



# **Recovering from the Great Recession**

## ***An Economic, Financial & Political Conundrum***

**Money, Banking and Financial Markets (470/570)**  
**Lecture**

**University of New Mexico**

**July 7, 2011**

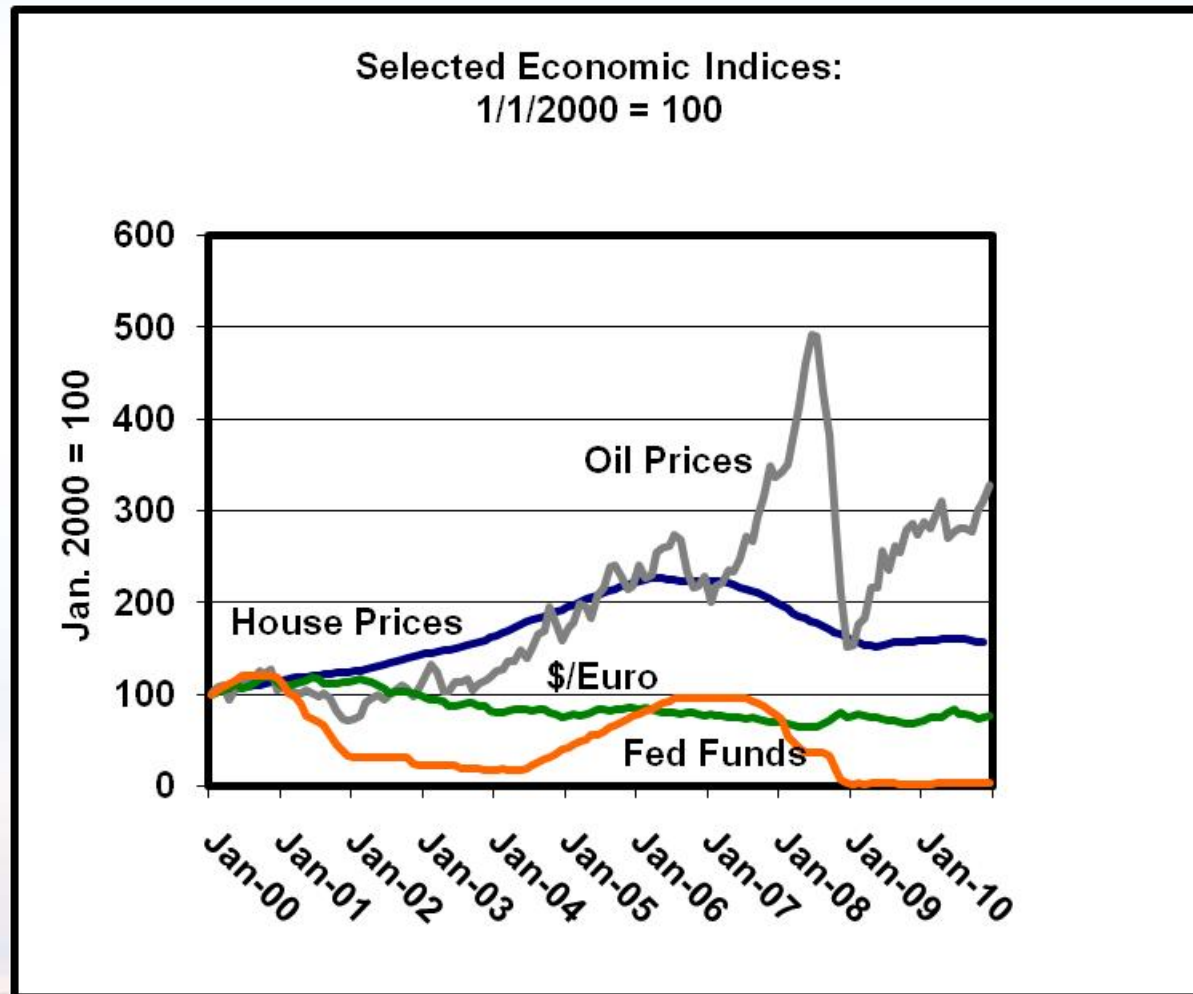
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**\* The opinions and conclusions in this presentation are those of the author and do not necessarily reflect those of Sandia National Laboratories or its management.**

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# Anatomy of a Bubble



Source: Monthly Data for Effective Federal Funds Rate, Case-Schiller 10 City Housing Price Index, U.S. \$/Euro, Nominal WTI

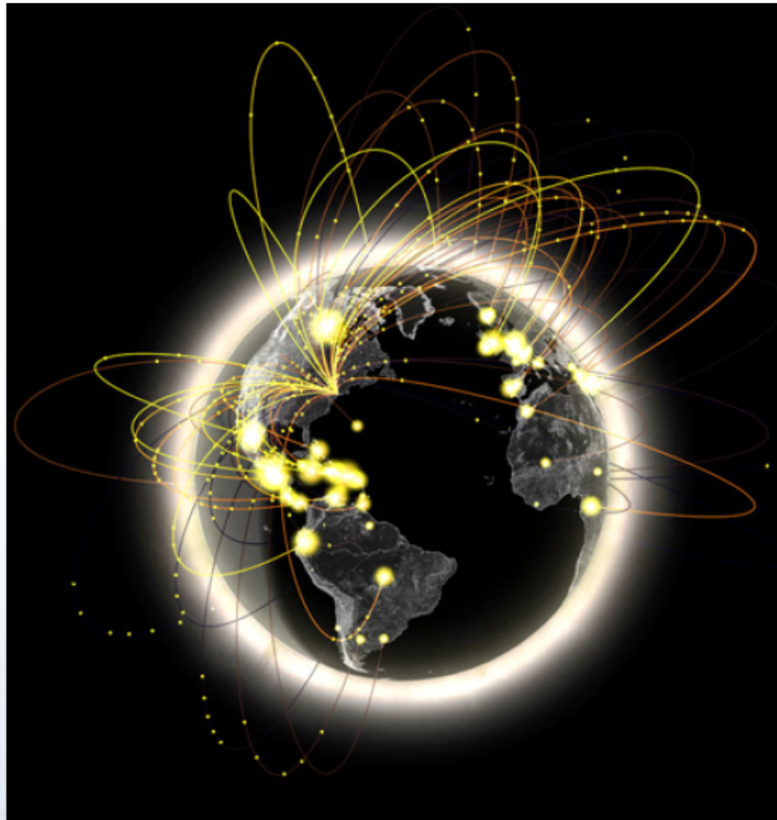
# Déjà Vu:

