium.
- ❖ 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.



# Oil/natural gas prices steady in real terms

Nominal Price indices: 2005 = 100





# Long Term Overview

## Real (inflation-adjusted) Quantities Average Annual Growth Rates, Percent

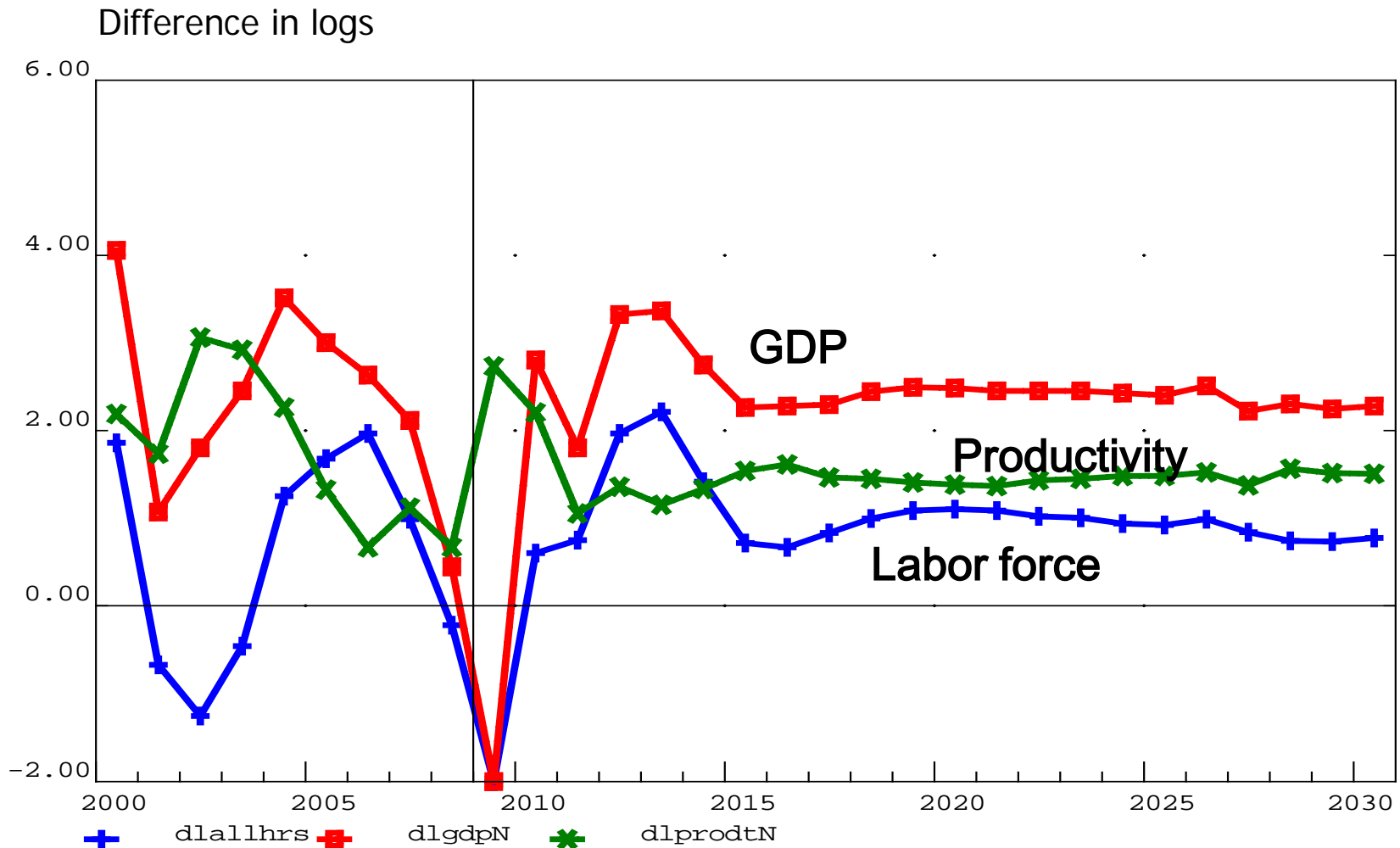
	12-15	15-20	20-30
Gross domestic product	2.8	2.4	2.4
Personal consumption	2.1	2.2	2.0
Nonresident structures	8.8	2.9	1.4
Equipment investment	6.5	4.0	3.0
Residential investment	6.2	3.0	2.1
Exports	7.8	5.8	5.7
Imports	4.8	3.8	3.0
Government	0.8	1.2	1.2
GDP deflator	2.1	2.0	2.0
Consumption deflator	2.6	2.2	2.2
Population	0.8	0.8	0.8
Labor force	0.7	0.8	0.5
Employment	1.4	0.9	0.9
Labor productivity	1.4	1.5	1.5

## Nominal Quantities, Billions of Dollars

	2015	2020	2030
Current account			
(% of GDP)	-701	-821	-398
	-3.8	-3.5	-1.1
Federal net borrowing			
(% of GDP)	-1259	-1282	-749
	-6.8	-5.5	-2.1



