

WHAT INVESTMENT RETURNS CAN WE EXPECT THE ECONOMY TO SUPPORT IN THE LONG-TERM?

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CD Howe Session (June 1, 16:30-18:00)

Long-Term Investment Returns: Expectations and Policy Implications

WHAT I WILL DISCUSS

- Major adjustments are still required in developed countries
- Implications of these adjustments for economic growth and rates of return
- Need for research on the nature of these adjustments and on best policies to follow to bring about these adjustments

WHY MAJOR ADJUSTMENTS ARE NECESSARY IN DEVELOPED COUNTRIES

- Very strong competition from emerging economies (no more private club of developed countries)
- Large savings/investments disequilibrium
- Large reduction in net assets held by households

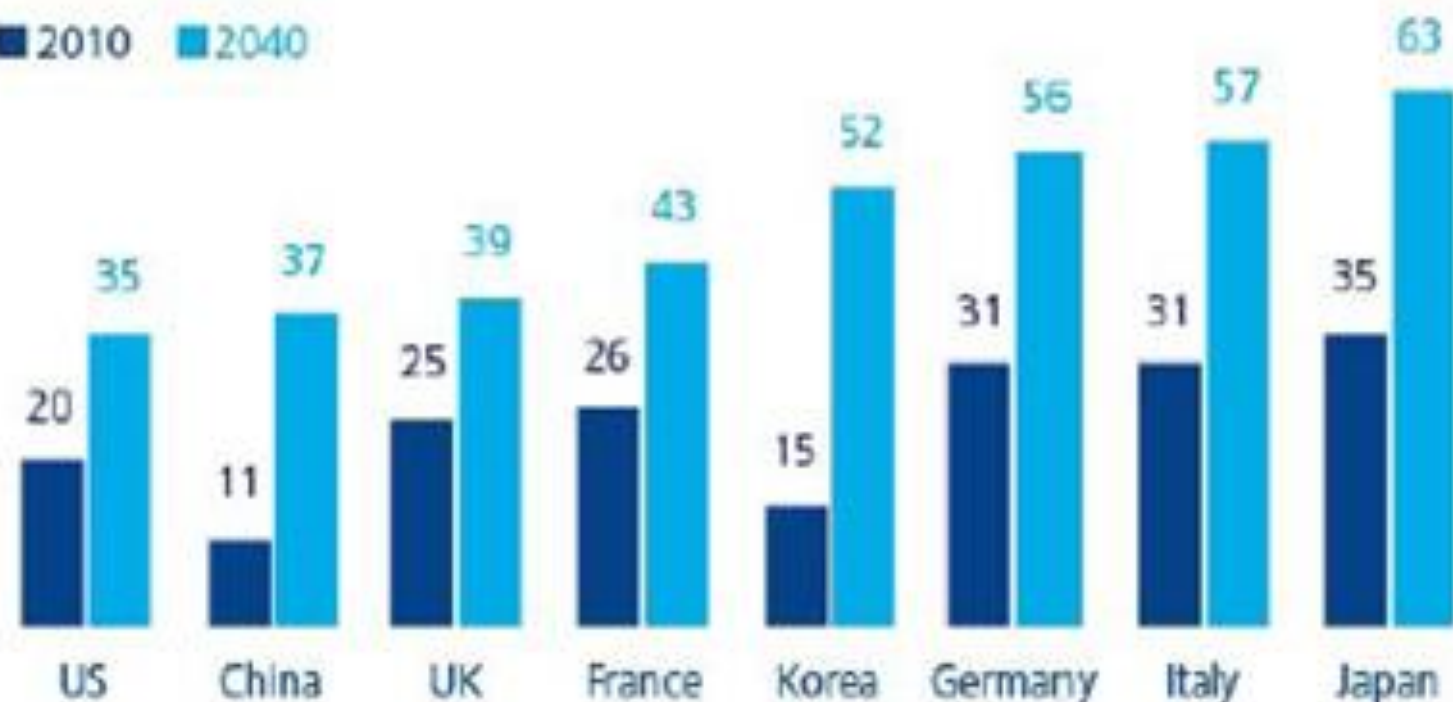
WHY MAJOR ADJUSTMENTS ARE NECESSARY IN DEVELOPED COUNTRIES (2)

- Financial crisis followed by a very slow return to full employment
- Sustained government deficits and high levels of government debt
- Aging population (we are just starting to understand the implications)

OLD-AGE DEPENDENCY RATIOS

65+ year-olds/15-64 year-olds

■ 2010 ■ 2040



Source: UN World Population Prospects 2010

Source "Debt Crisis 2.0: Aging and public finances,"
Deloitte Research, Jan. 24, 2012

OECD LONG TERM PROJECTIONS FOR ITS MEMBERS

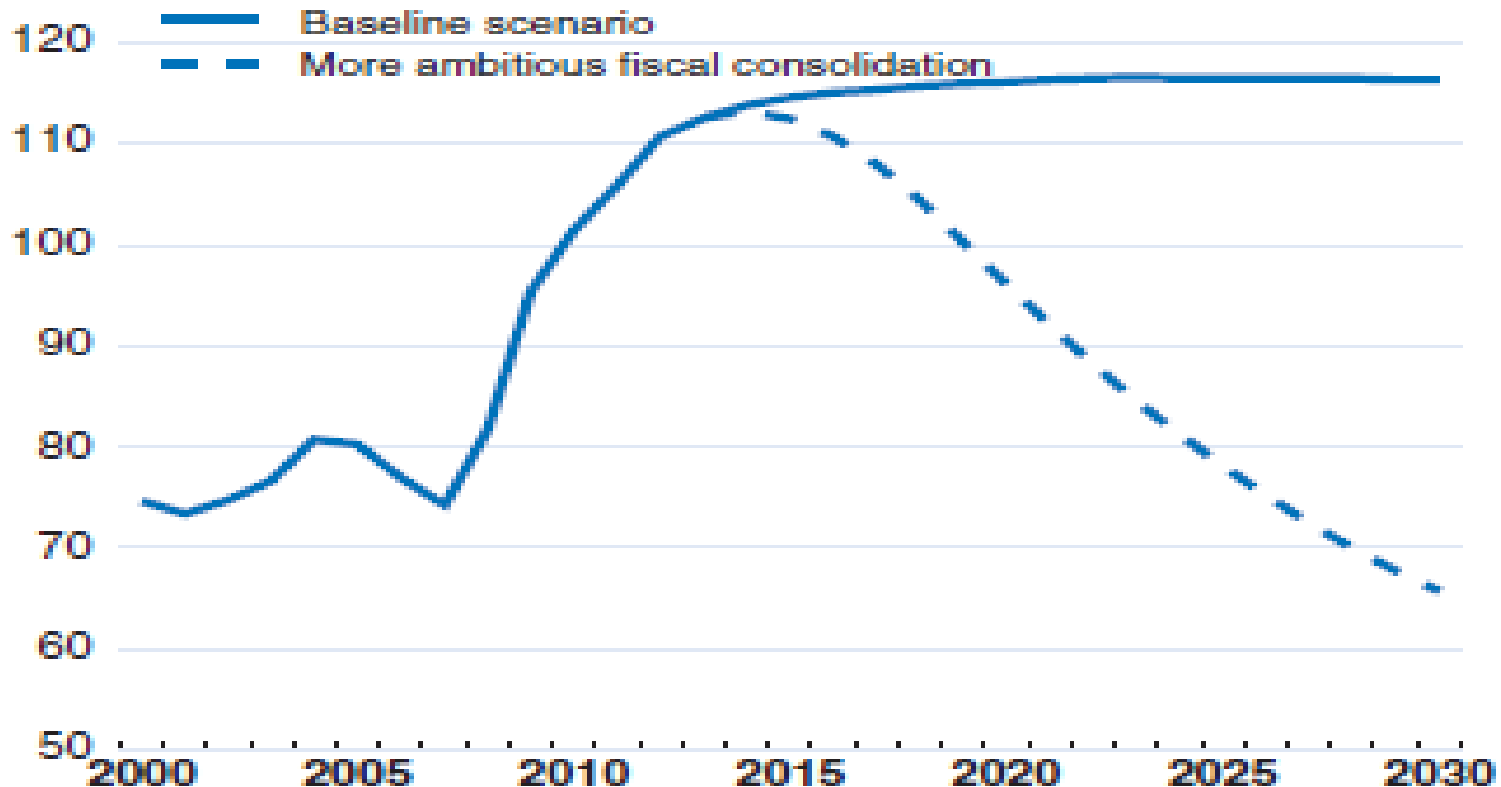
- Very high levels of government debt
- Relatively low GDP growth
- Difficulty in recognizing reduction in potential and in growth of potential in many countries
- Projections for many countries seriously affected by the debt crisis look very optimistic, especially as the OECD is assuming no debt writedowns.