## A Few Previous Bubbles/Financial Crises

YEAR	COUNTRY/ REGION	PRECEDING SPECULATION IN	MONETARY EXPANSION FROM
1636-37	Dutch Republic	Dutch East India Co., Tulips	Coin Debasement
1720	England, France	South Sea Co; Miss. Co.	Sword Blade Bank, John Law Bank
1772	UK/Amsterdam	Housing, Turnpks, Canals Dutch East India Co.	Chaining Accommodation Bills, Bank of Amsterdam
1837	U.S.	Cotton, Land	Wildcat Banks, Silver Retention
1873	U.S., Germany/Austria	Railroads, Securities Homesteading	Securities Bought on Margin
1890	England	Argentine Securities, Pvt. Cos. Going Public	Goschen Conversion
1893	U.S., Australia	Silver, Gold, Land	Silver/gold/\$, Capital Inflow
1907	U.S., France Italy	Coffee, Union Pacific, Industrial Bnk Borrowing	Trust Companies
1929	U.S.	Land to 1925, Stocks '28-9	Stocks Bought on Margin
1974-75	U.S.	Stocks, REITs, Office Buildings	Eurodollar Mkt. Flooding in 1970-71
1979-82	U.S., World	Third World Syndicated Loans, OPEC Price Rise, \$	Continuation of 74/75
1982-87	U.S.	Stocks, Luxury Housing, Office Bldg., \$	Capital Inflow
1990	Japan	Stocks, Real Estate	1986 Interest Rate Cut
1994-95	Mexico	Deregulation, Boom	Capital inflow, bank lending, Bank Privatization '91
1997-98	Thailand, Korea, Malaysia, Brazil Indonesia, Russia	Deregulation, Capital Inflow, Foreign Borrowing	Bank Lending, Construction Boom, Crony Capitalism

Source: Kindleberger, Charles, P and Albert, Robert, *Manias, Panics and Crashes*, Fifth Edition, John Wiles & Sons Inc, 2005, pp 256-265

# A More Open and Interdependent Global Framework



- Countries not immune to effects of domestic policies outside their borders
  - Food price increases from U.S. corn ethanol
  - Coal, oil, other commodity prices driven by China, India, U.S. economic growth and domestic public policies
  - U.S. housing bubble
- Scope for national public policies with major economic/financial impact is becoming more limited
  - Financial markets “über alles”
  - Can’t afford costs/returns out of line with competitor countries
  - Greater need for decision-making speed
  - Cost of mistakes will grow
- Protectionist pressures

Source: New York Talk Exchange, Total IP Traffic From New York in 24 hours

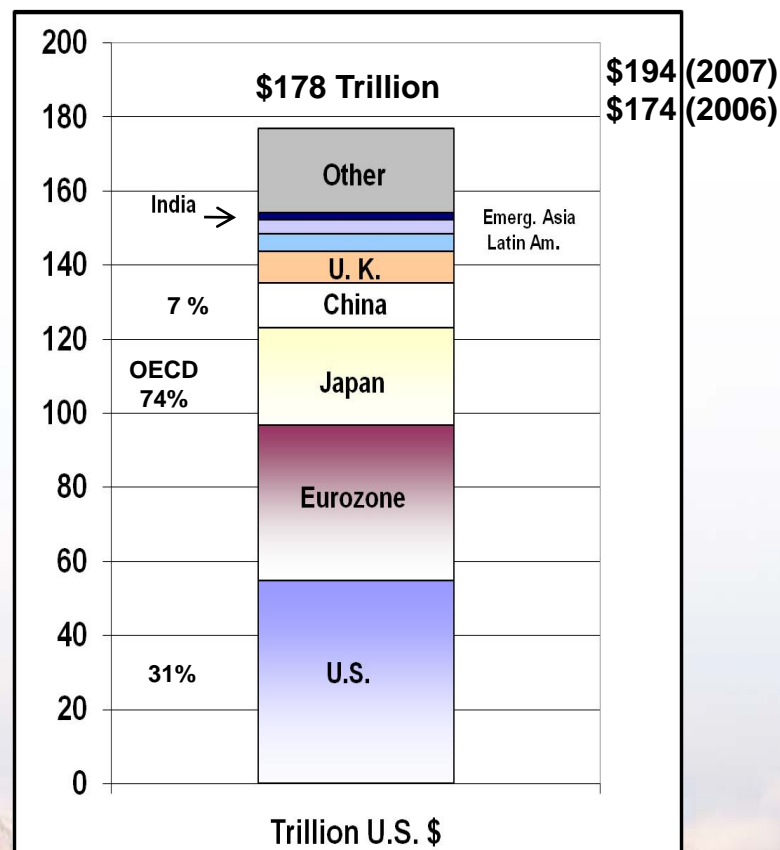
# U.S. Is the Center of the World Economy But a Transitional Shift Is Underway

## World GDP 2010

(Current Exchange Rates)

<u>Country</u>	<u>\$Trillion</u>
US	14.7 (23%)
China	5.9 (9%)
Japan	5.5
Germany	3.3
France	2.6
U. K.	2.2
Brazil	2.1
Italy	2.0
India	1.7
Canada	1.6
<u>World</u>	<u>63.2</u>
<u>OECD</u>	<u>42.9 (68%)</u>

## Global Financial Assets 2008



Source: Global Capital Markets: Entering a New Era, McKinsey Global Institute September 2009. Includes equities, private debt, government debt and bank deposits. 2010 GDP data from Global Insight World Overview, June 2011.



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# World Economy and Population

## 2010 World GDP

(Current Exchange Rates)

<u>Country</u>	<u>\$Trillion</u>	<u>World %</u>
U.S.*	14.7	23
China	5.9	9
Japan*	5.5	9
Germany*	3.3	5
France*	2.6	4
UK*	2.2	4
Brazil	2.1	3
Italy*	2.0	3
India	1.7	3
Canada*	1.6	3
<b>OECD**</b>	<b>42.9</b>	<b>68</b>
<b><u>World</u></b>	<b><u>63.2</u></b>	

## 2010 World Population

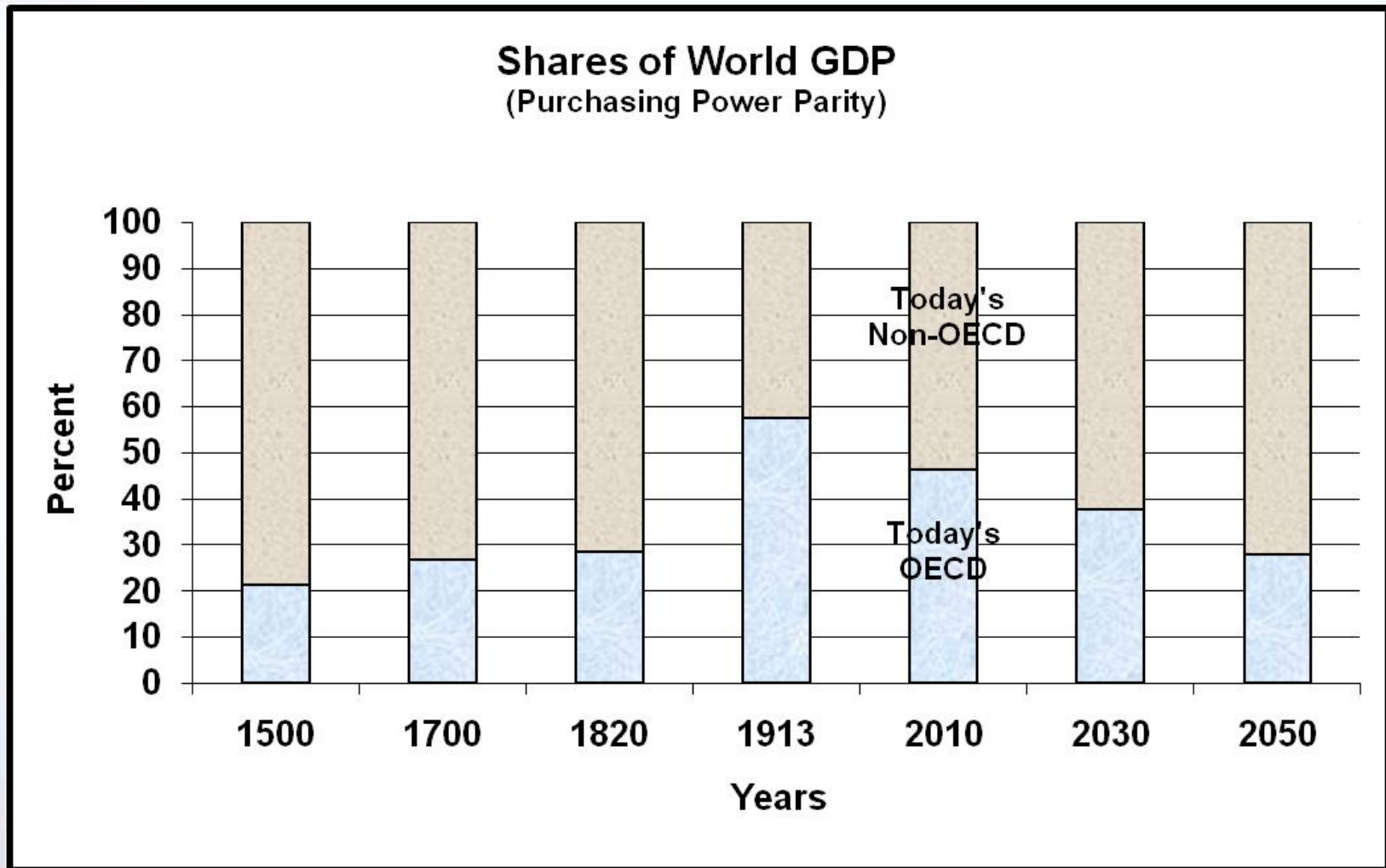
<u>Country</u>	<u>Population</u> (Million)	<u>World %</u>
China	1,371	20
India	1,225	18
U.S.*	311	5
Indonesia	240	4
Brazil	195	3
Pakistan	185	3
Bangladesh	165	2
Nigeria	148	2
Russia	140	2
Japan*	128	2
<b>OECD**</b>	<b>1,223</b>	<b>18</b>
<b><u>World</u></b>	<b><u>6,938</u></b>	