# Long term potential growth: strong productivity growth, low labor force growth

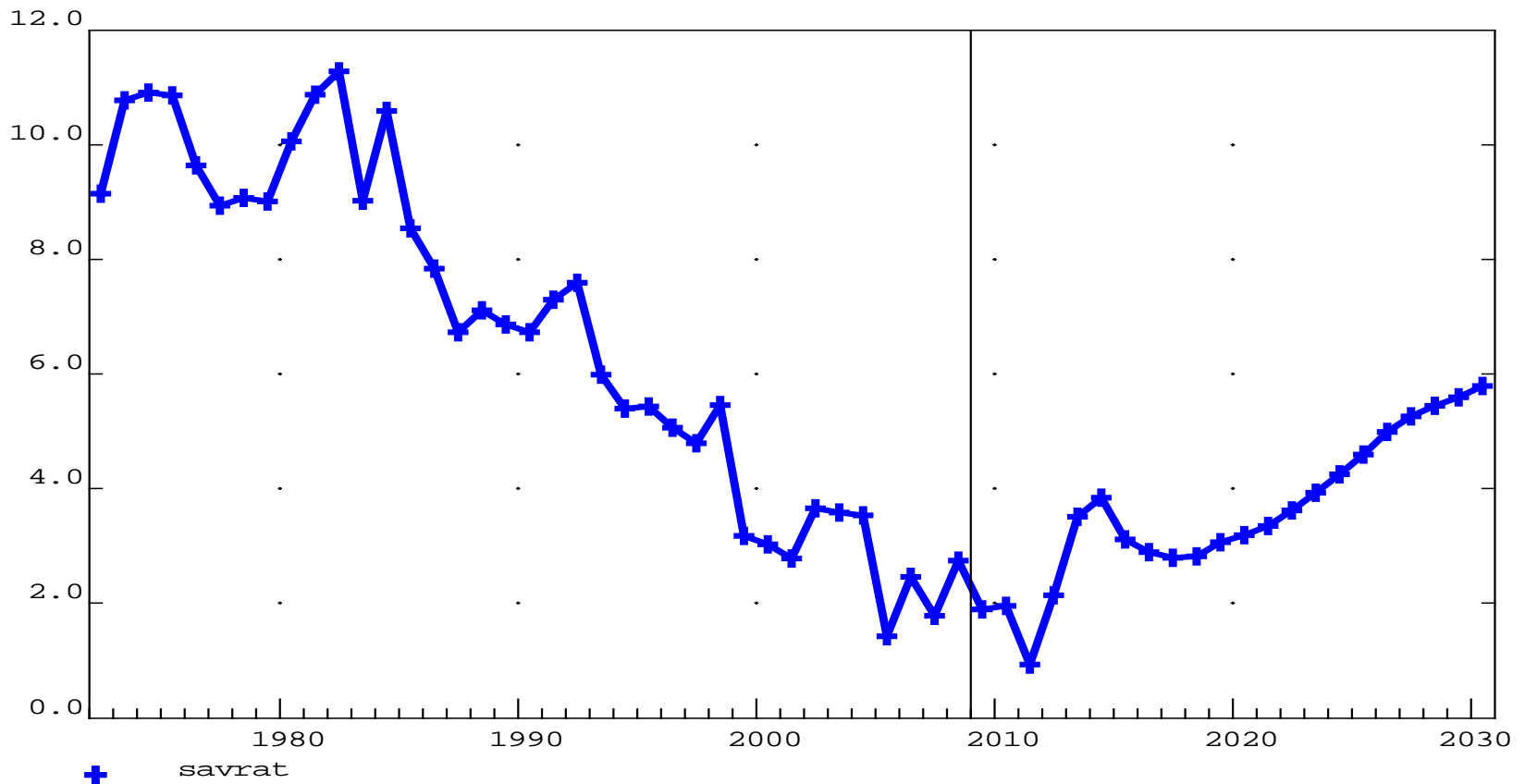




# Household Savings Rate

New long term trend will drive slow consumption growth

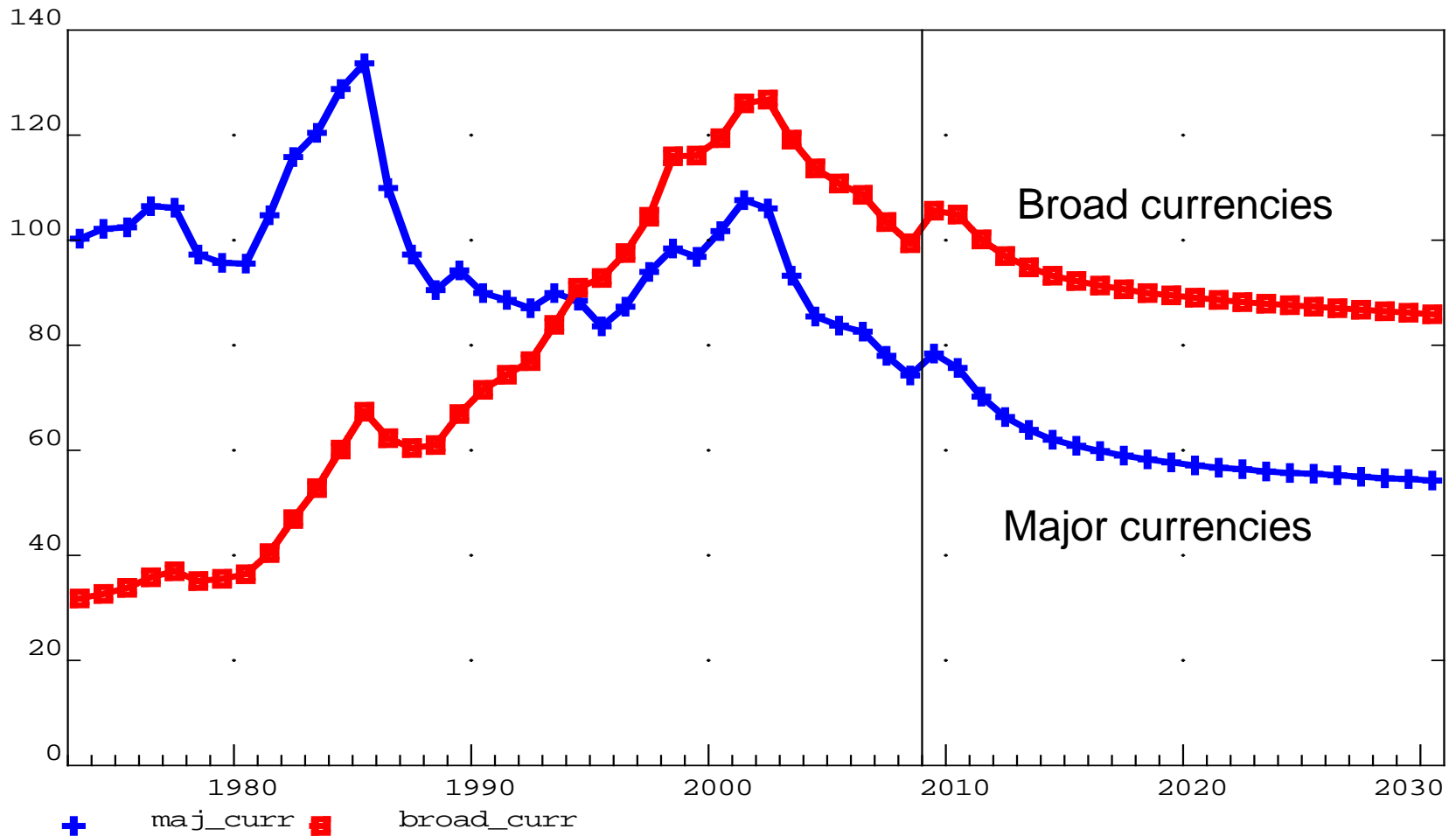
percent





