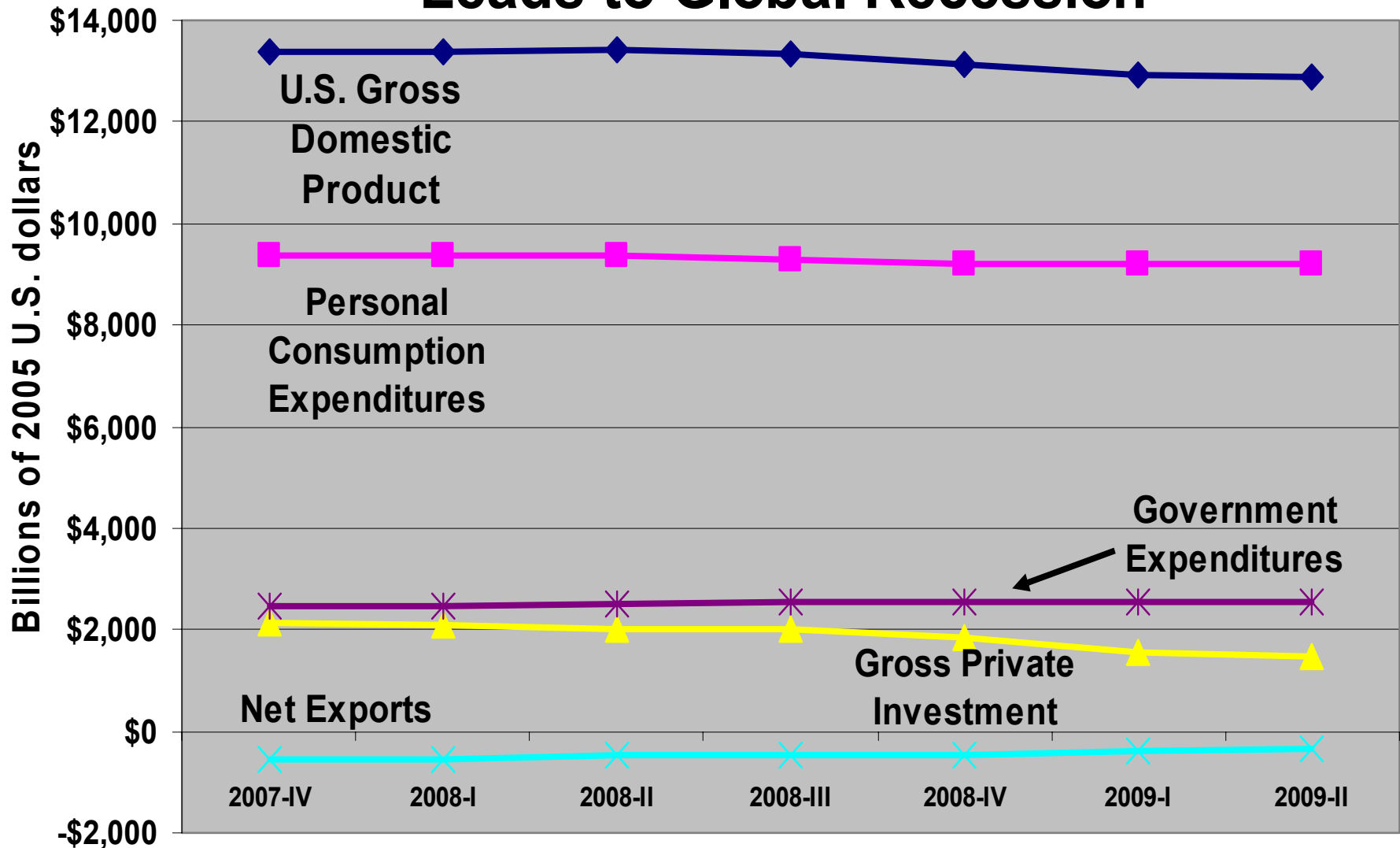




International Economic Outlook

**PINE CHEMICALS
ASSOCIATION**
2009 International
Conference
September 21, 2009

A Decline in US Fixed Investment Leads to Global Recession



SOURCE: U.S. Bureau of Economic Analysis

The slowdown began in 2006, Intensified in 2008:

- U.S. Automobile production and New Home investment fell in 2006 in reaction to inventory buildup.
- Restaurant sales slowed in 2008 as unemployment rose.
- Personal computer, server, networking equipment, and semiconductor shipments fell in October 2008.

GDP growth

constant prices, percent change

<u>North America</u>	1980-1989	1990-1999	2000-2008
Canada	3.0	2.4	2.7
United States	3.1	3.1	2.3
Mexico	2.4	3.4	2.9

Source: International Monetary Fund

GDP growth

constant prices, percent change

<u>The European Union</u>	1980-1989	1990-1999	2000-2008
France	2.3	1.8	1.9
Germany	1.9	2.3	1.4
Ireland	2.4	7.0	5.2
Italy	2.1	1.4	1.2
Poland	0.1	2.7	4.2
Spain	2.7	2.8	3.3
The United Kingdom	2.4	2.2	2.5

GDP growth

constant prices, percent change

<u>Asia</u>	1980-1989	1990-1999	2000-2008
Japan	3.8	1.5	1.5
Korea	7.7	6.3	4.8
India	5.6	5.6	7.2
Mainland China	9.7	10.0	10.0
Hong Kong, SAR	6.5	3.6	5.0
Taiwan	8.2	6.5	3.6