\* Indicates a developed country

\*\* Organization for Economic Cooperation and Development

Source: 2010 GDP data and population from Global Insight World Overview, June 2011

# A Transitional Shift



Source: *The World Economy*, OECD 2001, Angus Maddison; *IHS Global Insight Detailed Forecast*, June 2011, extrapolated to 2050, \$2005 PPP basis



# Two Equations & Two Important Assertions

## Two Equations

- Macroeconomic Accounting:  $Y = C + I + G + (X-M)$
- Quantity Theory of Money:  $MV = PT$

## Two Important Assertions

- Financial markets “über alles”
- Caveat emptor





# International Monetary System: A Confidence Game

- **Nation based, run by central banks (172) with varying degrees of independence**
  - Sweden (1668), Bank of England (1694), Banque de France (1800), Federal Reserve System (1913), ECB (1998)
  - Central bank mandates differ, but generally aim to
    - ♦ Control inflation; prevent recession; provide financial stability
  - Bank for International Settlements (1930)-- bank for central banks
  - Financial Stability Forum (1999)--improve coordination/info exchange
- **Money historically tied to gold/silver**
  - Most major countries adopted a gold standard during 1700s-1800s
    - ♦ On again, off again until early 1970s
  - US abandoned the gold standard in 1971; every major international currency followed suit
- **Money today is “fiat” money—that is, backed by confidence in the issuing government**

*“You can’t deal with the problems of global financial markets within national systems of regulation” U.K. Prime Minister Gordon Brown, October 14, 2008*



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# The “Great Recession”

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- **Globally integrated financial markets, fueled by liquidity, in competitive pursuit of profits**
  - No international financial regulatory system; national financial/monetary regulation
- **Home ownership was the “tulip”**
  - Encouraging home ownership was “good”
  - Rising house prices a “sure thing”
- **Creative financial institutions outgrew well intended regulations**
  - Securitized debt to create an asset, avoid reserve requirements, get higher leverage, provide a global risk hedge
  - Securitized assets knit together by hedge funds, but lost in the fog—no transparency
  - Unraveled when house prices started to fall and subprime borrowers began to default
    - ♦ Unraveling aided by mark-to-market rules
  - Financial losses led to credit tightening in key countries, which slowed economic growth, creating additional financial losses--negative feedback loop
- **To avoid “depression,” Federal Reserve & other central banks provided liquidity; U.S. government & other governments provided stimulus**



# Current Situation

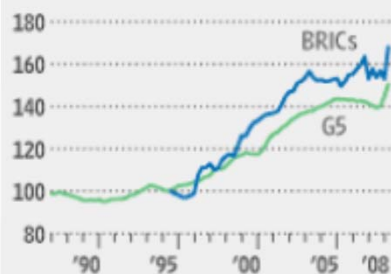
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- **We're recovering**
  - “Great Recession” ran (12/2007-06/2009)
  - Economies & expectations turned around
  - Financial markets are functioning reasonably well
  - Recovery from “financial” recessions takes longer
  - A continued recovery is the central scenario
- **But cautions remain**
  - Consumer remains under stress
  - A two speed world—OECD versus China & developing world
  - Uncertain approach to global financial market management
  - Emerging inflationary concerns--excess liquidity and oil/commodity prices
  - Growing concern about debt/deficits in the U.S. (8/2) and some EU countries
  - Uncertainty about U.S. Administration/Congress and 2012 elections