# Exchange rate index

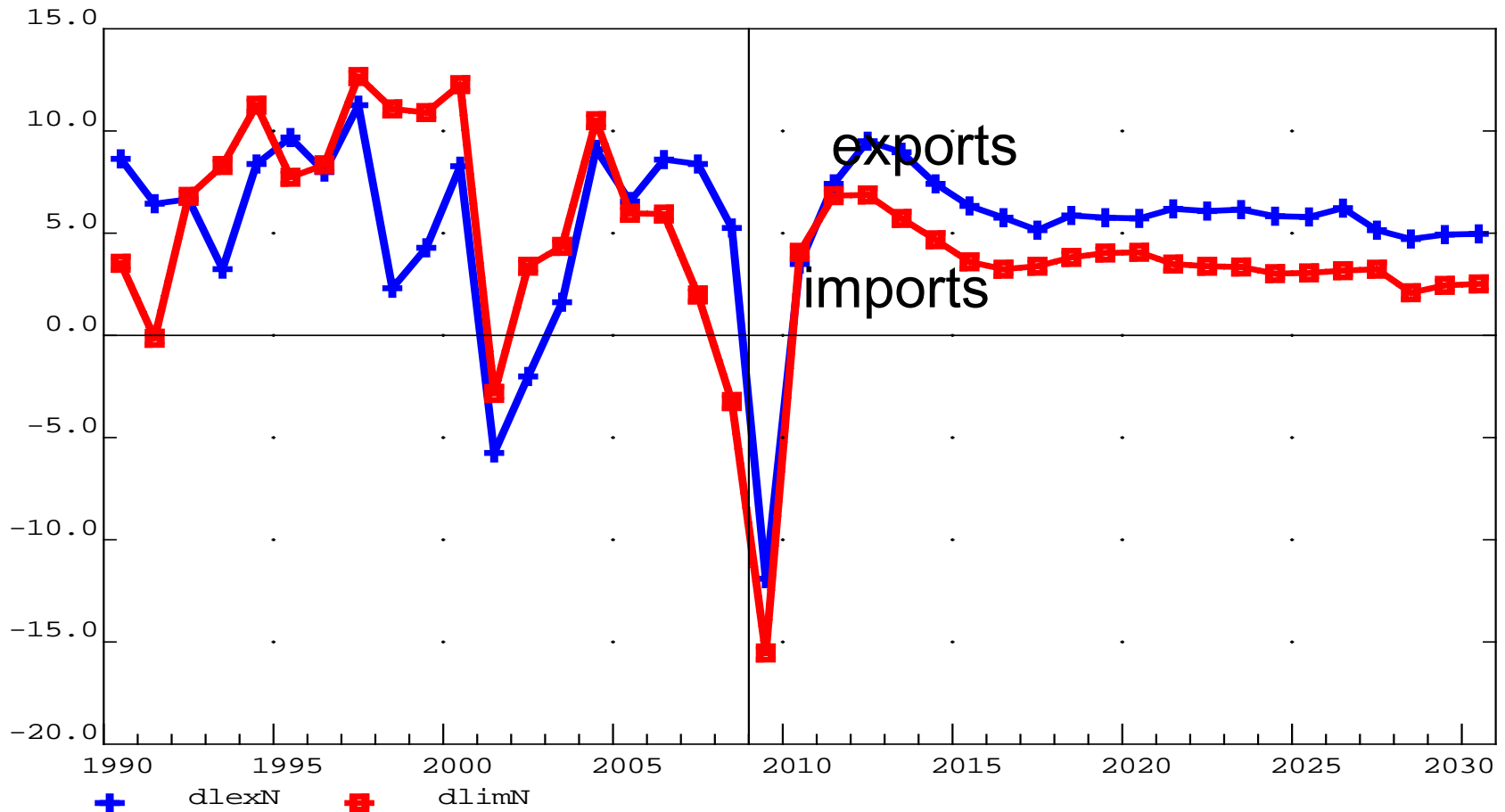
FRB indices





# Real import and export growth

Percentage growth

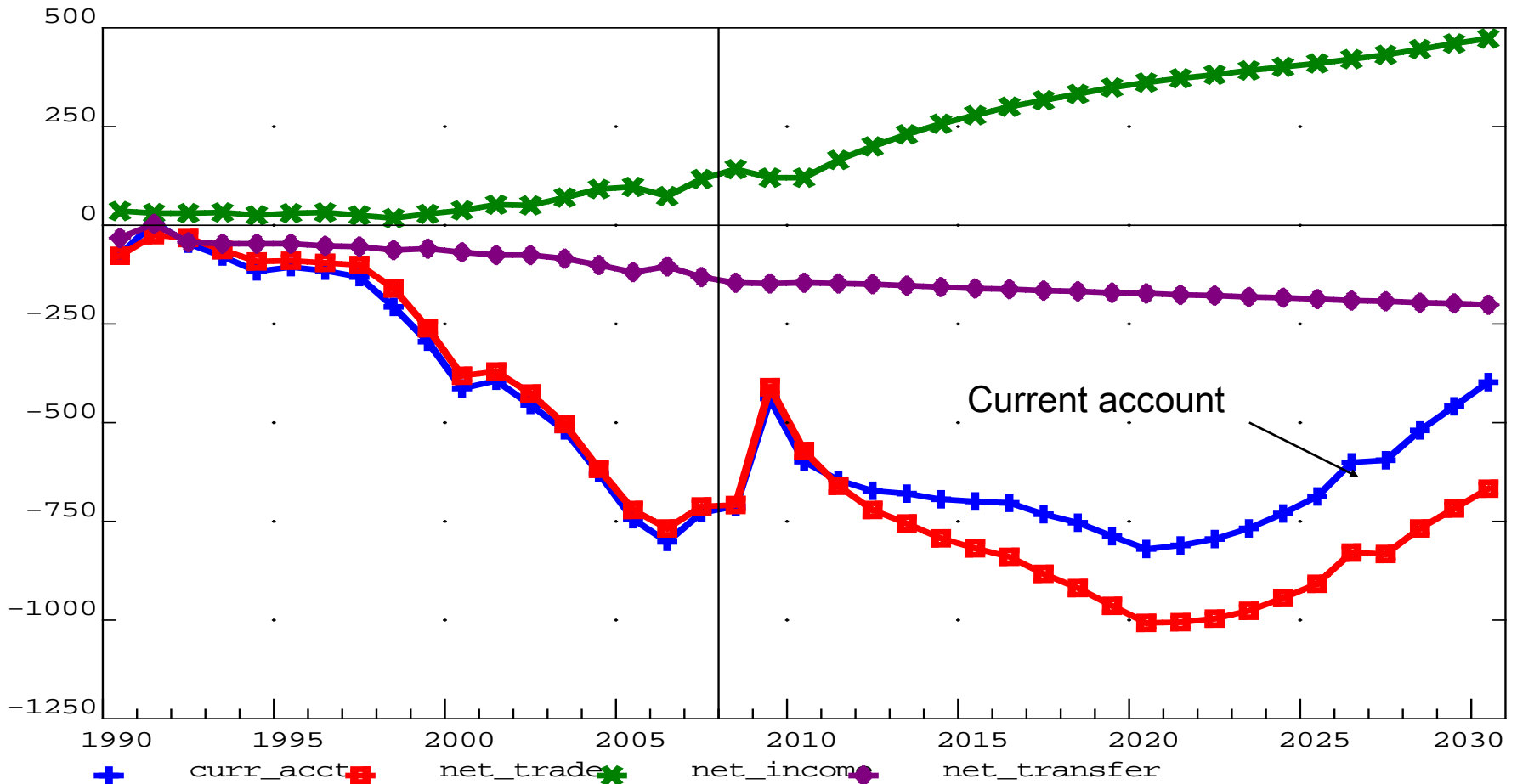






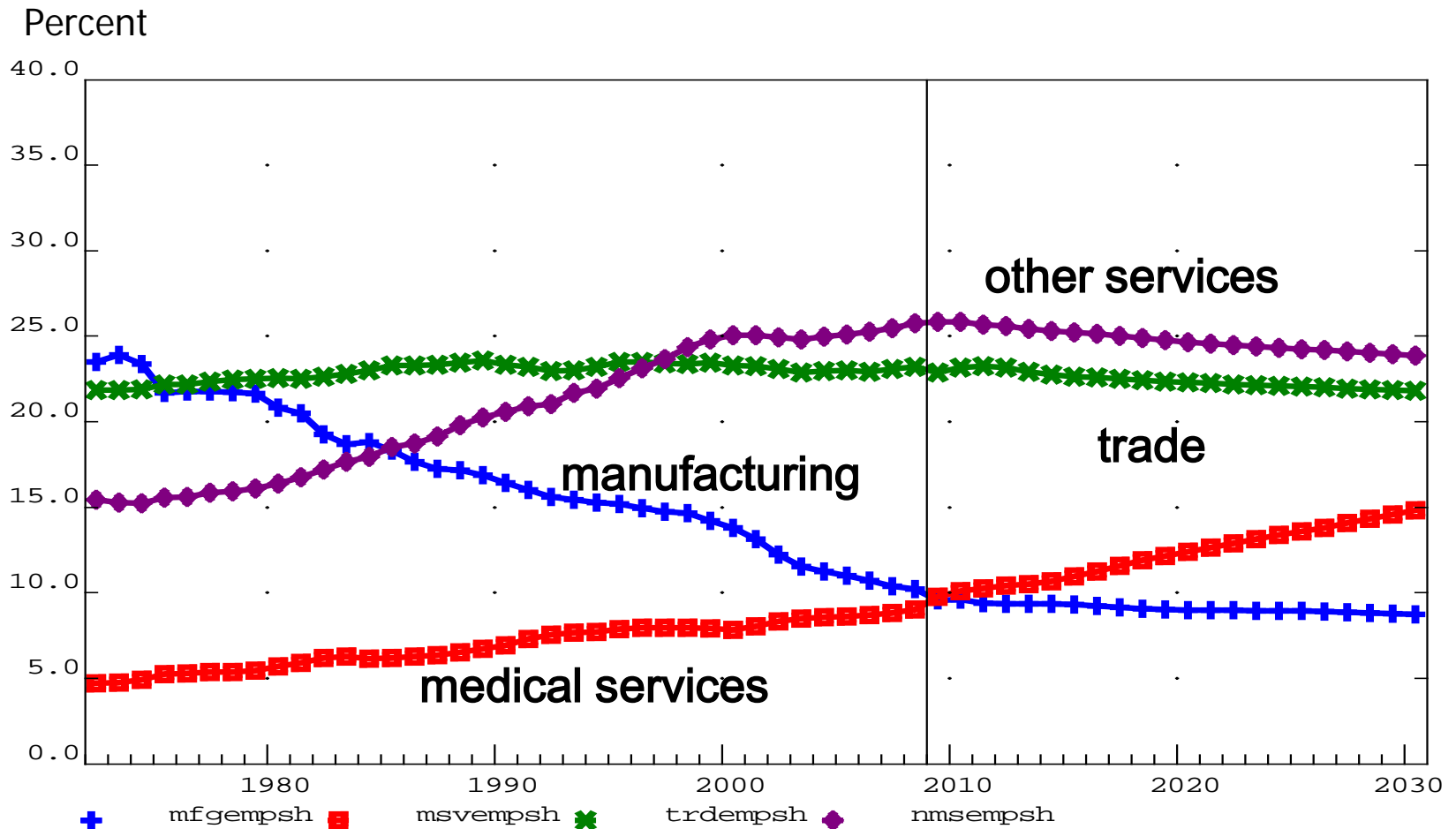
# Current account deficit: soft landing

Billions of dollars