OECD PROJECTIONS with no accidents

Report : Medium and long-term scenarios for global growth and imbalances, 2012

Panel A: Gross government debt, OECD average

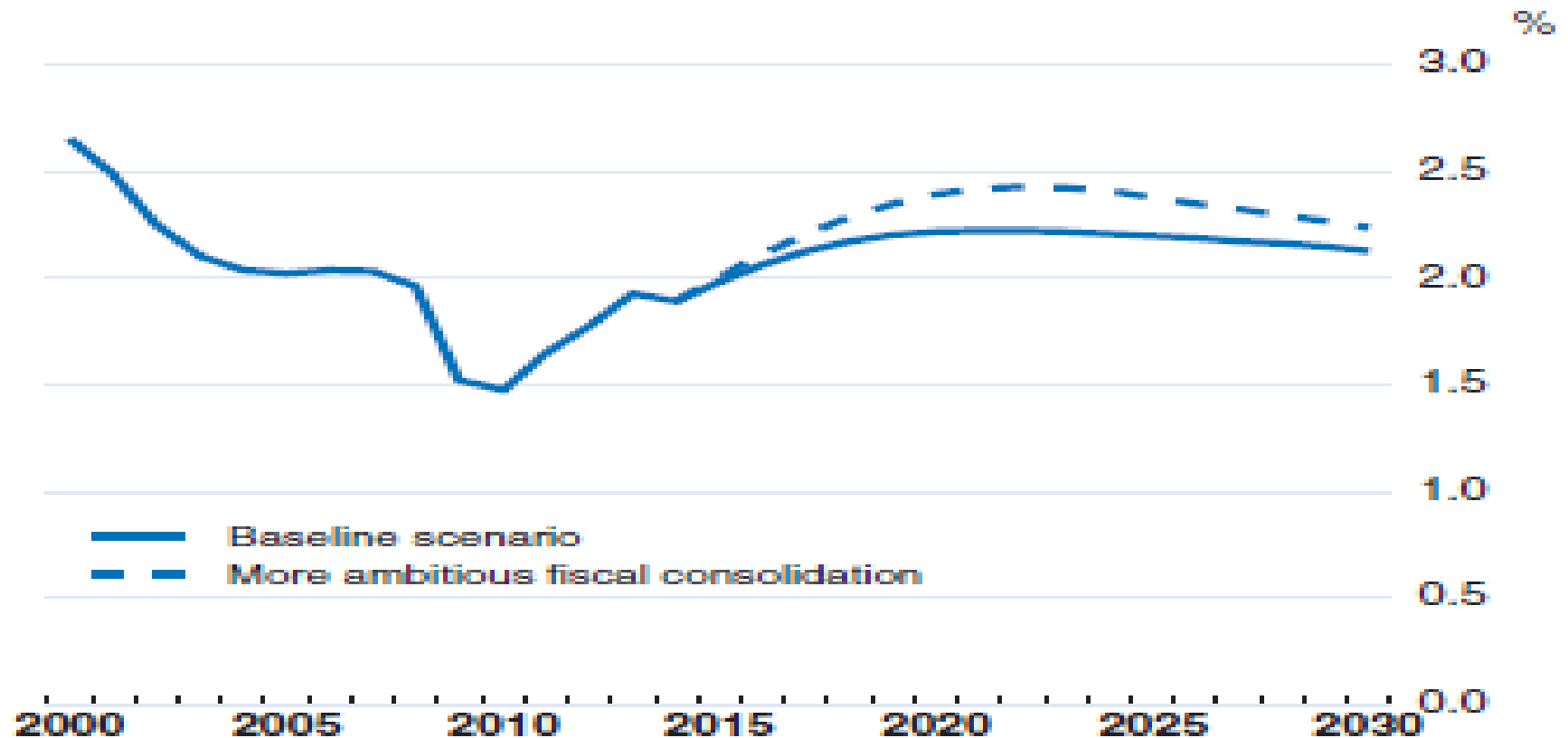
% of GDP



OECD PROJECTIONS with no accidents

Report : Medium and long-term scenarios for global growth and imbalances, 2012

Panel D: Potential output growth, OECD average

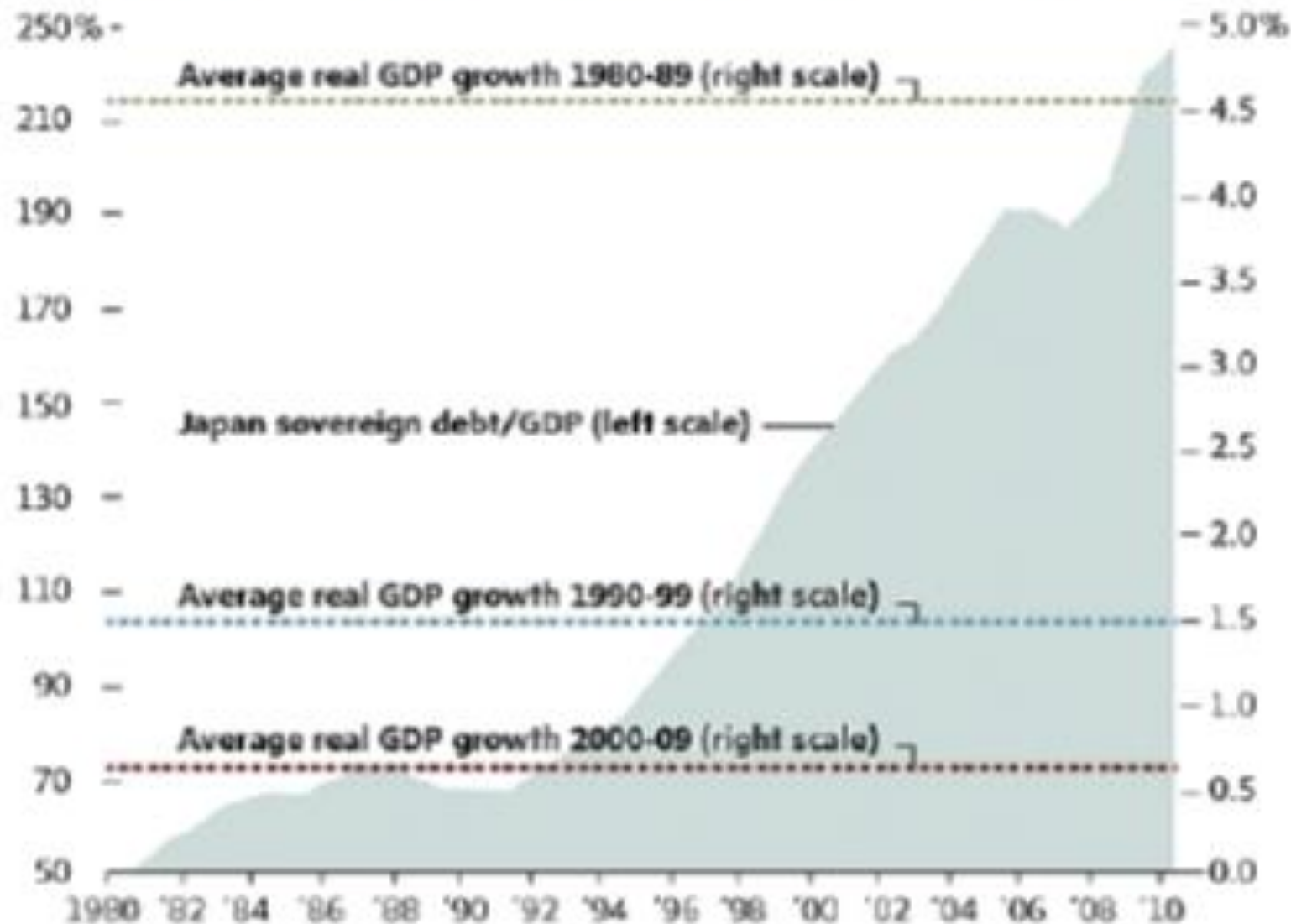