# Emerging Inflationary Concerns

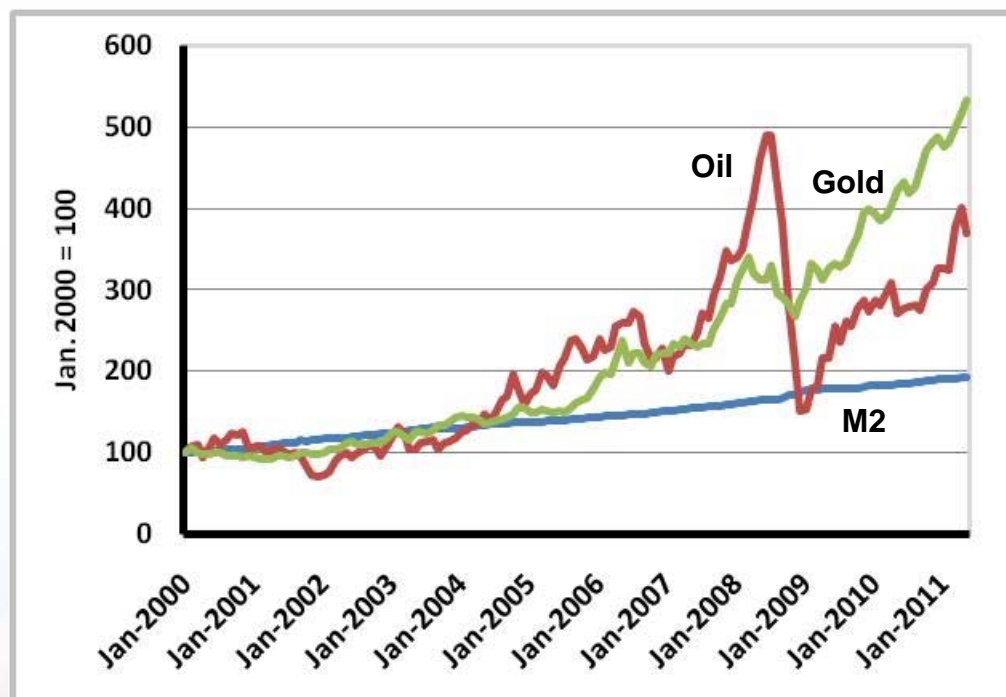
## Liquid Dreams

Excess liquidity, defined as narrow money divided by nominal GDP



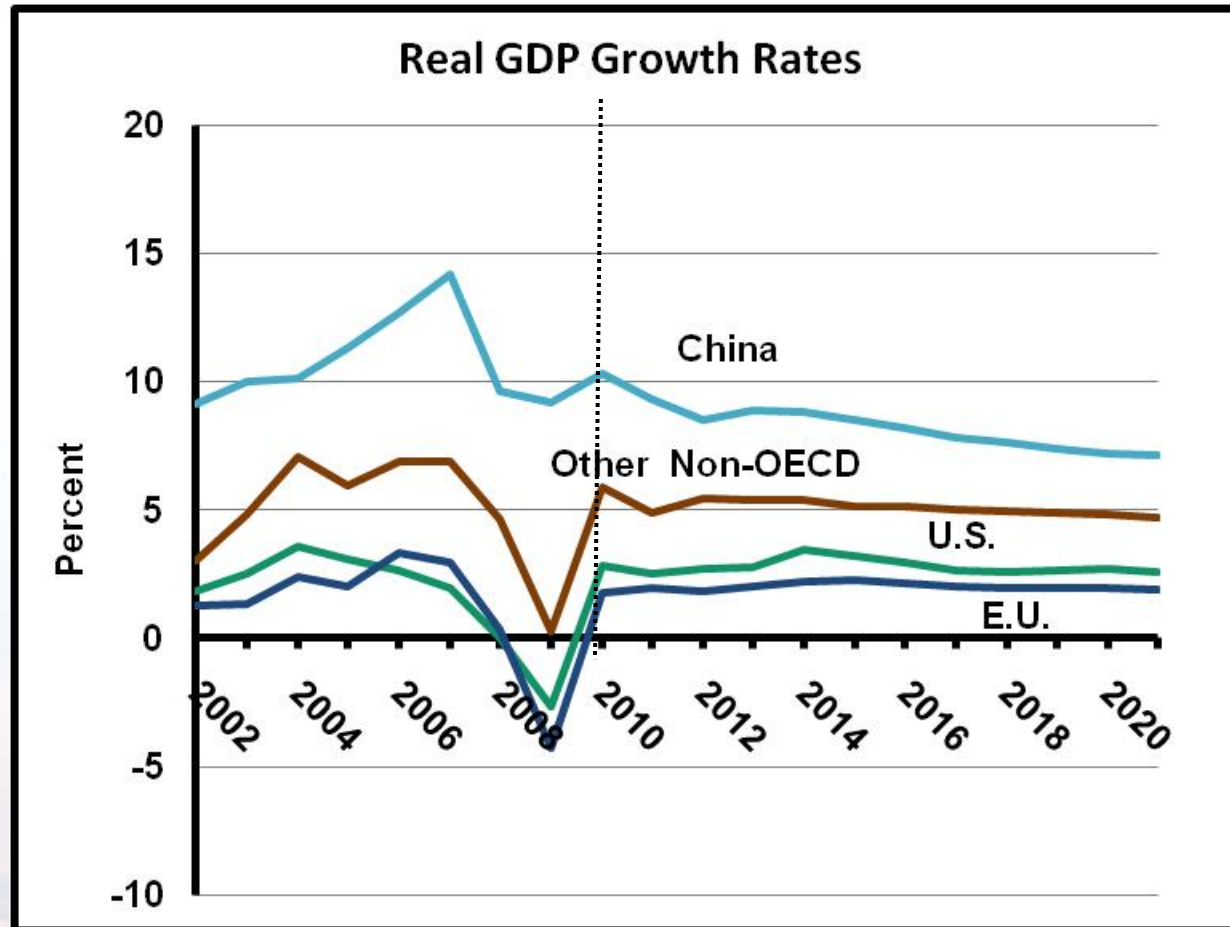
Note: G5 (France, Germany, Japan, U.K., U.S.) and BRICs (Brazil, Russia, India, China)

Source: Morgan Stanley



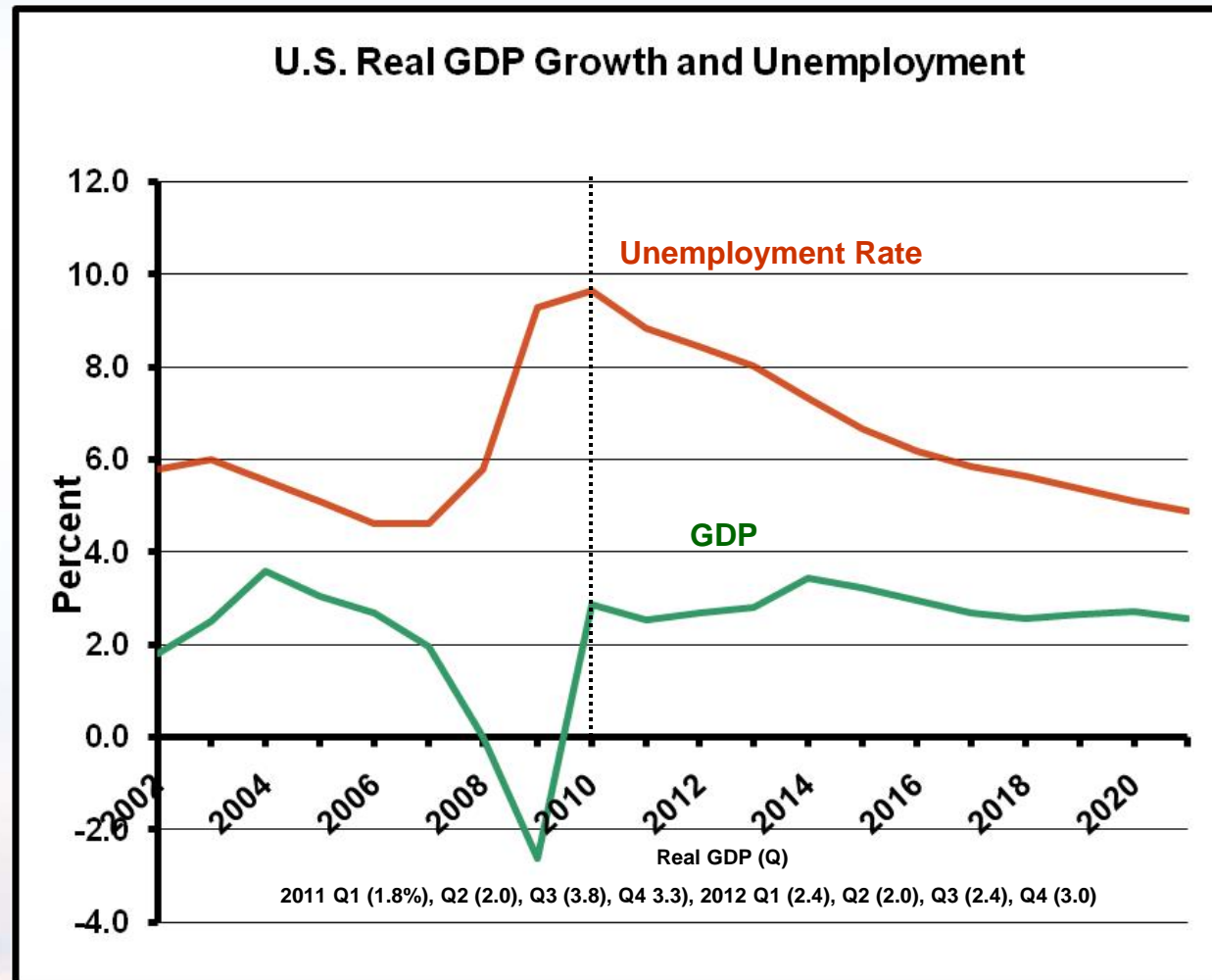
Source: WSJ 6/4/09 P C12; Federal Reserve, EIA, London Gold Exchange data