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





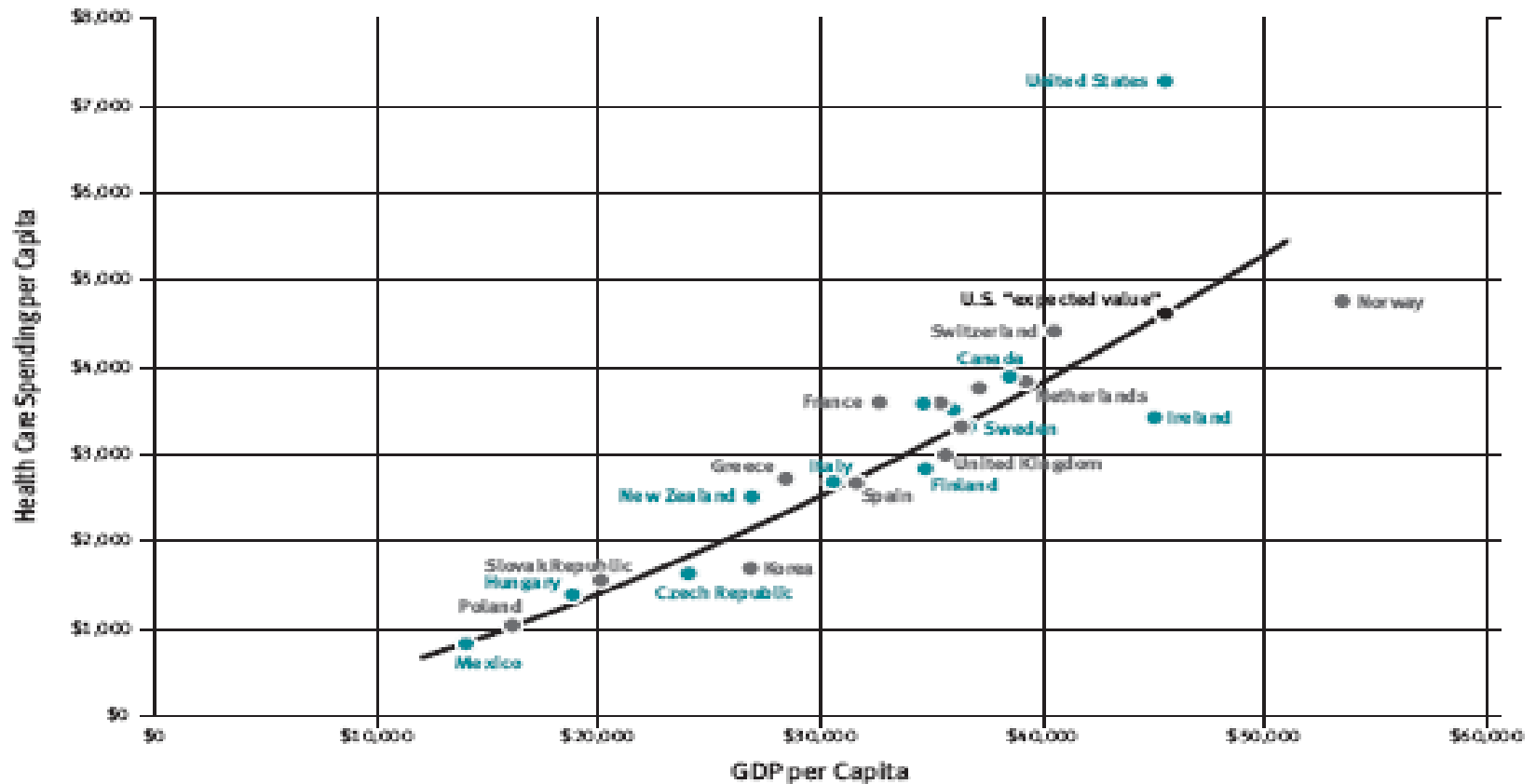
## *American Objectives for Health Care Reform*

- ✦ We want more, more, and more.
- ✦ We want to pay less, less, and less.
- ✦ Can we have an adult conversation?