FRANCE AND ITALY

Rates of growth of real GDP

	France	Italy
• Average rate		
1999- 2012	1.3 %	0.4 %
• OECD Projections		
2012-2017	1.8 %	0.2%
2018-2030	2.1%	0.7 %
• Natixis : GDP Potential		
2013-2023	0.5 %	0.1%

TOKYO'S VISE – DEBT IS SOARING AS ECONOMIC GROWTH SLOWS

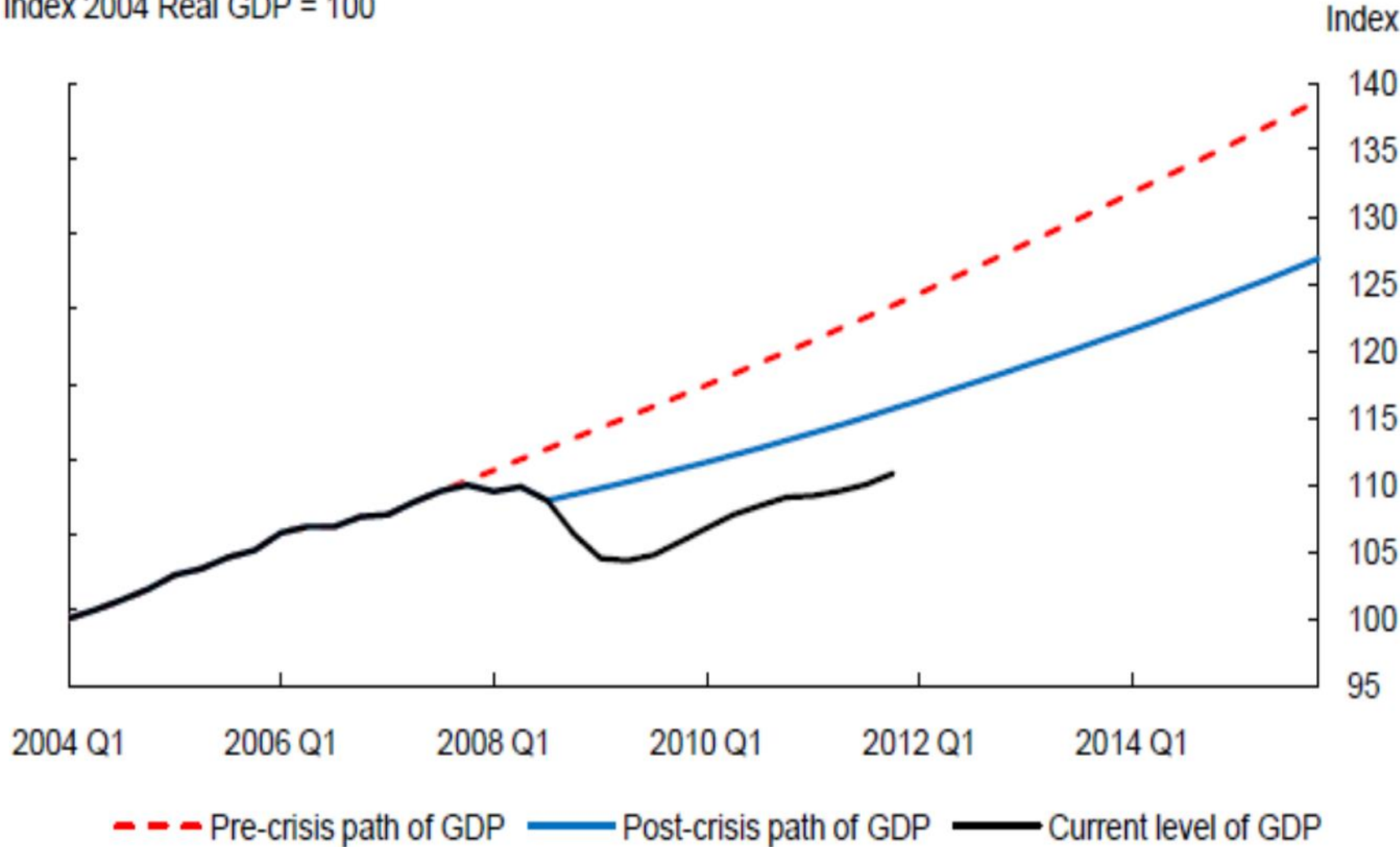


DATA SOURCE: BLOOMBERG

Source: "Japan's soaring debt," *The Globe and Mail*, March 16, 2012.