# Outlook For World Economic Growth



Source: IHS Global Insight World Overview Base Case, June 2011

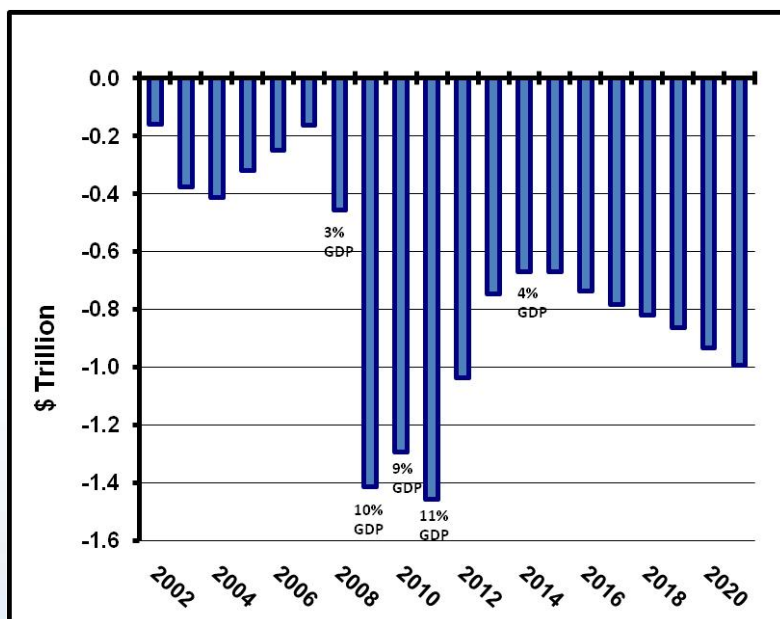
# Outlook for U.S. Economic Growth & Unemployment



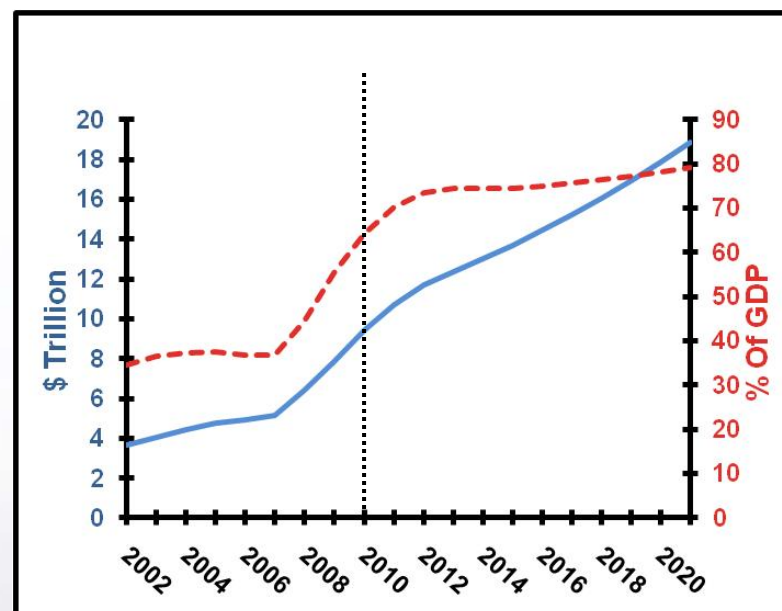
Source: IHS Global Insight, Short Term Forecast June 2011

# U.S. Federal Budget Deficit and Debt

## Budget Deficit



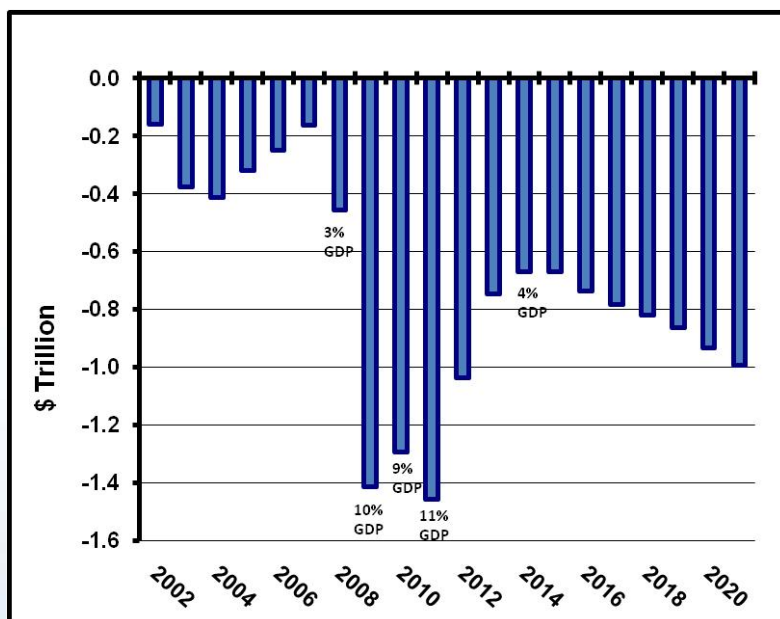
## Publicly Held Federal Debt



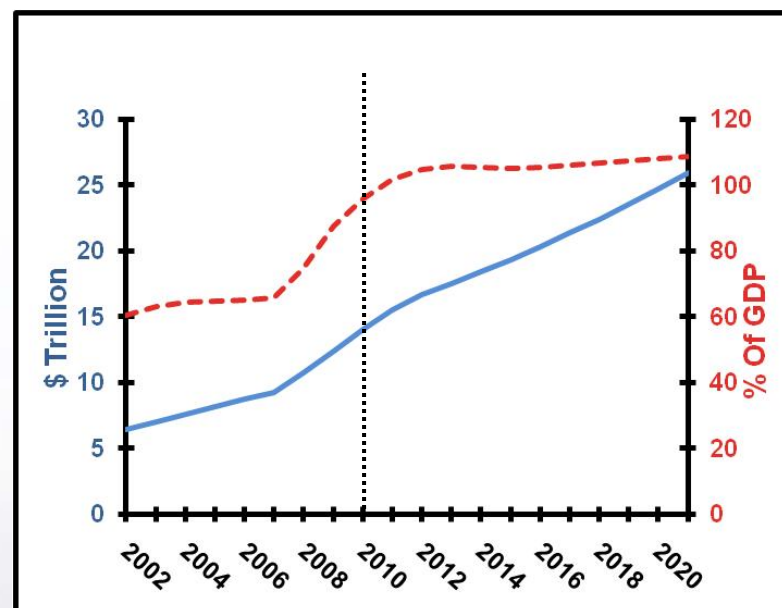
Source: IHS Global Insight Short Term Forecast June 2011