# 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

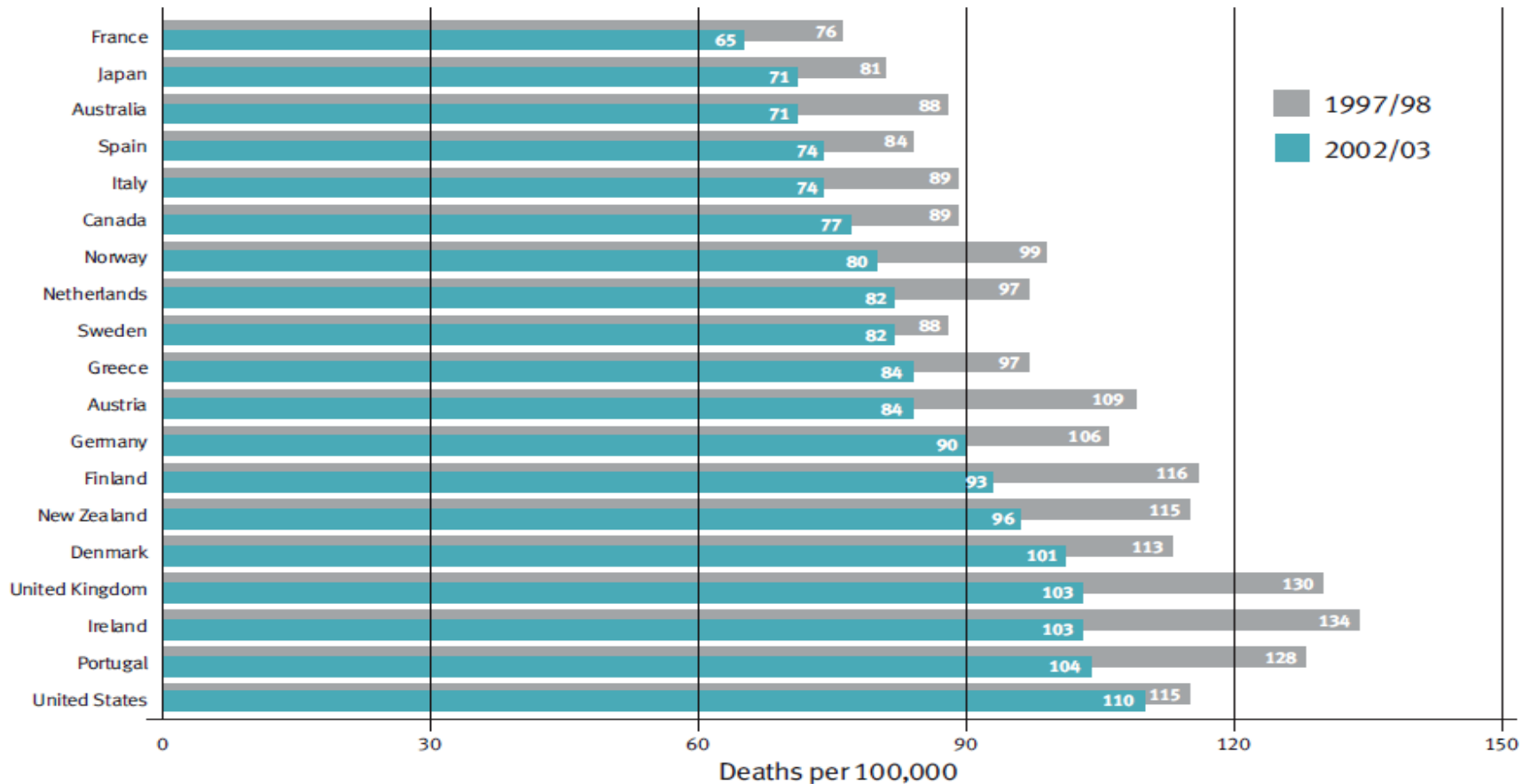


Source: OECD Health Data 2009



# *But health outcomes are generally inferior.*

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



Source: Nolte and McKee, 2008



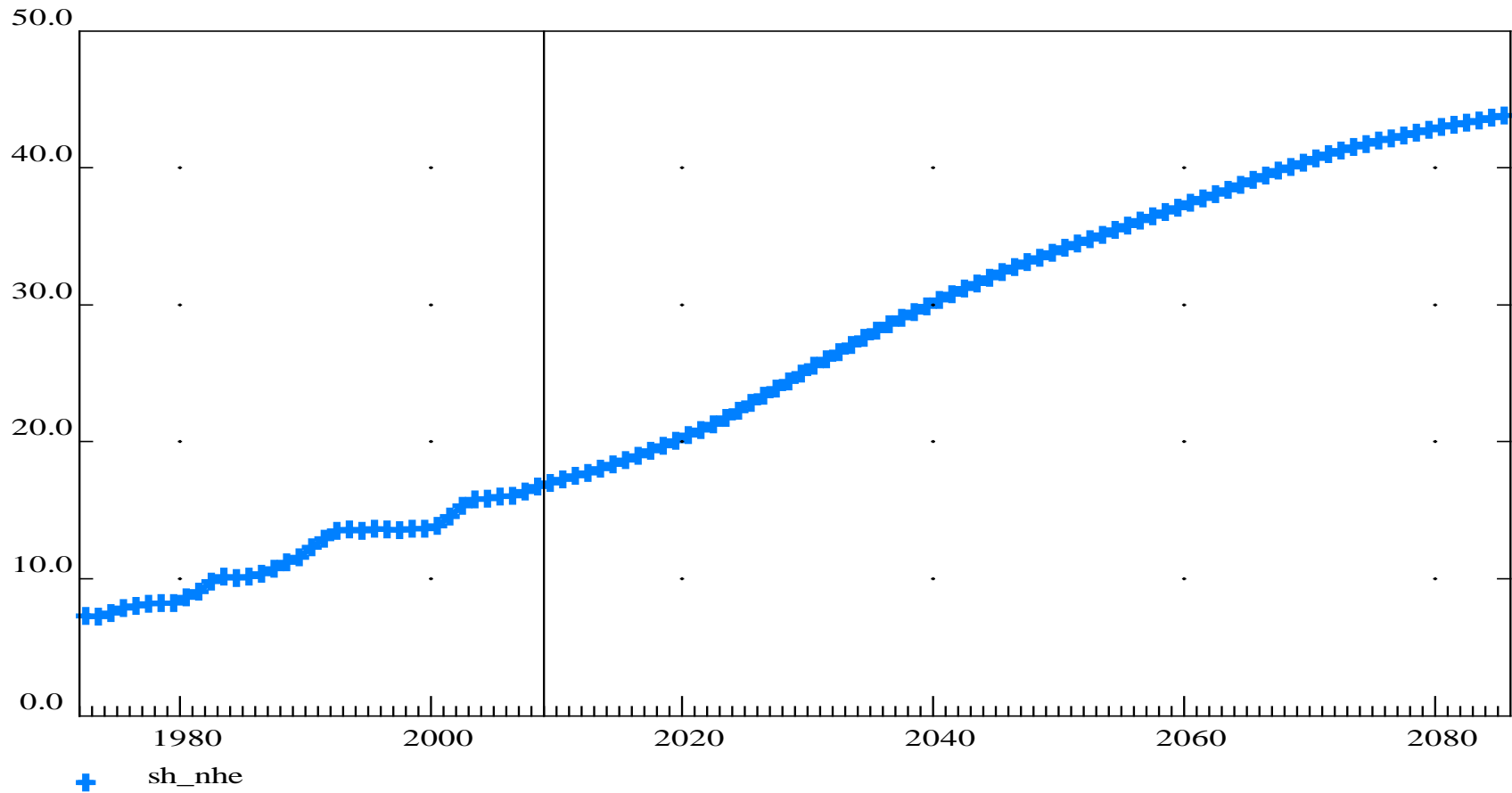
# *Tax subsidies for health are unfair and boost (wasteful?) expenditures*

Insurance Person	Employer Provided		Individual
	A	B	C
Premium Cost (including employers)	12000	12000	12000
Income	150,000	50,000	50,000
Tax bracket	30%	15%	15%
Tax subsidy	3600	1800	0
Net cost	8400	10200	12000



# Can we "Bend the Curve" ?

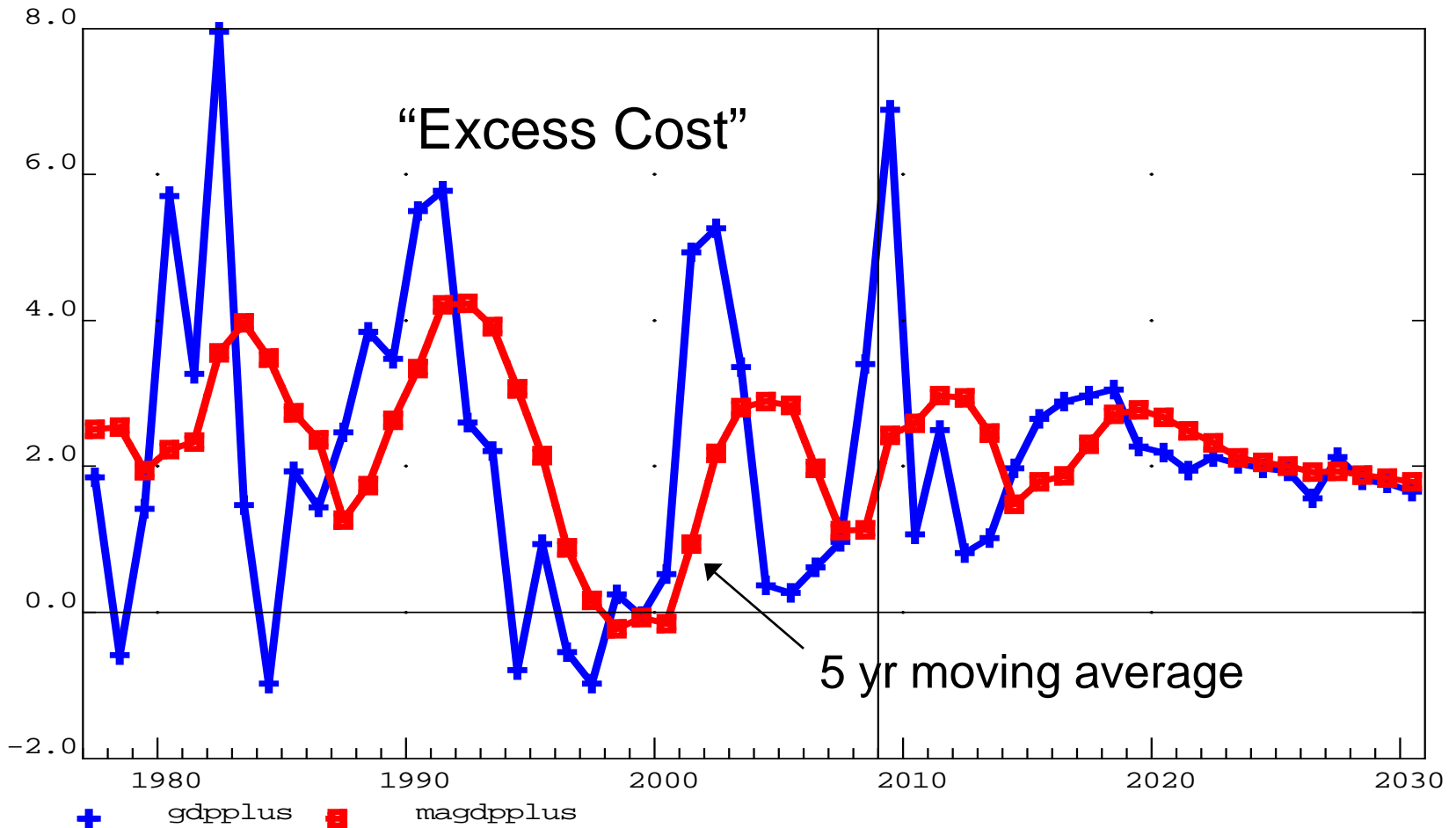
## National Health Expenditures as Percent of GDP