Chart 6: U.S. Economy Not What It Used To Be

Index 2004 Real GDP = 100

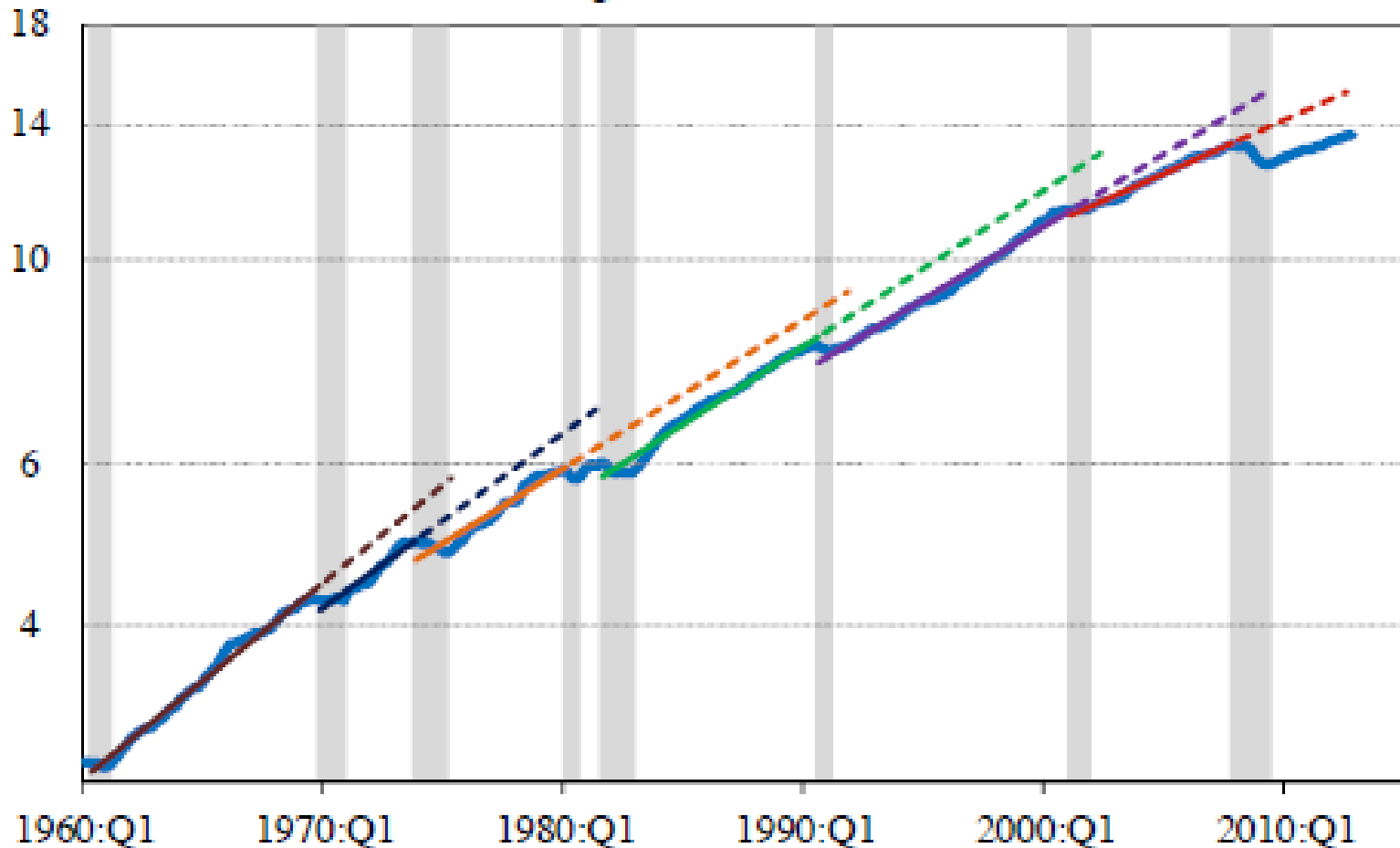


Source: Bureau of Economic Analysis and Bank of Canada calculations

Figure 1-2

Real Gross Domestic Product and Trends, 1960–2012

Trillions of chained 2005 dollars, log scale



Note: Shading denotes recession. Trend lines represent the average growth rate between successive business-cycle peaks.

Source: Bureau of Economic Analysis, National Income and Product Accounts; National Bureau of Economic Research; CEA calculations.

CANADA

(rates of growth)

	Real GDP	Labour	Productivity
1962-1970	5.3%	2.2%	3.0%
1971-1980	4.1%	2.3%	1.7%
1981-1990	2.8%	1.7%	1.1%
1991-2000	2.9%	1.1%	1.8%
2001-2010	1.9%	1.1%	0.8%
2013-2086	1.8%	0.6%	1.2%

Office of the Parliamentary Budget Officer, Fiscal Sustainability Report,
September 2011

See in the Annex the slides extracted from a presentation made by
Peter Dungan

OECD projections for 2014 (Dec. 2012)

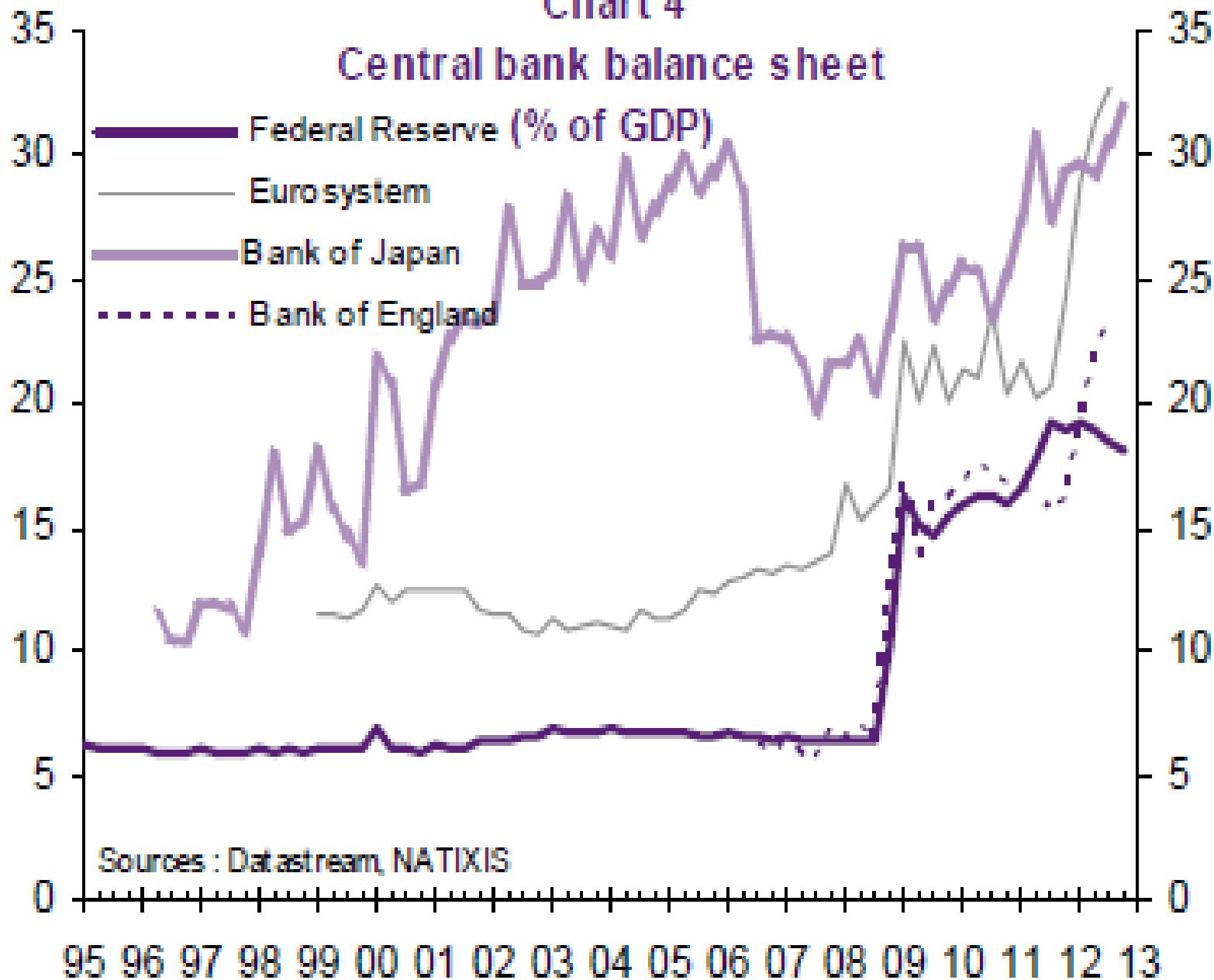
	<u>Output gap (%GDP)</u>	<u>Direction of the output gap 2012-2014</u>	<u>Government cyclically-adj. Balances (%GDP)</u>
France	-4.6%	Growing	-0.4%
Greece	-18.4%	Growing	3.9%
Ireland	-6.6%	Growing	-4.3%
Italy	-6.3%	Growing	0.5%
Japan	-2.2%	At best stable	-7.0%
Portugal	-8.5%	Growing	0.9%
Spain	-11.2%	Growing	-0.4%
United States	-2.9%	Déclining from -4.6%	-4.1%
Euro area	-4.8%	At best stable	-0.1%
Total OECD	-2.9%	Stable (down from -4%)	-2.6%

VERY SLOW RETURN TO BALANCED BUDGETS

- Despite extremely expansionary monetary policies for many years.
- Slow pace not mainly a result of low aggregate demand.
- Primarily a result of supply side problems and the fact that many countries are living beyond their means.
- Problems will take many years to resolve (especially in those countries that cannot devalue their real exchange rates).