# U.S. Federal Budget Deficit and Debt

## Budget Deficit



## Total Federal Debt



Source: IHS Global Insight Short Term Forecast June 2011



# Why Government Budget Deficits and Debt Matter

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- **Budget deficits are financed by government debt**
  - Growing deficits require more debt financing, which increase deficits further
- **Budget deficits can be inflationary (government is spending more than it is receiving)**
  - If bond holders/potential purchasers have rising inflationary expectations, they will demand higher interest rates on the debt
    - ♦ Higher interest rates will increase deficits
- **If bond holders/potential purchasers lose confidence in a government's ability to manage its fiscal and monetary policies (fear of run away inflation and/or government default)**
  - Could demand much higher interest rates and/or could refuse to hold these government bonds
    - ♦ Government could not borrow sufficiently to pay its bills



## 2010 Fiscal Balance as a Share of GDP

	<u>Country</u>	<u>Percent</u>
1	Ireland	-32.8
2	Mozambique	-14.6
3	Greece	-10.5
4	Venezuela	-10.4
5	Botswana	-10.2
6	United Kingdom	-10.1
7	Japan	-9.8
8	Spain	-9.3
9	Portugal	-9.1
10	United States	-8.8
11	Egypt	-8.6
12	Slovakia	-7.9
17	France	-7.0
19	Pakistan	-6.3
26	Canada	-5.5
36	India	-4.7
49	Russia	-4.2
64	Germany	-3.3
89	China	-1.6

Source: Source: IHS Global Insight World Overview & U.S. Short Term Forecast Base Case June 2011. Based on available data for 121 countries.

# Estimated 2010 Debt Ratios

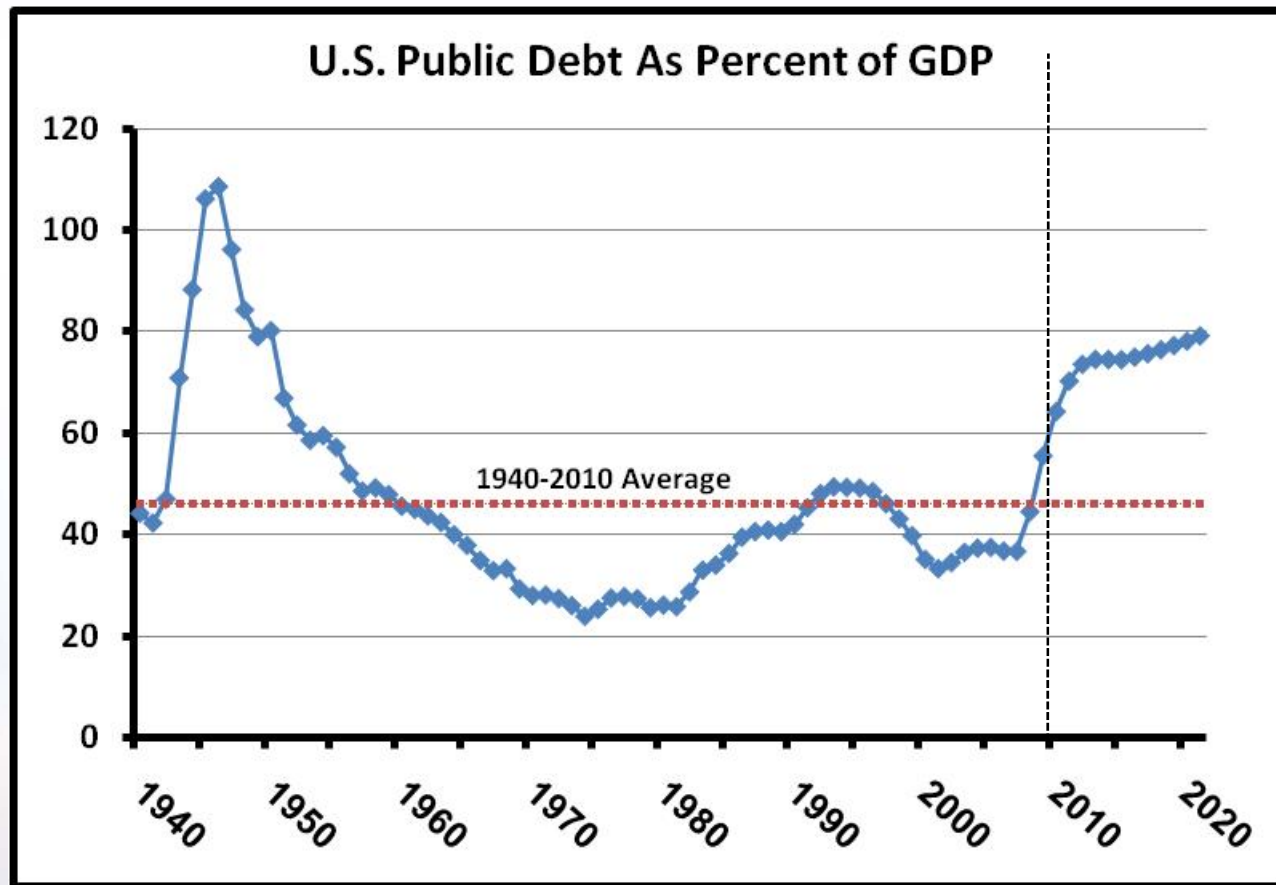
Rank	Country	Debt*/GDP	Govt. Debt**
		%	Held Externally %
1	Japan	226	15
5	Greece	144	84
8	Italy	118	54
11	Ireland	94	
14	France	84	
15	Portugal	83	53
19	Germany	79	45
23	U. K.	77	32
27	U. S.	64	30
28	Spain	63	
32	Brazil	61	
35	<u>World</u>	<u>59</u>	
44	India	56	
86	Canada	34	
112	China	18	

\* Public Debt

\*\*Gross Debt

Source: CIA World Factbook On-Line; IHS Global Insight Short Term Forecast June 2011 & Global Economic Outlook 6/21/11