Source: International Monetary Fund

Real GDP growth

Percent change from same period of the previous year

<u>North America</u>	Q1 2009	Q2 2009	2009f	2010f
Canada	-1.6	-0.9	-1.5	2.5
United States	-1.6	-0.3	-1.4	1.7
Mexico	-5.8	-1.1	-4.0	3.1

Source: OECD, International Monetary Fund

Real GDP growth

Percent change from same period of the previous year

	Q1 2009	Q2 2009	2009f	2010f
<u>The European Union</u>				
France	-1.3	0.3	-1.9	1.3
Germany	-3.5	0.3	-4.6	0.0
Ireland	-1.5	no data	-9.8	-1.5
Italy	-2.7	-0.5	-3.3	0.4
Poland	0.8	0.5	-0.7	0.6
Spain	-1.6	-1.1	-4.1	0.3
The United Kingdom	-2.4	-0.7	-2.5	0.5

Real GDP growth

Percent change from same period of the previous year

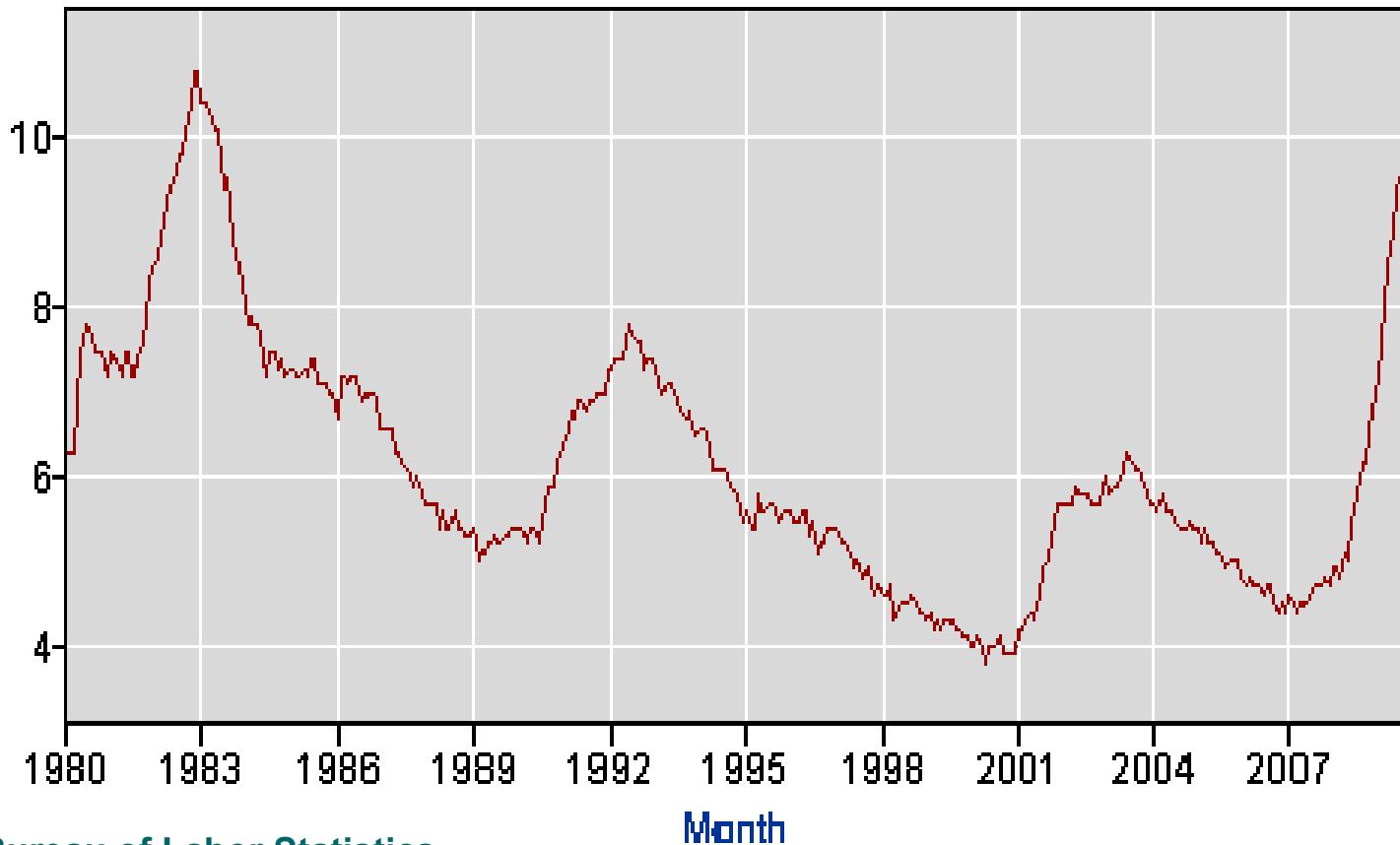
	Q1	Q2		
	2009	2009	2009f	2010f
Asia				
Japan	-3.1	0.9	-1.8	0.9
Korea	0.1	2.6	-1.8	2.5
India	5.8	6.1	5.8	6.7
Mainland China	6.1	7.1	8.4	8.6
Hong Kong, SAR	-3.8	-7.8	3.5	4.2
Taiwan	-10.1	-7.5	no data	no data

Sources: OECD; International Monetary Fund; and China, India and Hong Kong statistical agencies (2009 actual data).