# *GDP Plus: National Health Expenditures*

## Percent Change in NHE minus Percent Change in GDP

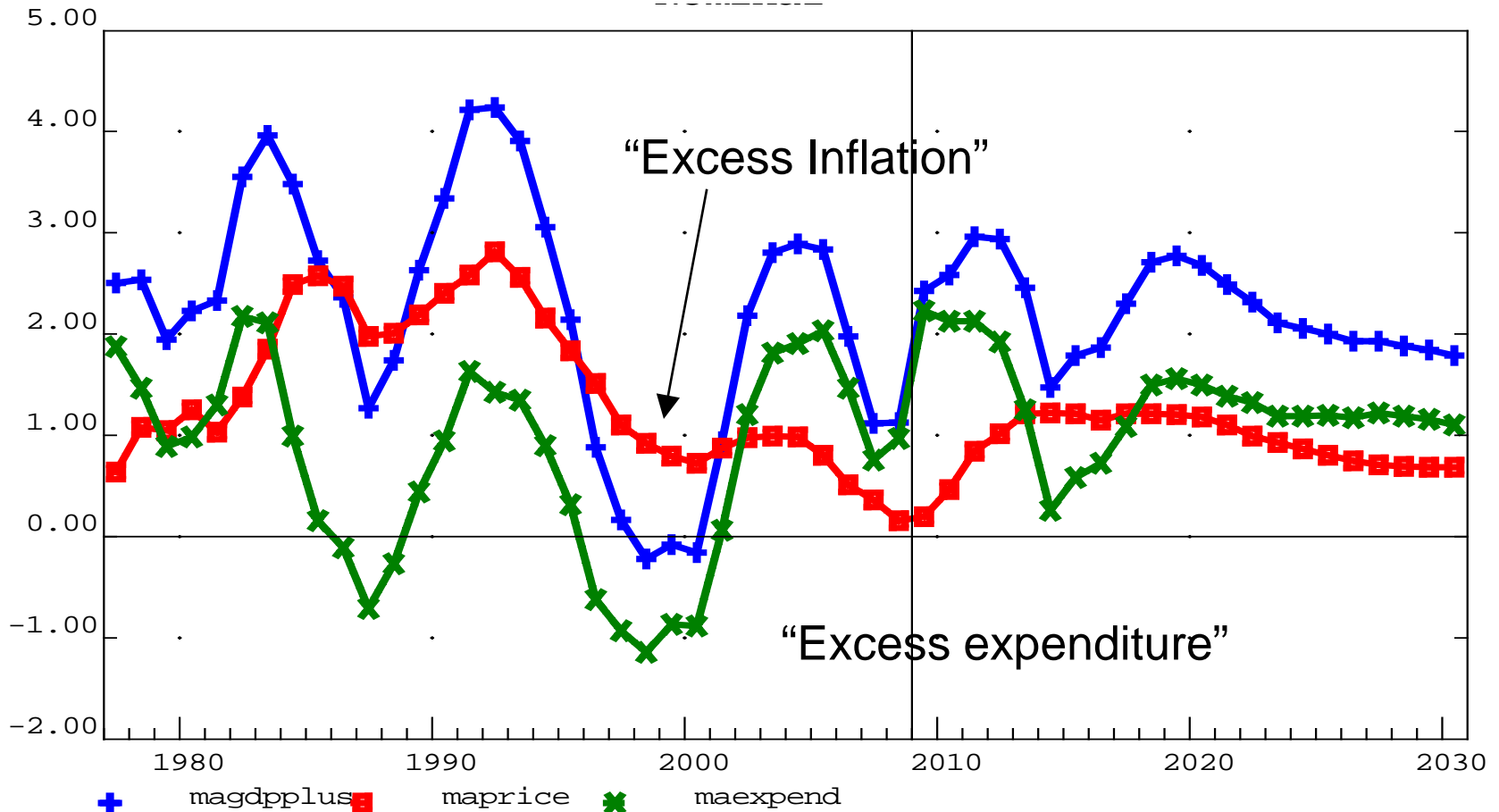






# Decomposing GDP plus between prices and real expenditures

## Percent Change in NHE minus Percent Change in GDP





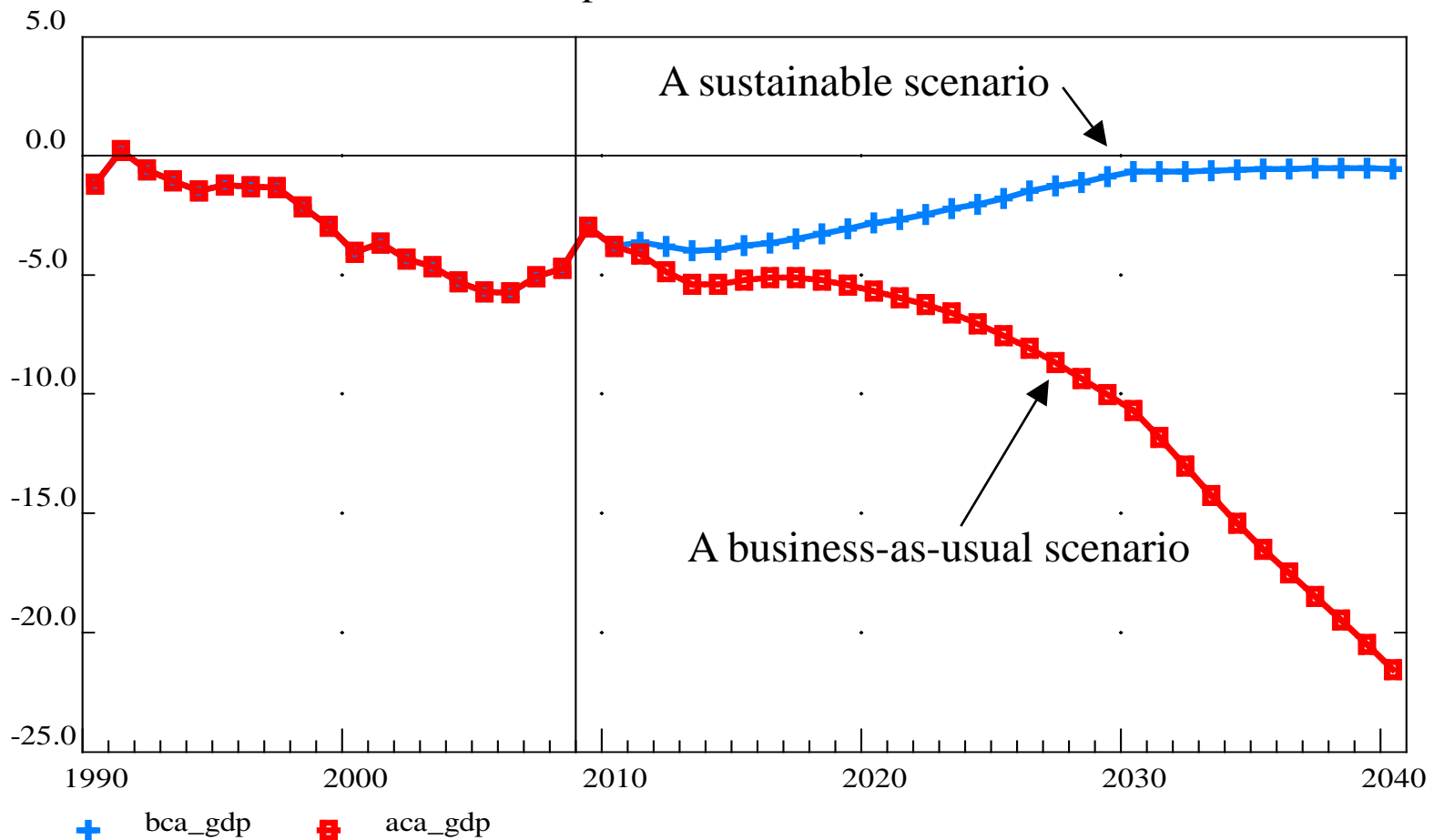
## *Long Run Health Expenditure Situation*