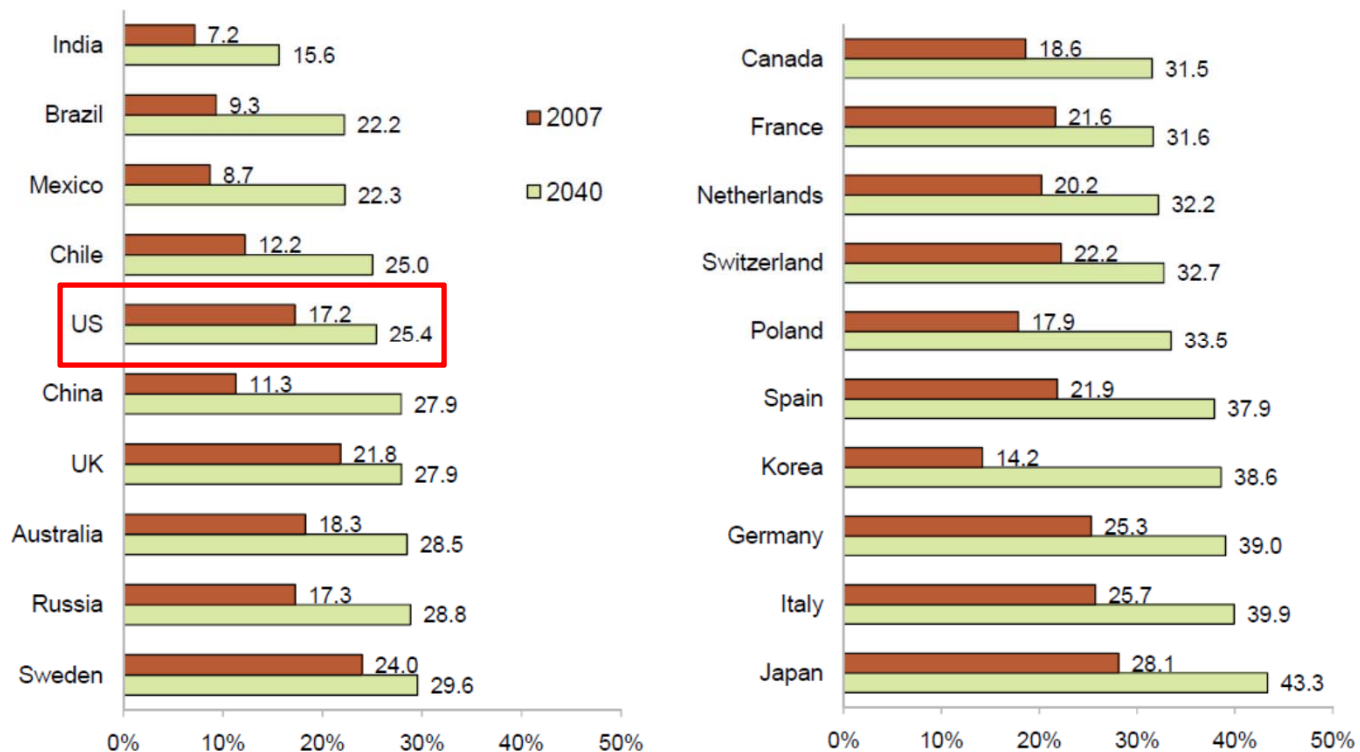
# U.S. Public Debt as a Percent of GDP



Source: Budget of the United States Historical Tables and IHS Global Insight Short Term Forecast June 2011

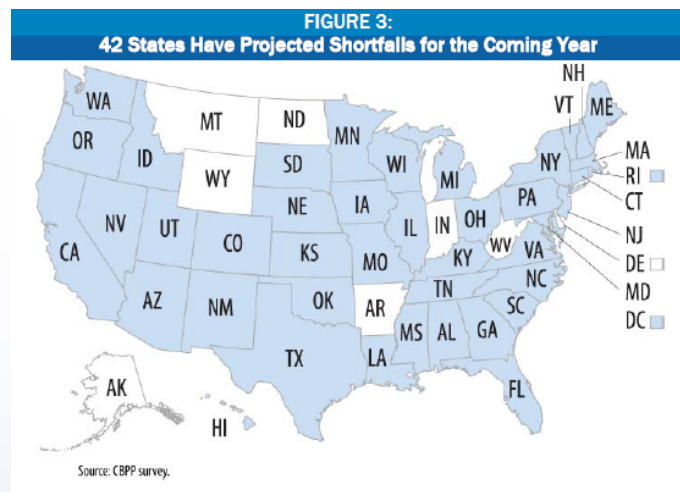
# Aging Populations Will Require Growing Social Safety Nets

Elderly (Aged 60 and Over), as a Percent of the Population in 2007 and 2040



Source: *The Global Aging Preparedness Index, CSIS, 1/10/11*

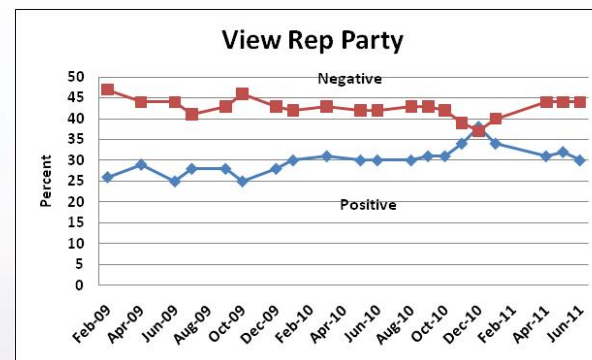
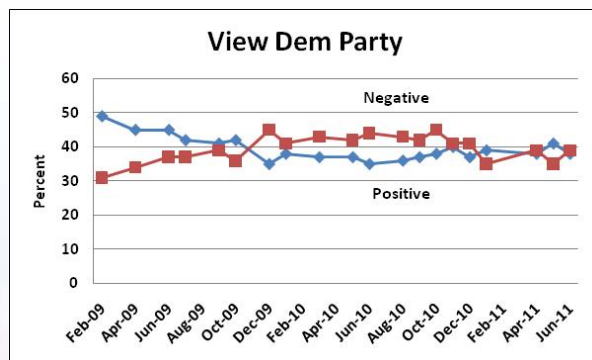
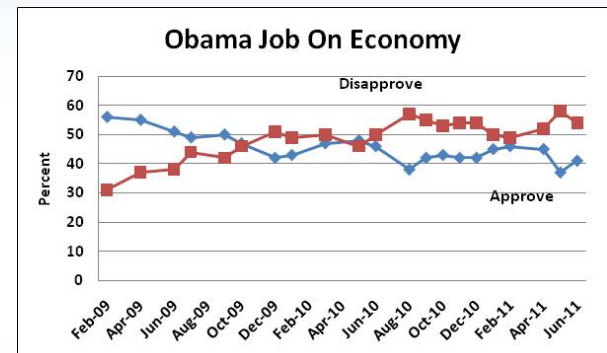
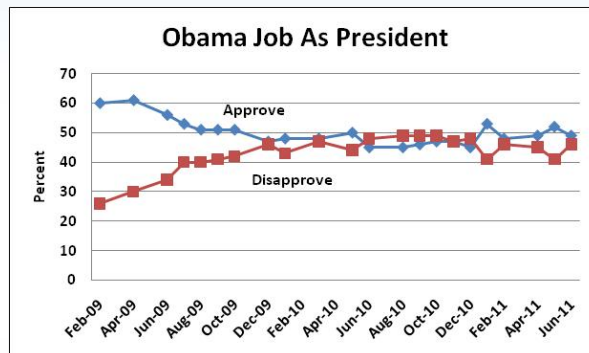
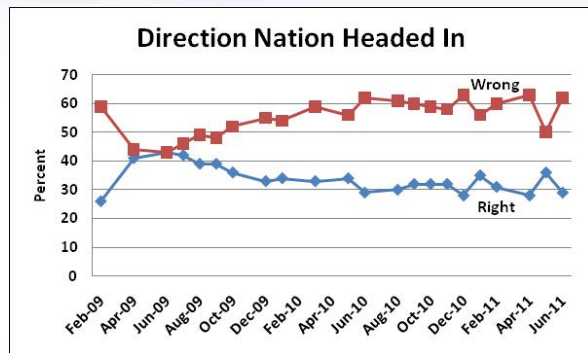
# States Are In Financial Crisis Too



- 27 states are projecting FY12 budget deficits exceeding 9 percent of their budget
- Almost 40% of the states (19) are facing FY12 budget deficits of \$1 billion or more.
- Nine states with the largest budget gaps (\$billions)
  - CA (\$23), NJ (\$11), NY (\$10), IL (\$5)
  - MN (\$4), FL (\$4), PA (\$4), CT (\$3), WA (\$3)
- Some 24 states are currently projecting budget gaps for FY13
- State pensions & health care commitments are the big items on the spending side
- Rise in muni bond risk raises interest costs
- Who bails out the states?