Declines in international trade hit the global economy in 2009:

- **IMF forecasts world trade will fall -12.2%.**
- **Germany and Japan have been hit especially hard by declines in exports.**
- **Net exports have increased in some countries, as imports decline with domestic demand:**
 - ❖ ***United States, Ireland, Poland, Spain and Korea have increased net exports, offsetting the negative effects of lower domestic demand.***

U.S. Unemployment Rate, 1980- Aug., 2009 (percent, monthly, seasonally adjusted)

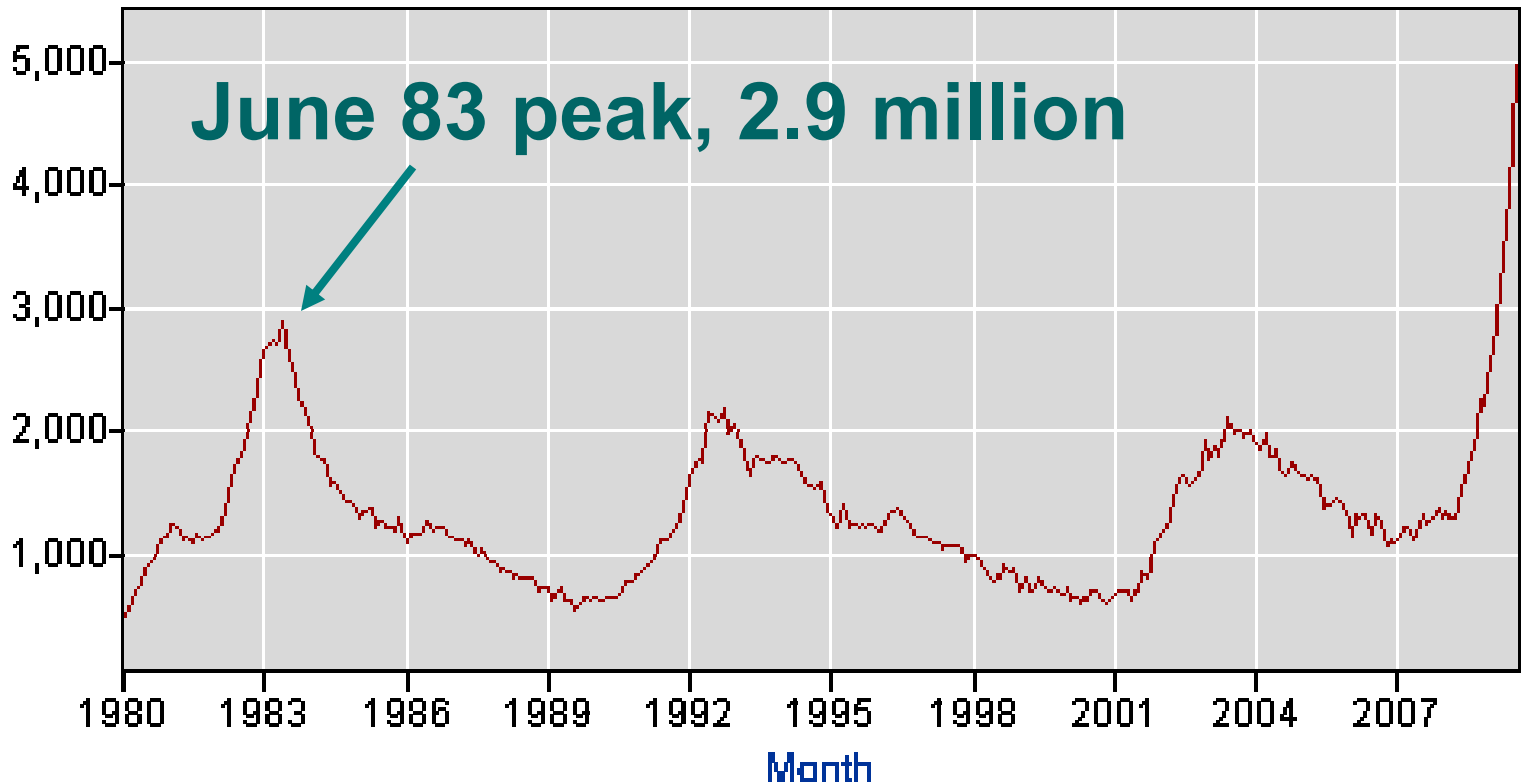


Source: U.S. Bureau of Labor Statistics

www.Econosystems.com

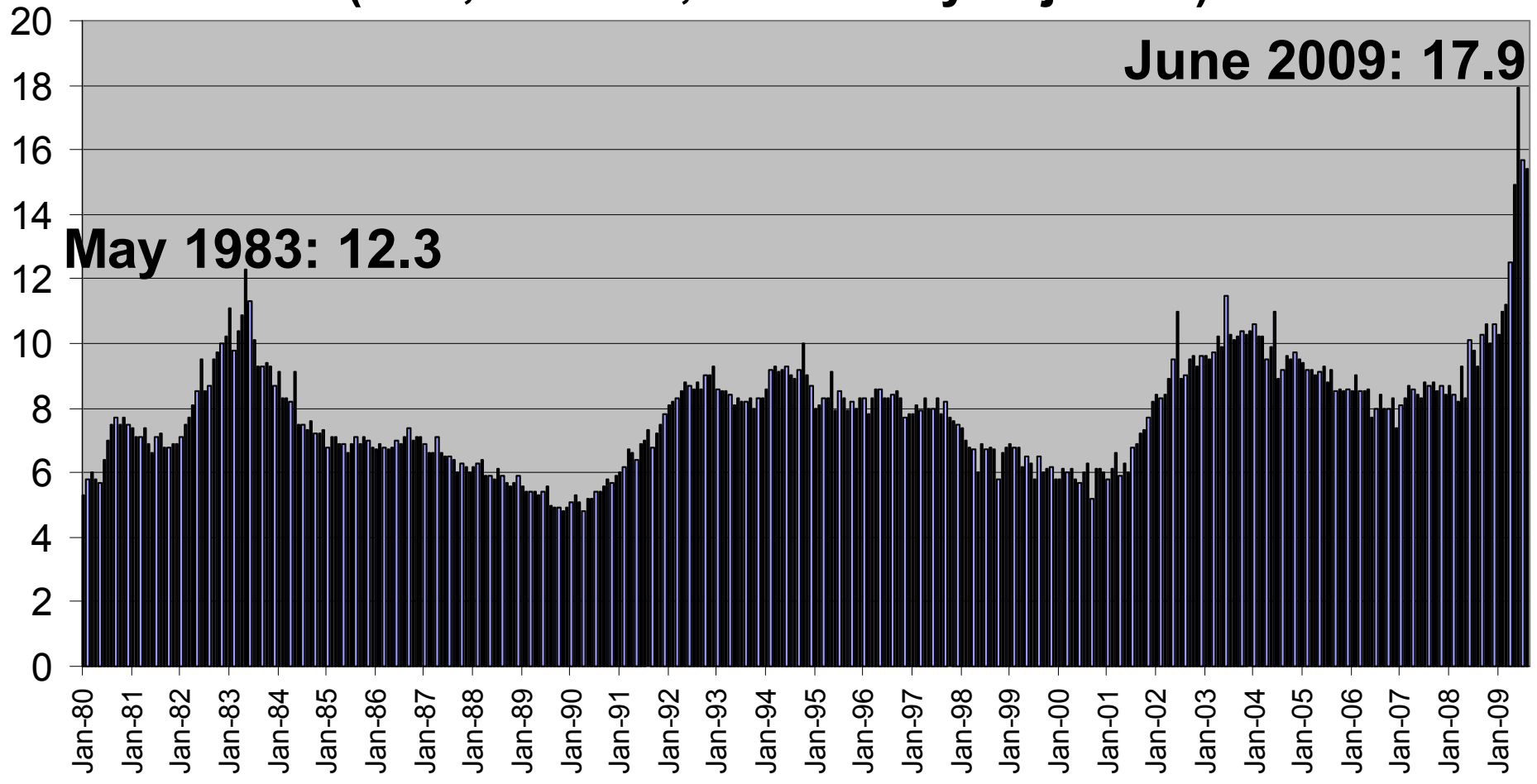
Number Unemployed longer than 26 weeks *5.0 million in July-August 2009*

(graph, number in thousands, seasonally adjusted)



Source: U.S. Bureau of Labor Statistics

Median Weeks Unemployed, Jan. 1980 - Aug. 2009 (U.S., number, seasonally adjusted)



June 2009: 17.9

May 1983: 12.3

Source: U.S. Bureau of Labor Statistics

Unemployment percent of total labor force

<u>North America</u>	1980-1989	1990-1999	2000-2008
Canada	9.4	9.6	6.9
United States	7.3	5.8	5.1
Mexico	2.5	2.8	2.8

Source: International Monetary Fund

Unemployment percent of total labor force

The European Union	1980-1989	1990-1999	2000-2008
France	9.1	10.7	8.8
Germany	6.9	7.7	8.7
Ireland	14.1	12.1	4.6
Italy	8.5	10.3	8.0
Poland	no data	12.1	16.3
Spain	17.7	19.7	10.6
The United Kingdom	9.9	8.2	5.2

Source: International Monetary Fund

Unemployment percent of total labor force

Asia	1980-1989	1990-1999	2000-2008
Japan	2.5	3.0	4.6
Korea	3.8	3.3	3.6
Mainland China	2.1	2.8	3.9
Hong Kong, SAR	2.9	2.8	5.6
Taiwan	2.1	2.0	4.2

Source: International Monetary Fund

Slow Economic Growth Causes Unemployment to Rise Further:

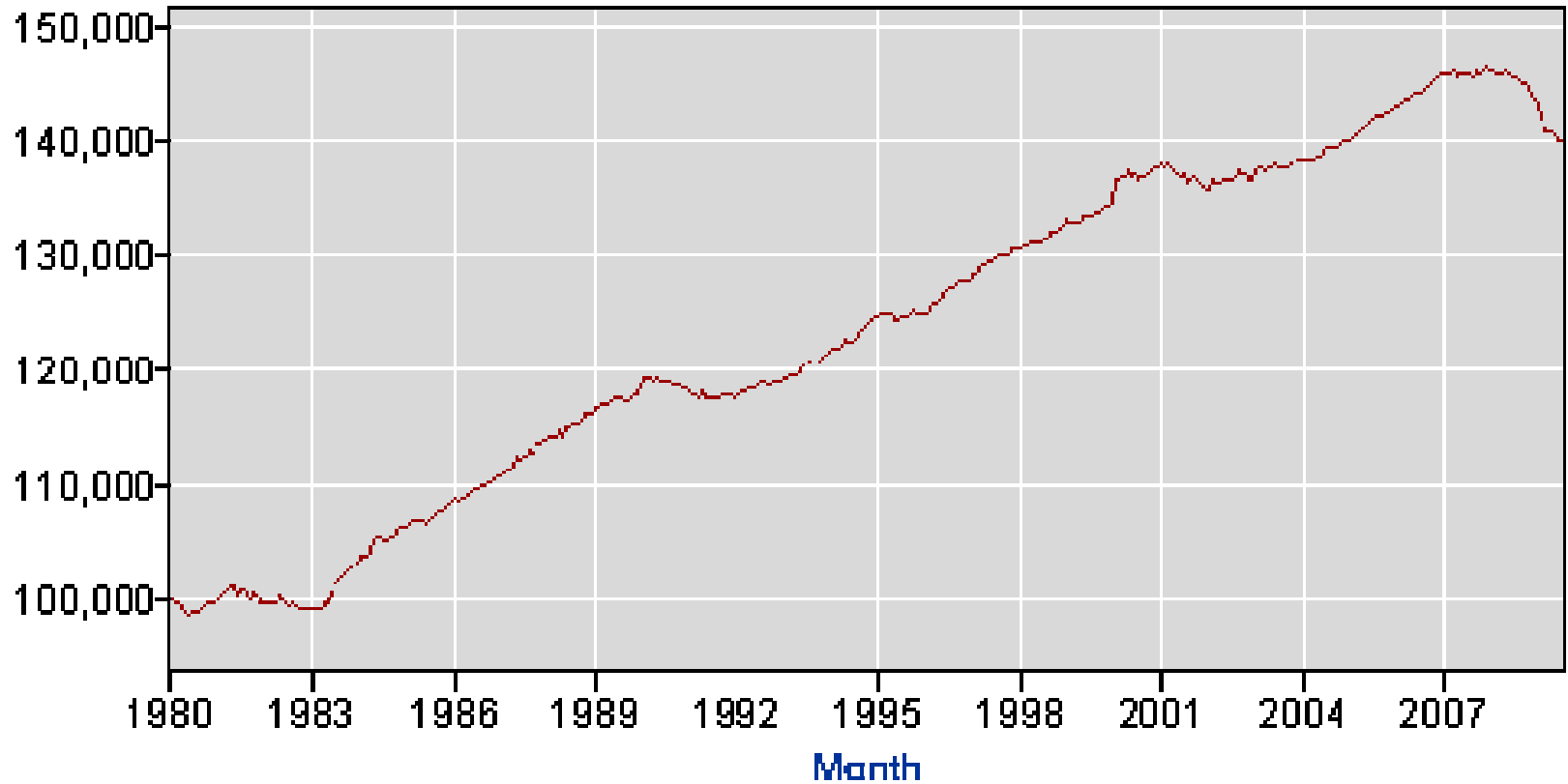
Forecast Unemployment Rates

- US: **2009** 10.0% **2010** 10.1%
- Canada: **2009** 9.3% **2010** 9.8%
- Japan: **2009** 5.6% **2010** 5.8%

Forecast Unemployment Rates:

- France: **2009** 10.6% **2010** 11.3%
- Germany: **2009** 10.3% **2010** 11.8%
- Ireland: **2009** 13.7% **2010** 15.1%
- Poland: **2009** 10.2% **2010** 12.5%

Civilian employment, Jan. 1980 – Aug. 2009 (U.S., thousands, seasonally adjusted)



Source: U.S. Bureau of Labor Statistics

Employment

average annual percent change

North America	1980-1989	1990-1999	2000-2008
Canada	1.7	1.0	1.7
United States	1.7	1.2	0.7
Mexico	no data	2.5	1.1

Source: International Monetary Fund

Employment percent change

The European Union	1980-1989	1990-1999	2000-2008
France	0.3	0.4	0.7
Germany	0.2	0.1	0.3
Ireland	-0.4	3.4	2.5
Italy	0.8	-0.9	1.2
Poland	-0.3	-1.6	0.9
Spain	0.6	1.1	2.5
The United Kingdom	0.6	0.1	0.8

Source: International Monetary Fund

Employment percent change

Asia	1980-1989	1990-1999	2000-2008
Japan	1.0	0.3	-0.1
Korea	2.5	1.2	1.3
India	1.1	0.6	-0.9
Mainland China	2.1	1.1	0.8
Hong Kong, SAR	1.4	1.9	0.9
Taiwan	2.3	1.3	0.9

With a global recovery like this, who needs recessions?

- Employment levels will continue to fall in 2009 and into 2010.
 - Productivity increases allow income and output to increase even as employment falls.
- Employment growth not seen until 3rd quarter of next year.
 - The OECD predicts employment change of -2% for 2009, -1% for 2010.
- Without a positive spending shock, job losses will slow but not be reversed this year..