- ❖ Eliminating inefficiencies, abuse, excess malpractice claims, etc. are one-time gains. Though they are potentially large, they cannot “bend the curve.”
- ❖ Driving the slope of the curve: Technology, high income elasticity, and a strong preference for health. Also, strong sentiment for “socializing” many health risks.
- ❖ Currently, rationing is accomplished by income and by arbitrary circumstances (where employed).
- ❖ Markets for health care contain inherent and crucial failures. They cannot ration health care efficiently or fairly.
- ❖ Therefore, the task is to identify the proper role of government.



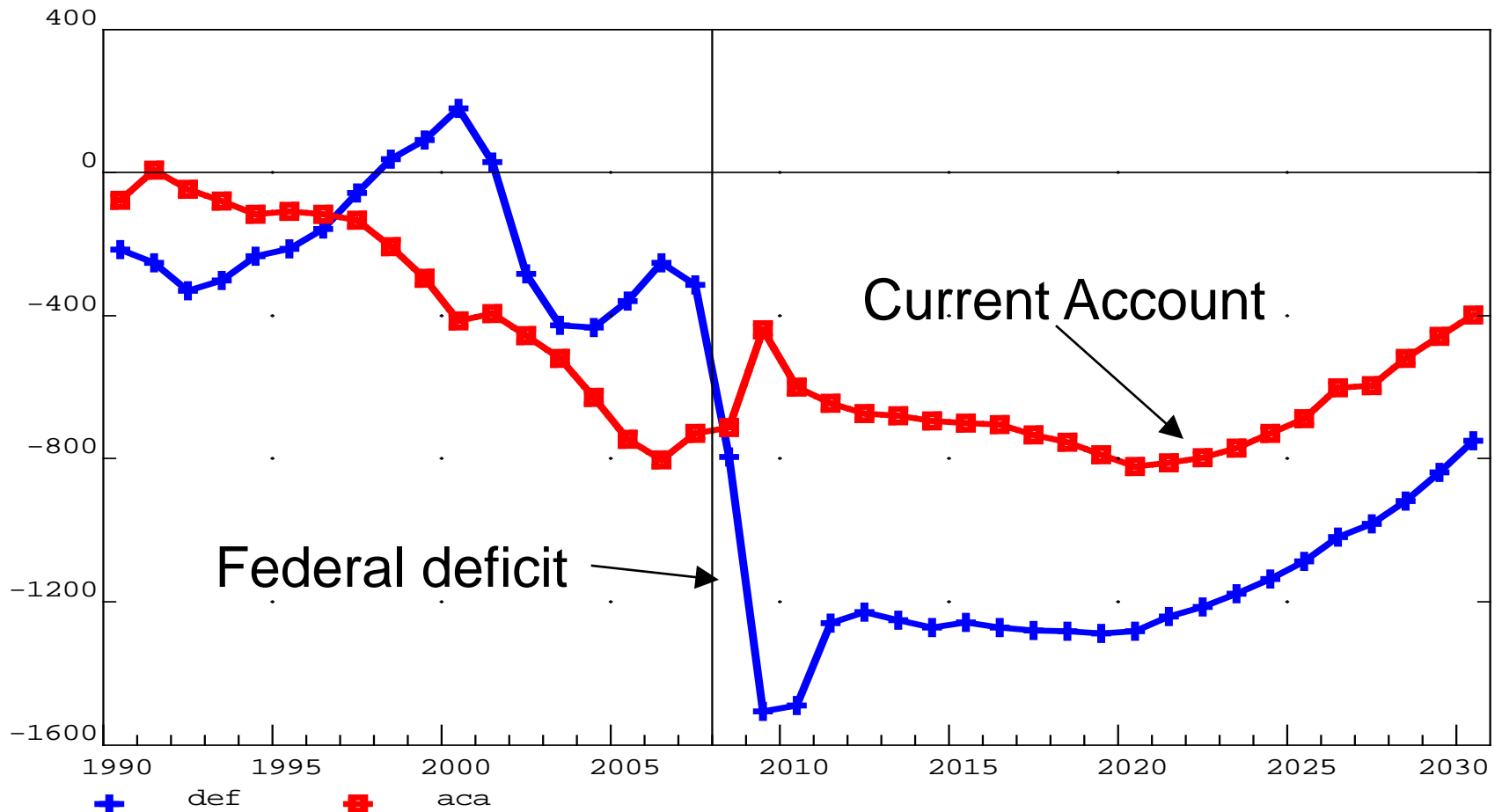
*"Business as usual" is not sustainable now.*