Source: Center on Budget Policy and Priorities 6/17/10, on-line. NM projected FY12 deficit of \$450 million, 8.3% of budget

# Trends in Public Views



Source: NBC-WSJ Survey, 6/9-6/13, 2011  
 +/- 3.1% Margin of Error



# Apparent U.S. Government Leadership Approach To Economic Policy: 2009-10

- **Government intervention and complexity**
  - **“Redistribute” income**
    - ◆ Tax “rich” and spend on “poor” and “middle class”
  - **Change market direction**
    - ◆ **Industry: reign in/regulate**
      - Commodities trading, pay czar, GM-Chrysler bailouts with “direction”
    - ◆ **Energy: shift toward renewables/efficiency, and ... nuclear?? & offshore O&G??**
      - R&D and deployment, regulation; tradable CO<sub>2</sub> permits-fees/EPA regulation
    - ◆ **Healthcare: Patient Protection and Affordable Care Act--inject more federal government**
      - Focus on insurance rather than healthcare fundamentals
    - ◆ **Banking/Finance: international collaboration; domestic regulations**
      - G20/IMF oversight; Consumer Credit Protection Act; Dodd-Frank Wall Street Reform & Consumer Protection Act
  - **Protectionism to “save” U.S. jobs?**
    - ◆ “Buy America” in stimulus bill; “hire American” in TARP
    - ◆ U.S. carbon tariff in House passed climate bill
  - **Fiscal stimulus/government spending**
    - ◆ ARRA; budget deficit necessary to accomplish objectives



## November 2010 Mid-Term Earthquake

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### Senate

Old    **57 D 41 R, 2 I**

New   **51 D 47 R, 2 I**

### House

Old    **256 D 178 R, 1 V**

New   **193 D 242 R**

### State Governorships

Old    **26 D 23 R**

New   **20 D 29 R**



# Debt/Deficit Reduction Panels

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- **National Commission on Fiscal Responsibility and Reform (President's appointed commission; Bowles/Simpson)**
- **Bipartisan Policy Center Debt Reduction Task force (Domenici/Rivlin)**
  - Both had non-binding recommendations to
    - Cut federal spending, reform the federal tax code
    - Control costs of social safety net (health care, social security)
    - Domenici/Rivlin added 6.5 % national Debt Reduction sales tax
  - In theory, “everything is on the table,”; in practice, a political food fight
- **Vice President Biden Bi-Partisan Deficit Reduction Working Group**

# Reducing Budget Deficit as a Top Priority Over Time

## Partisan Views of Importance of Reducing the Budget Deficit

	% rating deficit "top priority"	Rep %	Dem %	Ind %	R-D diff
Barak Obama	Jan 2011	68	61	65	+7
	Jan 2010	61	60	60	+1
	Jan 2009	51	52	57	-1
	Jan 2008	52	64	57	-12
George W. Bush	Jan 2007	42	57	53	-15
	Jan 2006	45	62	56	-17
	Jan 2005	48	64	54	-16
	Jan 2004	44	57	55	-13
George W. Bush	Jan 2003	38	48	33	-10
	Jan 2002	27	41	38	-14
	Jan 2001*	49	55	58	-6
	Jan 2000*	39	41	50	-2
Bill Clinton	Jan 1999*	42	42	43	0
	Jan 1998*	54	38	47	+16
	Jan 1997	66	54	62	+12
	Dec 1994	65	61	68	+4

PEW RESEARCH CENTER Jan. 5-9, 2011. Q26bF1.

\* From 1998 to 2001 question asked about "paying off the national debt" rather than "reducing the budget deficit".

Source: "Public's Priorities for 2010: Economy, Jobs, Terrorism," The Pew Research Center for the People and the Press, 1/20/11, on-line



# How to Reduce the Deficit ?

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- **Raise taxes**

- After mid-term elections, tax raising philosophy seemingly has less vigor than spending cuts. Bush tax cuts expire 12/2012, but role/shape of higher taxes TBD
  - ◆ Higher taxes/fees (tilting toward “the rich”?)
  - ◆ Limit tax deductions (“tax expenditures”)
  - ◆ VAT? Other?

- **Cut spending**

- FY11 budget due Oct.1, 2010 was not enacted until April 15, 2011
  - ◆ Cut a purported \$38.5 Billion from FY2010 funding levels of some \$3.7 Trillion (CBO estimated actual cut was \$352 million)
- Feb. 2011 President released FY12 budget
  - ◆ Cut outlays 2.4% in FY12, but increased spending through 2016
- April 2011 House budget Chairman’s Mark (Paul Ryan)
  - ◆ Cut outlays 2.4% in FY12, but cut \$6.2 Trillion in spending 2012-2021 from Pres. proposal

- **Accelerate economic growth**

- Underway, but increased government intervention/uncertainty goes against it
- Streamline federal regulations (1/18)?

- **Reducing deficit “too soon” could abort recovery...**



# So Where Are We Heading?

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- **Economic recovery, but some fragility**
  - U.S. still has high unemployment, consumer debt overhang; housing, commercial real estate, bad bank assets; states under economic stress
  - Europe has weak economic growth and fiscal uncertainty (debt/deficits) in fringe countries (e.g., Greece, Portugal, Ireland, Spain) that could trigger bond market responses/need for bailouts
  - Asian/developing countries--strong economic dynamism is a driver, but a delicate balance among growth, inflation and interest rates
- **U.S. government policy uncertainty**
  - Two year Bush tax cut extension will provide economic boost, but 2012?
  - Where are the Administration and the new Congress on:
    - ♦ Debt & deficit reduction, debt ceiling extension, tax/spending priorities?
    - ♦ Health care and banking & finance law implementation?
    - ♦ Medicare, Social Security?
  - 2012 election campaigns have already started
  - When will the markets and/or the Fed raise interest rates?
  - Is the U.S. (and U.K, France, Germany) AAA debt rating at risk?
    - ♦ Moody's, S&P, Fitch bond raters have warned U.S.; bond "vigilantes"



# Economic Policy “Boundary Conditions”

- In our increasingly integrated global economic & financial system
  - “Bad” policies will be undone by the market place
  - Expectations will lead markets
  - Confidence in U.S. public policy and policy-makers will be critical



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# A Few Things to Watch in 2011+

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- **Near term: political**

- How well & where will the Administration & Congress come together to make the difficult economic/financial policy decisions?

- **Near term: economic/financial**

- Unemployment
- Federal budget deficit & debt
  - FY12 budget—what/when?
  - Federal debt ceiling expected to be hit August 2
  - U.S. debt rating/market confidence in U.S. Government policy
- State deficits (and pensions & health care)

- **Near to medium term: economic/financial**

- U.S. monetary policy -- interest rates, inflation & exit strategy (2011+)
  - US dollar relative value; \$, Euro & Yuan roles in international monetary system
- U.S. fiscal policy (FY2012+ budgets)
  - Dealing with budget deficits & debt, health care & financial reform implementation, expiration of Bush tax cuts, Medicare, Social Security, etc.
  - U.S. debt rating/market confidence in U. S. Government policy
- U.S. policy toward business and regulation
- Restructuring, regulation, performance of U.S. & global financial markets
- Unanticipated national security events, natural disasters, etc.
  - Budget capacity?