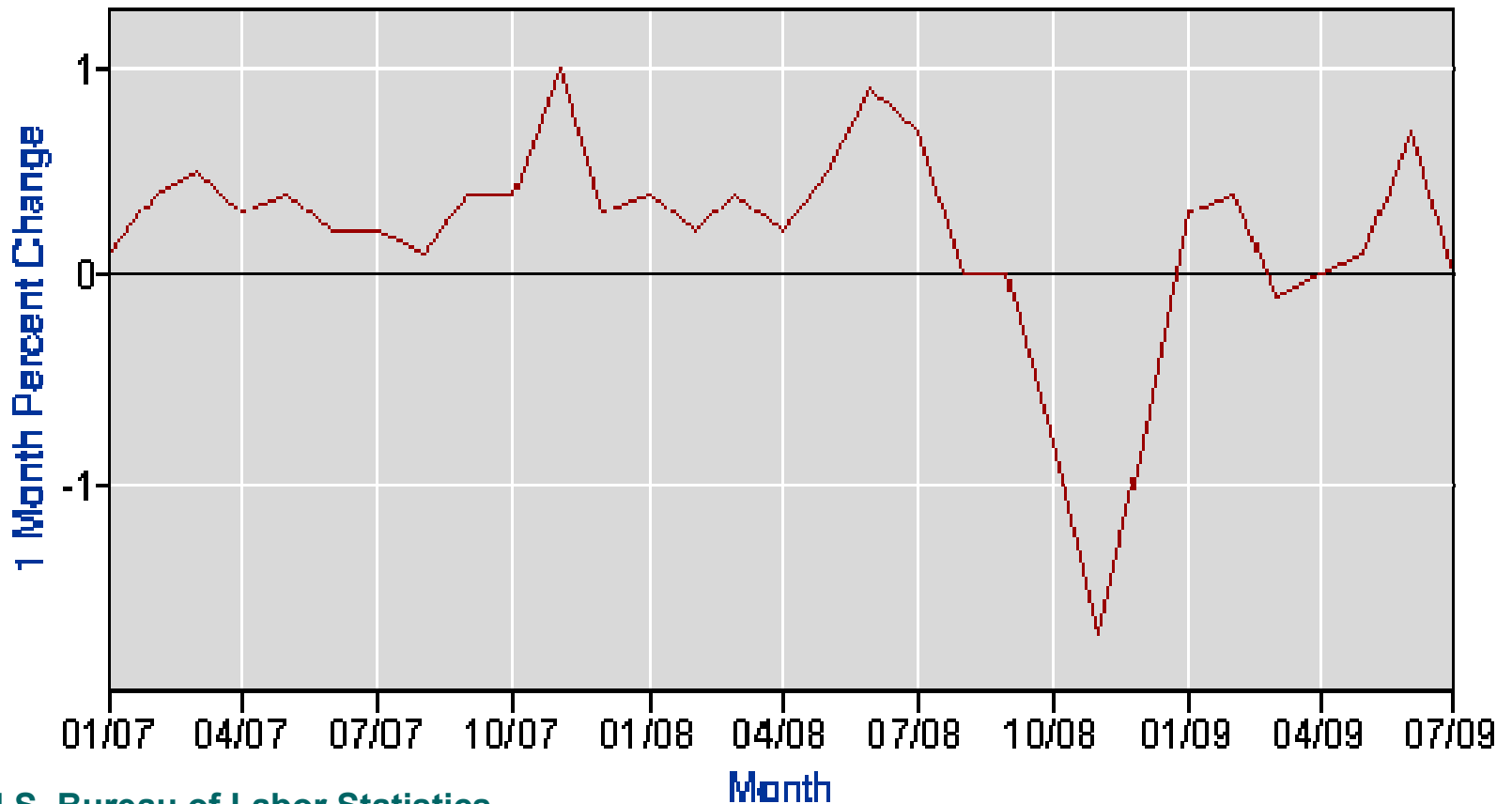
Inflation

consumer prices, average annual percent change

North America	1980-1989	1990-1999	2000-2008
Canada	6.5	2.2	2.3
United States	5.6	3.0	2.9
Mexico	69.1	20.4	5.2