### U.S. Current Account Balance percent of GDP





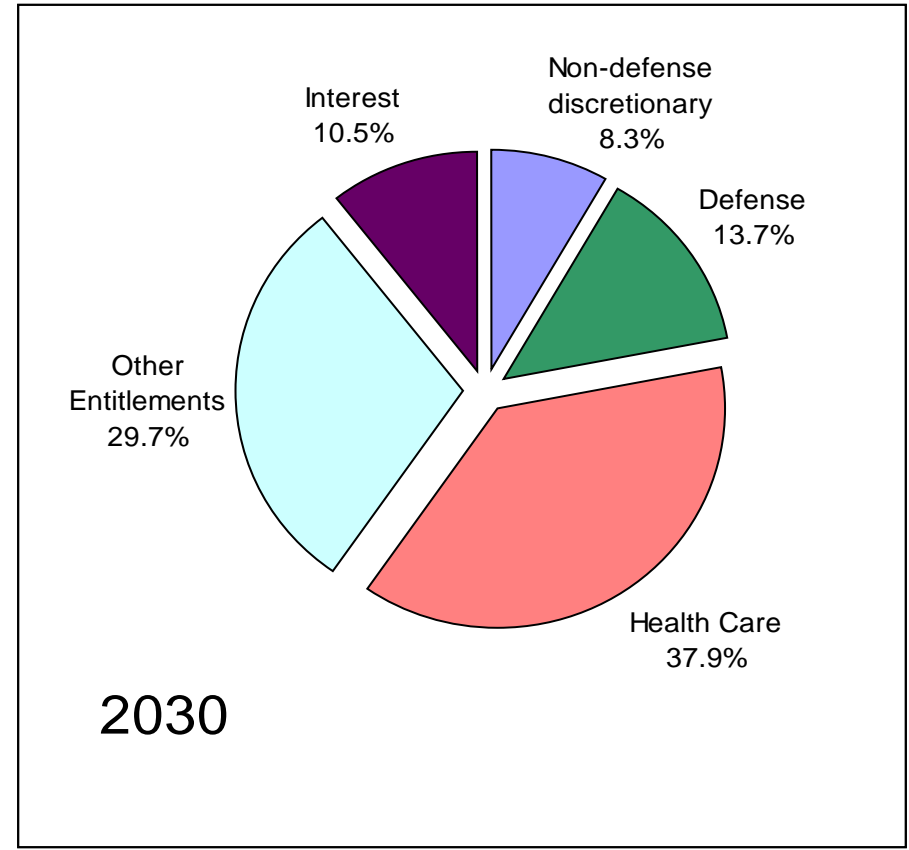
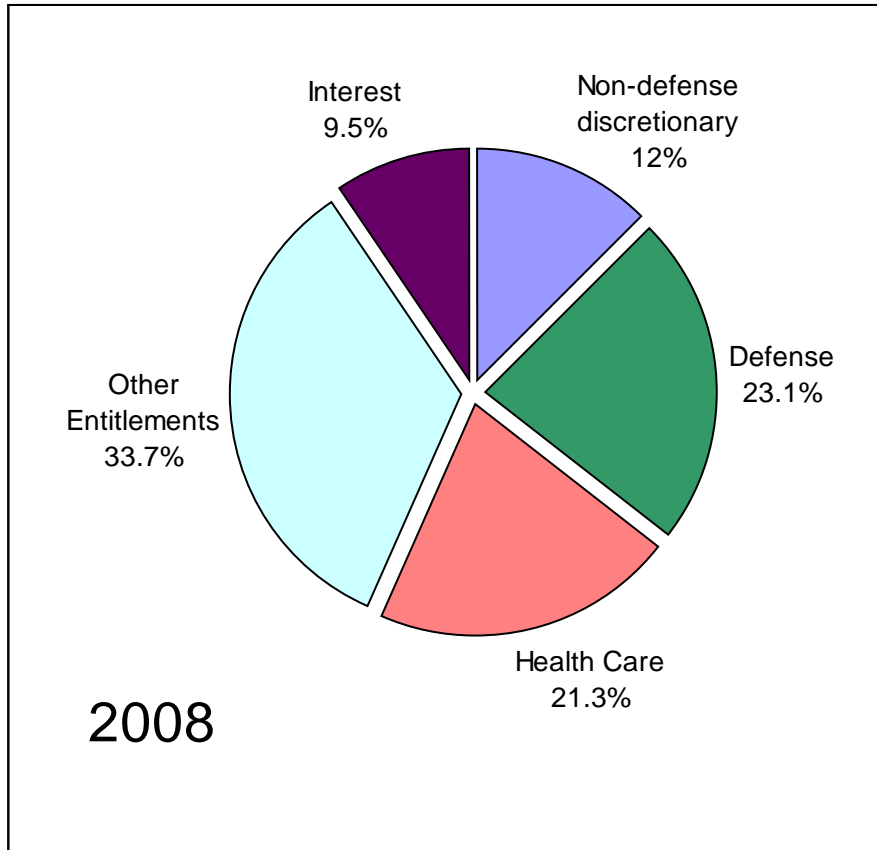
*Only by balancing federal deficit can we close the current account deficit.*





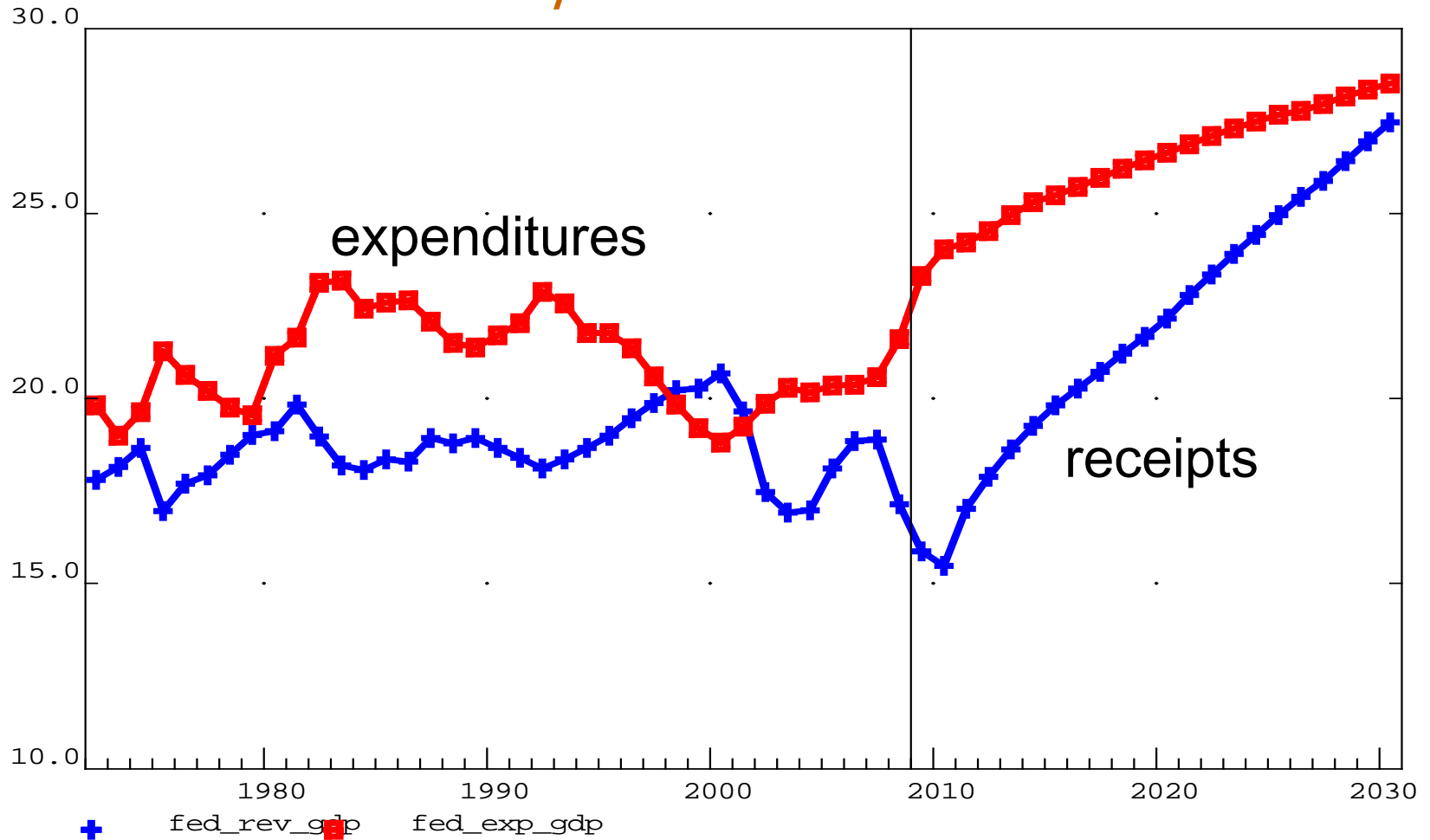
# Federal Priorities: Importance of Health Care

## Federal spending by function





# Federal receipts and expenditures as percent of GDP





## *Level of Federal Revenue is less relevant than how it is raised*

- ⊕ High marginal income taxes can retard growth.
- ⊕ Corporate income taxes are very inefficient.
- ⊕ Income exclusions for health care insurance, mortgage interest, and other goodies are extremely regressive and counterproductive. As are payroll taxes.
- ⊕ Energy taxes should include externalities.
- ⊕ Move away from taxes on capital and labor and toward taxes on consumption and energy (or carbon).
- ⊕ Radical tax reform will be key to future.