Chart 4

Central bank balance sheet



Sources : Datastream, NATIXIS

ARE WE FACING A DISCONNECT BETWEEN THE REAL SECTOR AND THE FINANCIAL SECTOR?

- Significant reduction in GDP potential (in part generated by the lack of competitiveness)
- Lower growth of GDP resulting from lower growth in productivity and the labour force (related to the aging of the populations)
- **Not enough production to match the commitments made to citizens and debt holders**

ASSUMPTIONS REGARDING LONG-TERM REAL RATE OF RETURN ON RISK-FREE FINANCIAL ASSETS

- In the long term, the real rate of return is more likely to be high when the growth rate of the economy is high. The converse is also true.
- The rate of return on risk-free assets in developed countries can be expected to be lower in coming decades, as their growth rates are affected by aging populations, difficulty competing with emerging countries and problems of excessive debts.

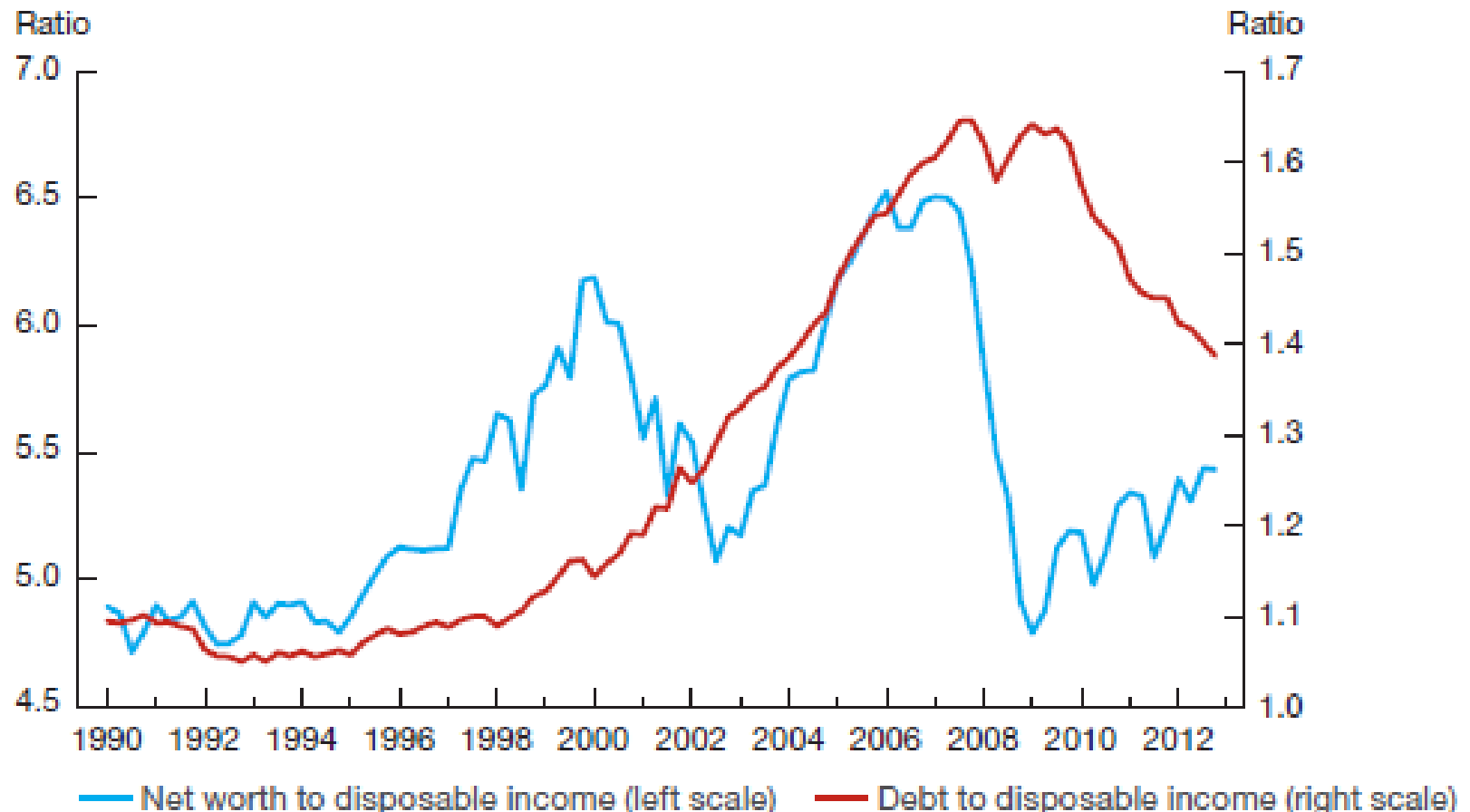
THE DISCONNECT AND THE VALUE OF THE DEBT CERTIFICATES

- Without a credible plan to reduce the relative size of the government debt, countries will find it increasingly difficult to borrow.
- Debt certificates will lose some of their market value (=> lower return ex-post)
- **We must think beyond the debt reduction process (Wealth effect in the life cycle model)**
- Lower permanent income for households => a need to save more and to work for a longer period of time

US : SLOW RECOVERY OF HOUSEHOLD WEALTH

Chart 9: U.S. households have made considerable progress in repairing their balance sheets

Quarterly data



Note: U.S. debt calculations include the unincorporated business sector.