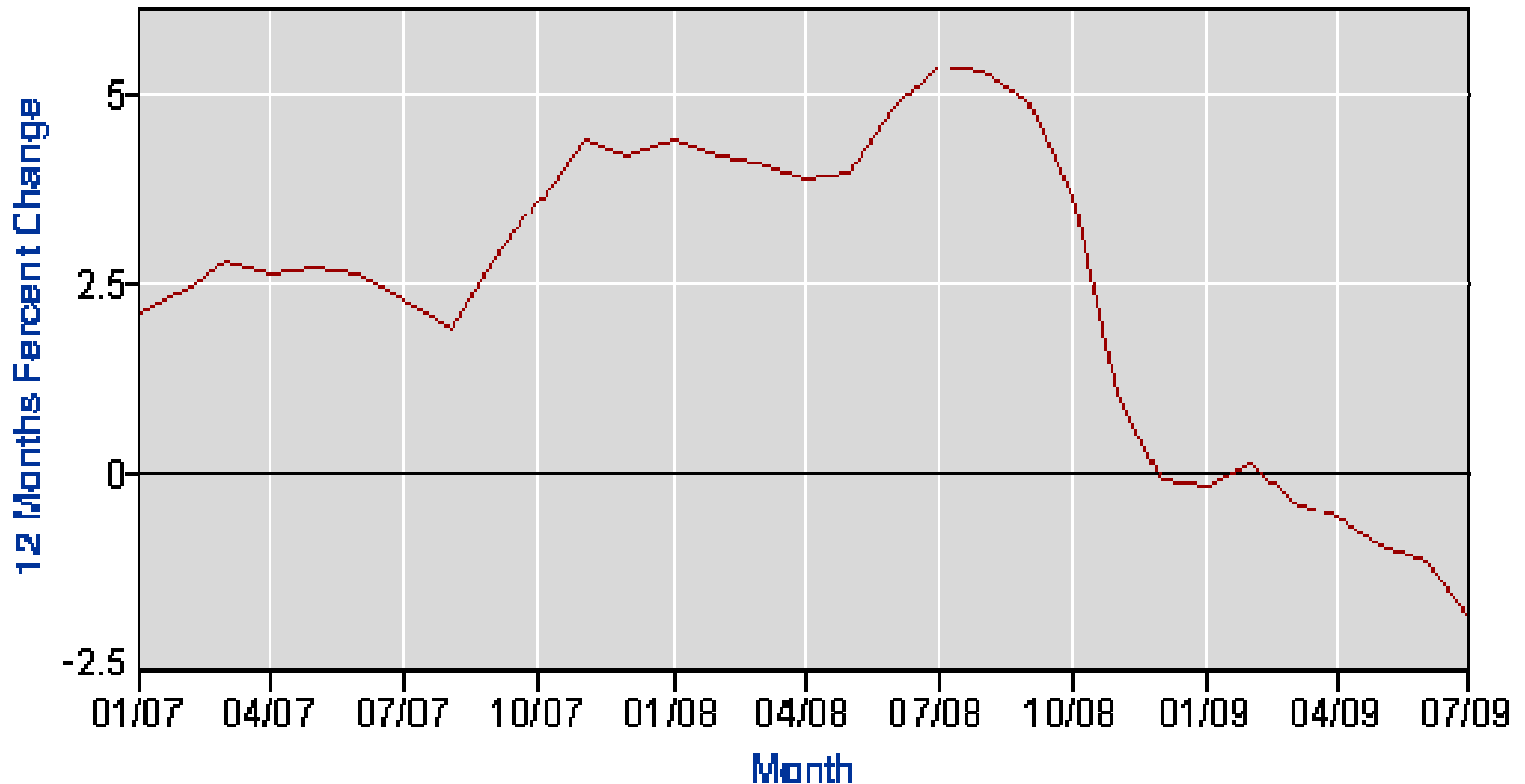
Source: International Monetary Fund

US Consumer Price Index: percent change from prior month November 2008, drop of -1.7%



Source: U.S. Bureau of Labor Statistics

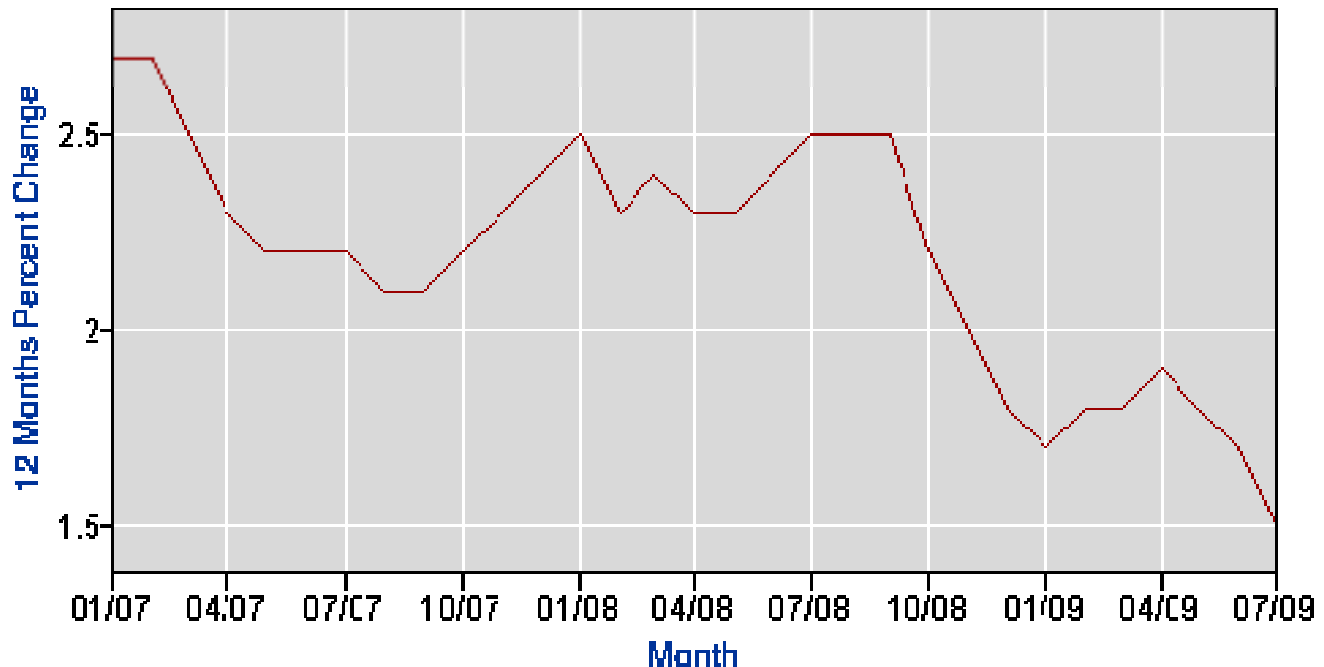
US Consumer Price Index: Percent change from same month prior year



Source: U.S. Bureau of Labor Statistics

U.S. Core Consumer Price Index*

Percent change from same month prior year



*All items less food and energy.
Source: U.S. Bureau of Labor Statistics

Inflation

average consumer prices, percent change

The European Union	1980-1989	1990-1999	2000-2008
France	7.3	1.9	2.1
Germany	2.9	2.4	1.8
Ireland	9.3	2.4	3.5
Italy	11.4	4.1	2.5
Poland	59.9	84.8	3.5
Spain	10.2	4.3	3.3
The United Kingdom	7.0	3.3	1.8