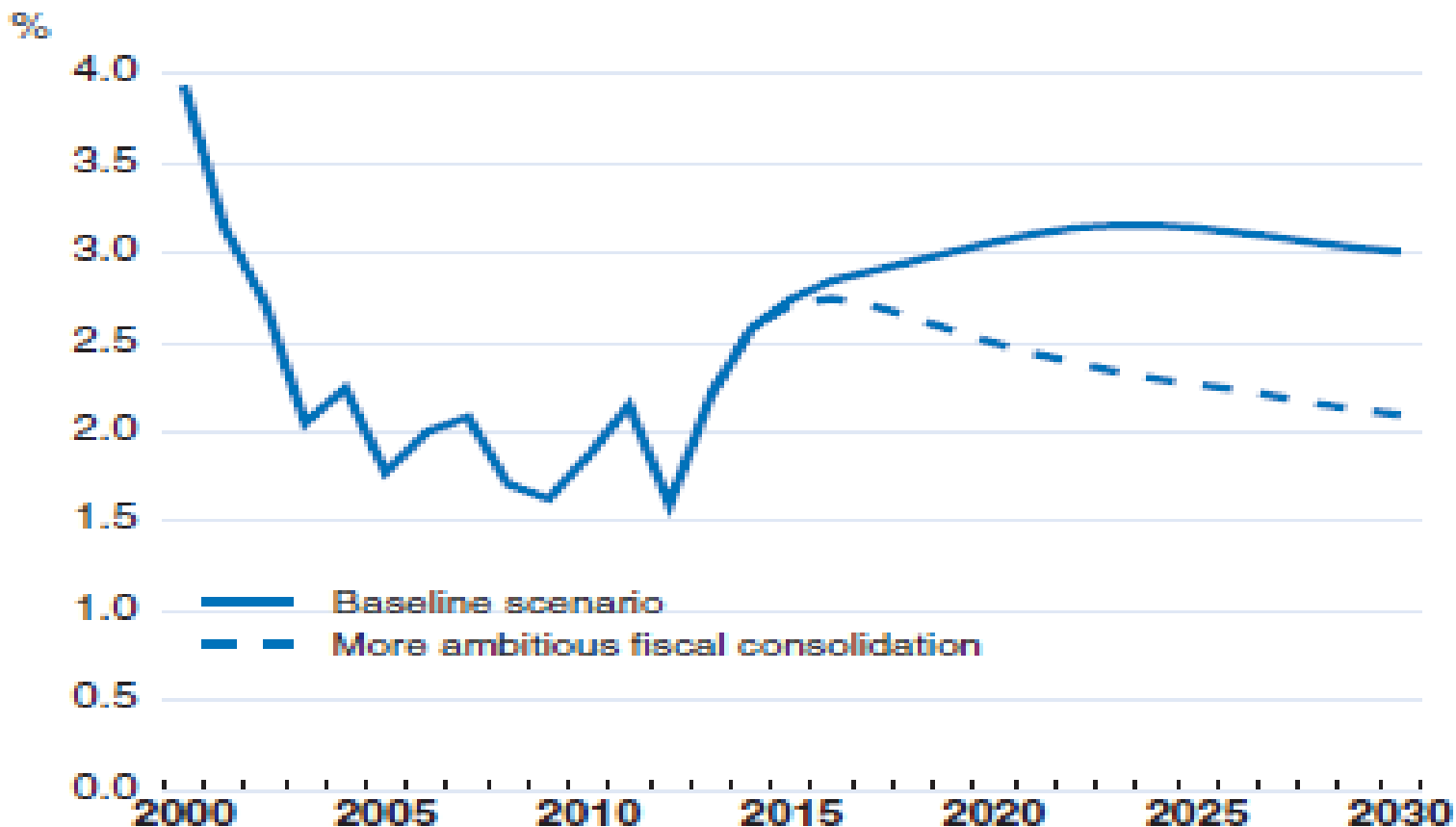
Sources: U.S. Federal Reserve and U.S. Bureau of Economic Analysis

Last observation: 2012Q4

OECD PROJECTIONS

LONG TERM REAL RATE OF INTEREST

Panel C: Real interest rate, OECD average



THREE COMMENTS ON THESE PROJECTIONS

- Interest rates must go up from the current abnormally low level.
- But over the long term, real rates will continue the downward trend observed before the crisis
- In the high debt scenario, the OECD has included a risk premium in its real rate projection (see in the chart the difference between the blue line and the dotted blue line)

THE LONG-TERM REAL RATE OF RETURN IN THE OECD COUNTRIES VERSUS THAT IN THE GLOBAL MARKET?

- Limits to capital mobility.
- Diminishing returns.
- Constraints on allocation of investment portfolios.
- Exchange rate risks.
- Examples (China, Japan, Southeast Asia...).

CONCLUSION

- *«In the longer term, real interest rates are determined primarily by nonmonetary factors, such as the expected return to capital investments, which in turn is closely related to the underlying strength of the economy.» Ben S. Bernanke, March 1, 2013*
- Lower growth for developed countries will imply lower real long term interest rate
- More research is needed on this subject and on the public policies that would be the most appropriate

ANNEX

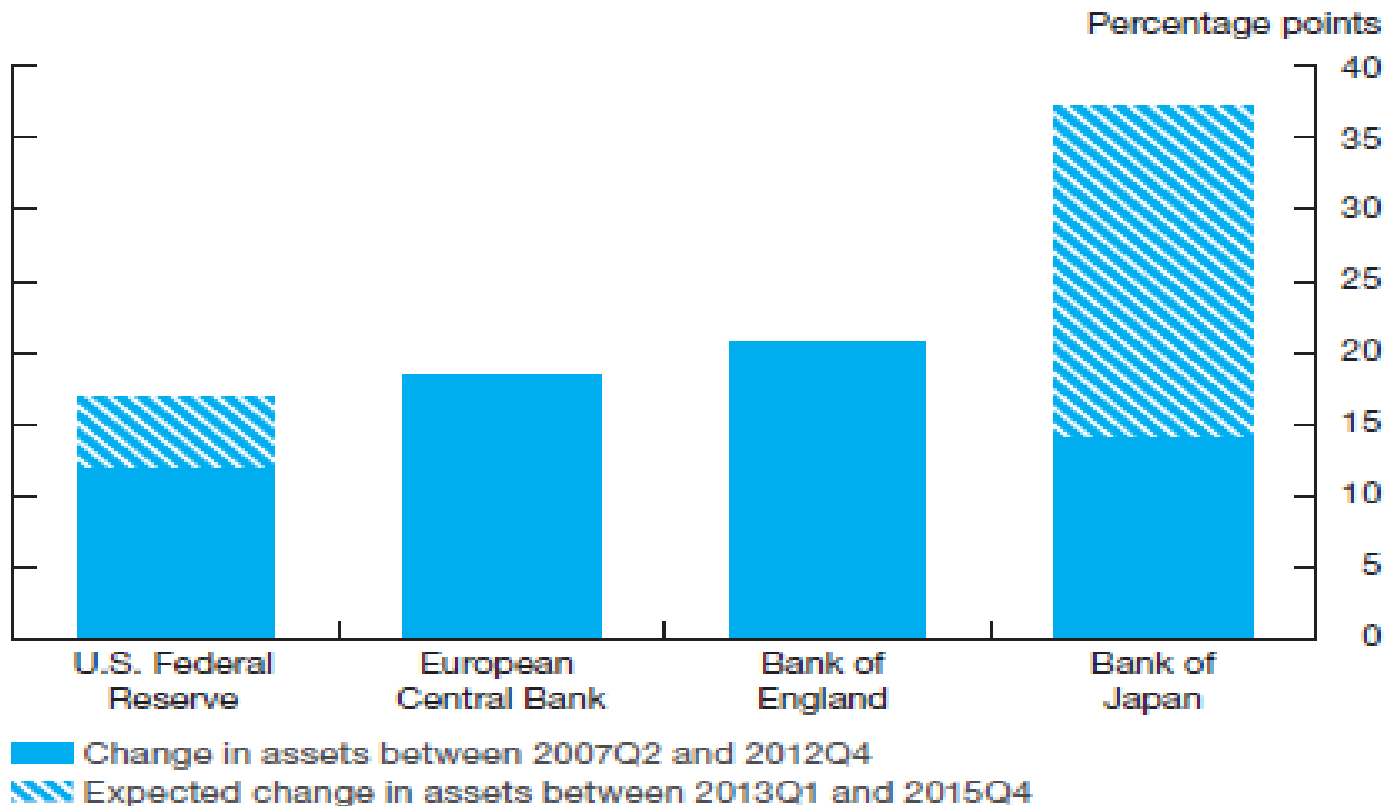
- Substantial unconventional monetary easing
- Aging population and rates of return
- 6 slides presenting abstracts from the chapter 4 of an OECD Report
- Canada example, projection errors on the rate of growth of productivity and the real interest rates, 4 slides from a presentation made by Peter Dungan

Substantial unconventional monetary easing

Monetary Policy Report, April 2013, BoC

Chart 2: ...and some central banks have provided additional substantial unconventional monetary easing

Change in central bank assets relative to GDP since 2007Q2, quarterly data



AGING POPULATION AND RATES OF RETURN

Jean Boivin, Deputy governor, Bank of Canada,

April 4, 2012

“ ... the aging population in advanced economies may in time have implications for the level of global interest rates. Taken in isolation, the scarcity of labour relative to capital would lead to higher wages and lower returns on capital, which could eventually contribute to persistently lower interest rates

The next 6 slides present abstracts from the chapter 4 of an OECD Report : Medium and long-term scenarios for global growth and imbalances, 2012

<http://www.oecd.org/berlin/50405107.pdf>

*«Further ahead, demographic changes, including ageing, and fundamental forces of economic convergence will bring about massive shifts in the composition of global GDP. **Many countries face a long period of adjustment to erase the legacies of the crisis,** particularly high unemployment, excess capacity and large fiscal imbalances. Further ahead, demographic changes, including ageing, and fundamental forces of economic convergence will bring about massive shifts in the composition of global GDP.»*

«The scenarios presented in this chapter thus provide a benign, even optimistic, medium-term outlook for the world economy. There are large risks around this central path that could derail the recovery in one or more countries, including: further crises of confidence around the debt of one or more governments; disorderly debt defaults; the collapse of one or more systemically important financial institutions or renewed concerns around bank solvency that would further impair private credit necessary to fuel the recovery; worse-than-anticipated growth impacts from private sector deleveraging; worse-than-anticipated drag from sustained and concurrent fiscal consolidation; a spike in energy prices from already elevated levels; and more generally risks from political turmoil, conflict or natural disaster. Any or a combination of these factors could tip countries back into recession or lead to stagnation ... »

«In addition, in many OECD countries government indebtedness will exceed thresholds at which there is evidence of adverse effects on interest rates, growth and the ability to stabilise the economy.... In addition, for a typical OECD country, additional offsets of 3 to 4% of GDP (in their primary balance) will have to be found over the coming 20 years to meet spending pressures due to increasing pension and health care costs.»

«Over a horizon to 2030... the baseline scenario shows a build-up of a number of major macroeconomic imbalances including: high and widespread government indebtedness; rising global current account imbalances; and upward pressures on interest rates... These imbalances should be viewed as identifying future tensions which will need to be addressed by policy rather than most likely outcomes...»

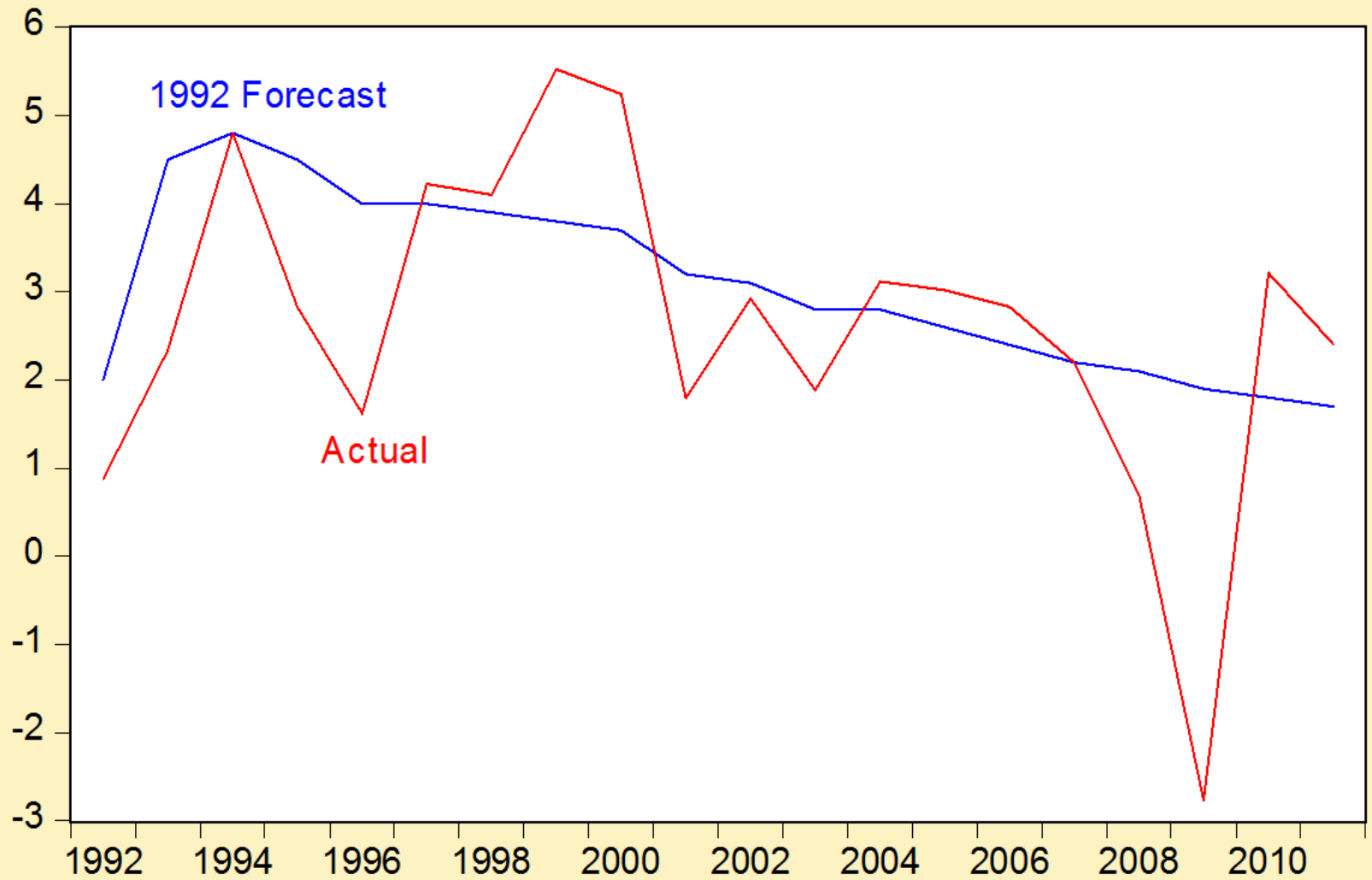
«Ageing populations are then projected to be the dominant force driving down saving rates over the long term. Demographic developments (combining the effect of changes in old-age and youth dependency ratios as well as life expectancy) are estimated to reduce the private saving rate for the median OECD country by about 3-4 percentage points by 2030, with much heterogeneity around this median.»

«Another optimistic assumption that underlies the scenarios presented here is that the crisis has only reduced the level of potential output and has had no permanent adverse effect on its growth rate. Compared with precrisis projections, the level of aggregate OECD potential output, both currently and over the next few years, has been revised downwards by about 2½ per cent... Because even very large output gaps are assumed to close fairly quickly, the possibility of large negative output gaps persisting for several years, with hysteresis-type effects continuing to drag down the level of potential output, is thus a downside risk to the scenarios presented here.»