Inflation

average consumer prices, percent change

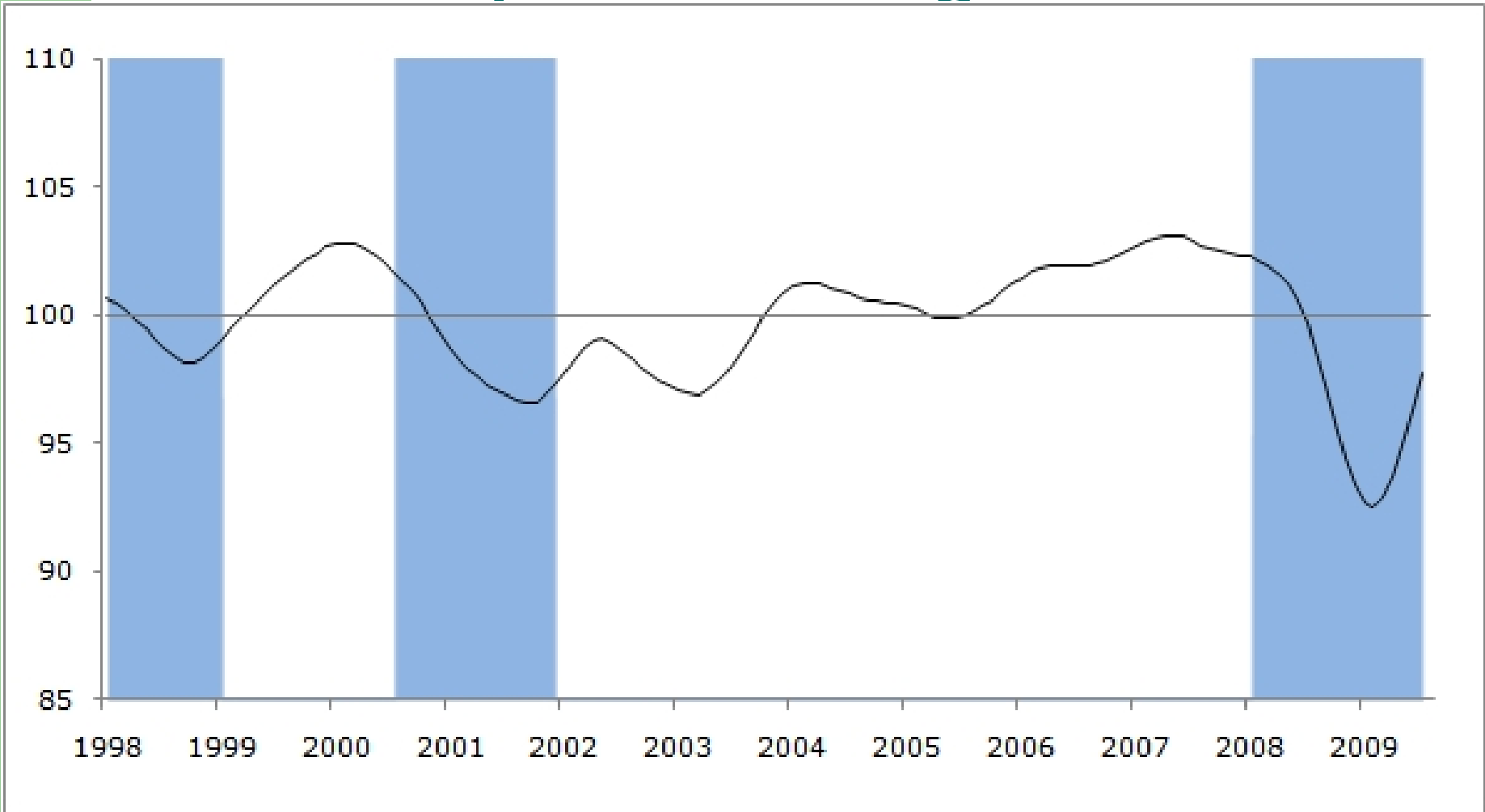
Asia	1980-1989	1990-1999	2000-2008
Japan	2.5	1.2	-0.1
Korea	8.4	5.7	3.2
India	9.1	9.5	5.0
Mainland China	7.5	7.8	2.1
Hong Kong, SAR	7.4	6.9	-0.2
Taiwan	4.6	2.9	1.2

Forecast inflation rates (IMF):

● Developing Economies:		● Developed economies:	
2008	7.6%	2008	2.1%
2009	4.2%	2009	0.5%
2010	3.7%	2010	0.6%

Inflation risk: More rapid global economic growth would lead to supply constraints in nonrenewable resource markets, and inflation would accelerate more rapidly.

Recovery from a historical low: OECD Composite Leading Indicators



Risks to the Recovery:

- Recent turnaround is government, inventory based.
 - Government spending and tax breaks stimulated much of the recent spending globally.
 - Firms worldwide are rebuilding inventory.
- In the U.S., local governments are experiencing falling sales and property tax revenue: More cuts – and spending shocks – are to come.
- Financial re-regulation has not yet occurred.
- Volatility in the financial markets will remain; uncertainty will restrict business investment for some time to come.

Slow GDP & Income growth: With a recovery like this, who needs recessions?

- High vacancy rates in residential and commercial buildings will restrict new building investment.
- Corporate profits will be first to recover:
 - Bank profits are recovering.
 - Cost cutting, utilizing spare capacity will add to output and overall profitability in the near term.
 - Hiring will be slow, unemployment will remain high.
- Low levels of business investment and consumer spending will limit growth rates.

Slow GDP & Income growth – Policy risks:

- Aggressive monetary policy brings with it inflation risk:
 - Excess bank reserves at extremely high levels.
 - A return of confidence, demand and supply of loans has potential to explode money growth.
- Expansionary fiscal policy has exploded government debt levels in many economies.
 - Higher interest rates will result as improved confidence and loan demand strains credit markets.
- ***Slow growth, slow unwinding of policy is necessary to avoid inflation, higher interest rates, recession.***

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