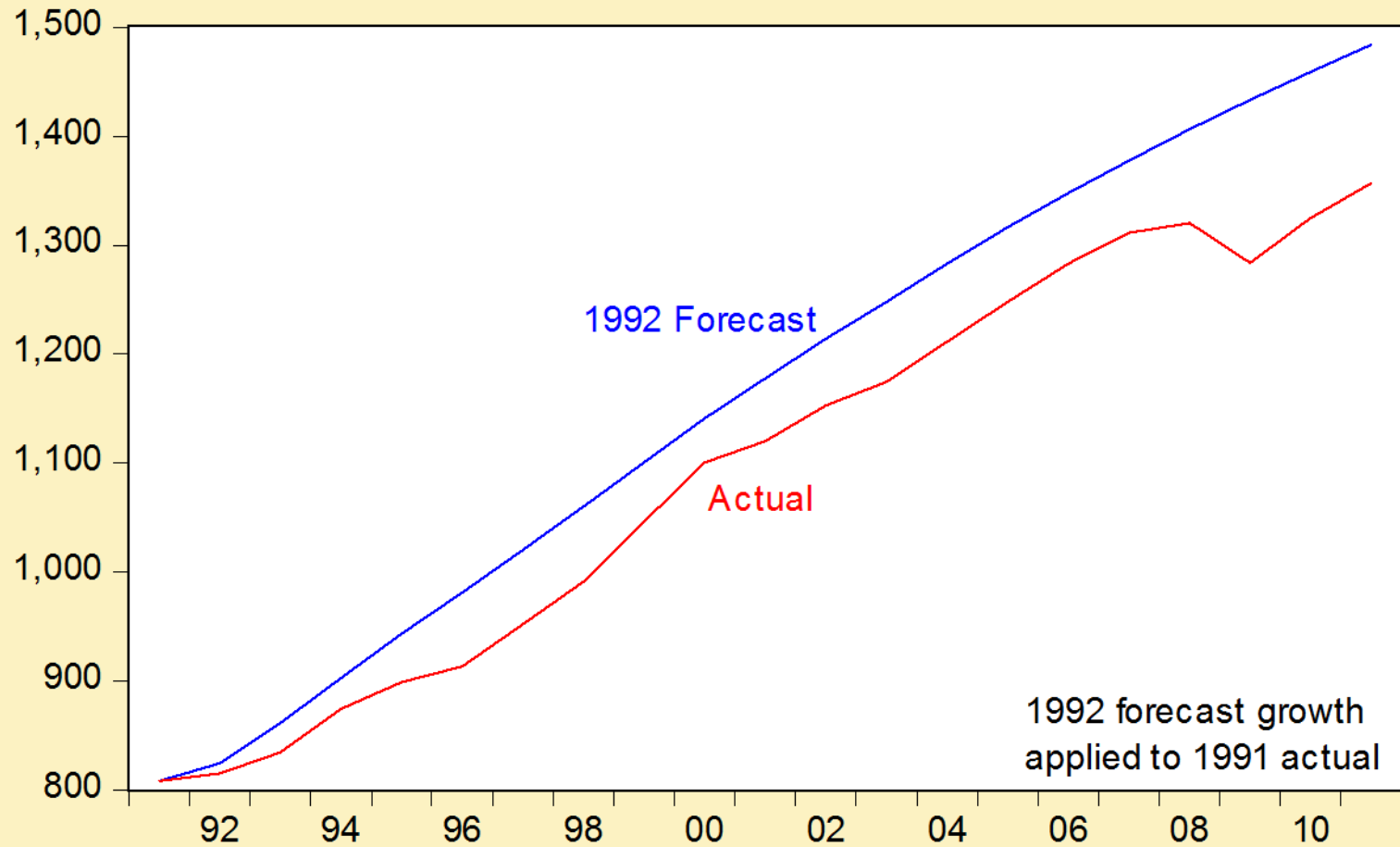
PROJECTION ERRORS ON ECONOMIC GROWTH AND REAL INTEREST RATES

- Peter Dungan, Adjunct Associate Professor of Business Economics, University of Toronto, Rotman School, Toronto, Ontario
- Seminar on Demographic, Economic and Investment Perspectives for Canada - 2012 to 2050 , Office of the Chief Actuary, Sept. 2012,
- One of the main error made in the economic projection made in 1992 : too high GDP growth, productivity growth, and real interest rates

Real GDP Growth Rate 1992 Forecast and Actual

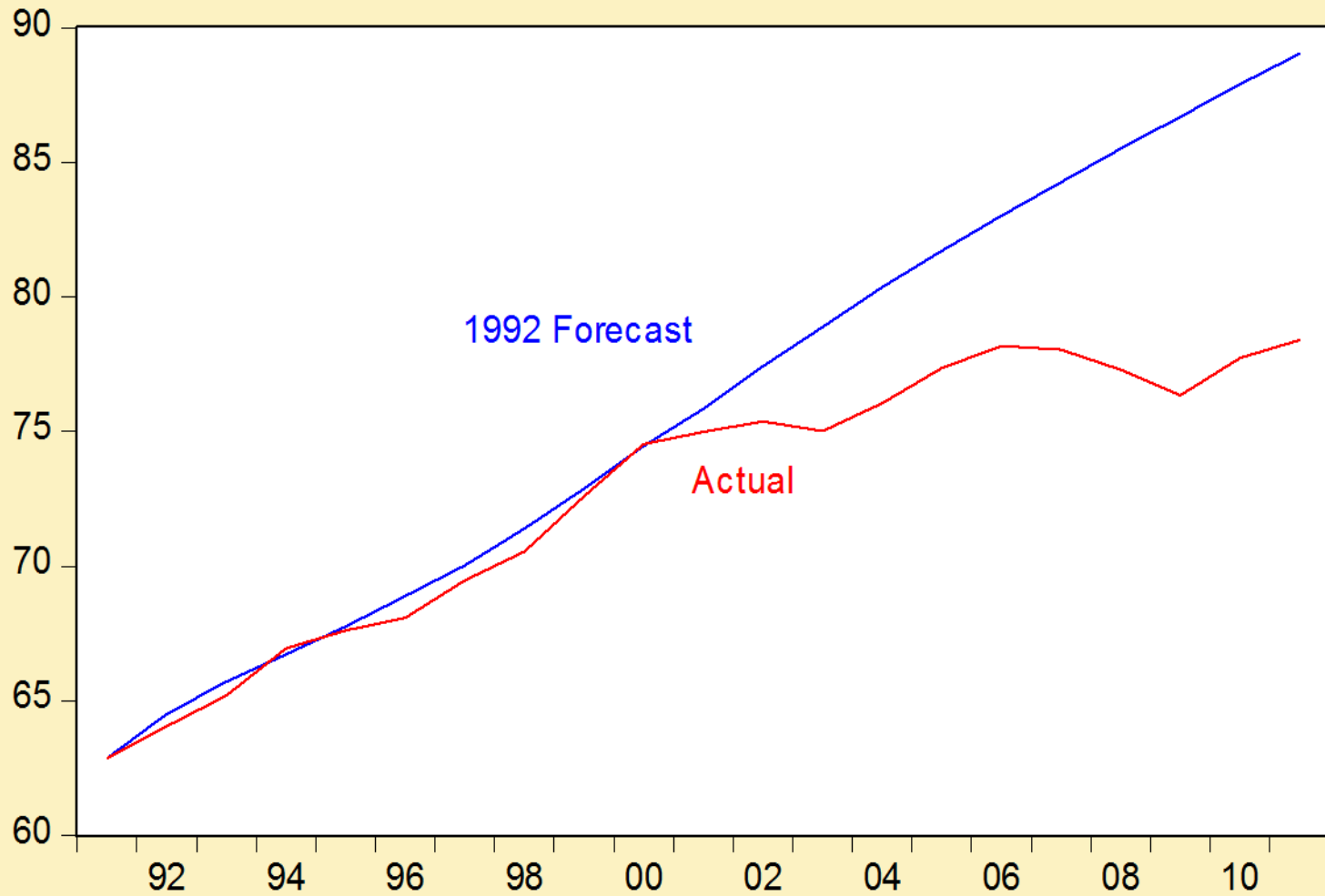


Real GDP (\$ 2002 Bill) 1992 Forecast and Actual



GDP/Employee (\$2002 '000)

1992 Forecast and Actual



Real Industrial Bond Rates: 1992 Forecast and Actual

