

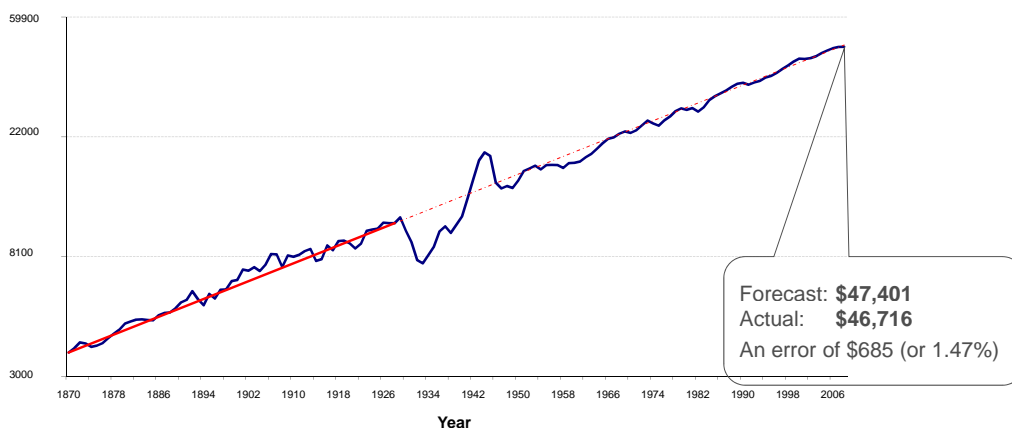
Ilian Mihov
Professor of Economics
Novartis Chaired Professor of Management and the Environment

Alumni Forum in Asia
7 November 2009

The Road to Recovery: A Macroeconomic View on the Crisis of 2008/09

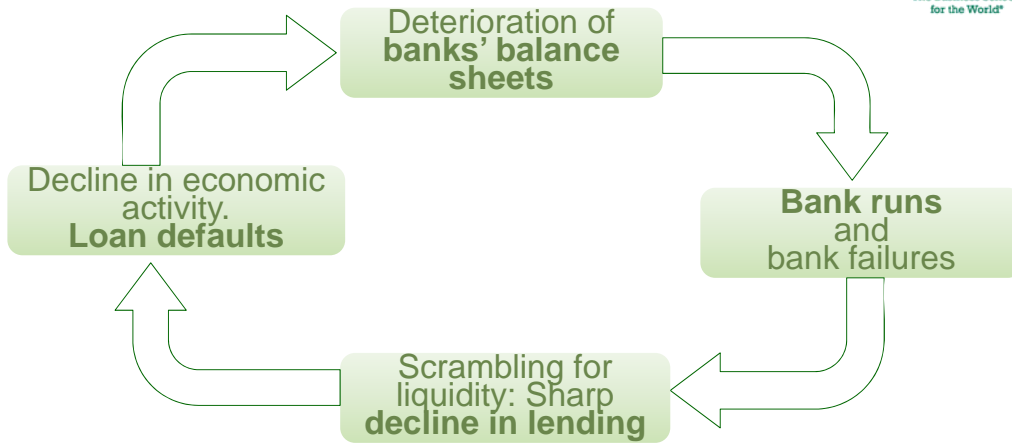
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Trend and Cycle: Forecasting 80 years ahead



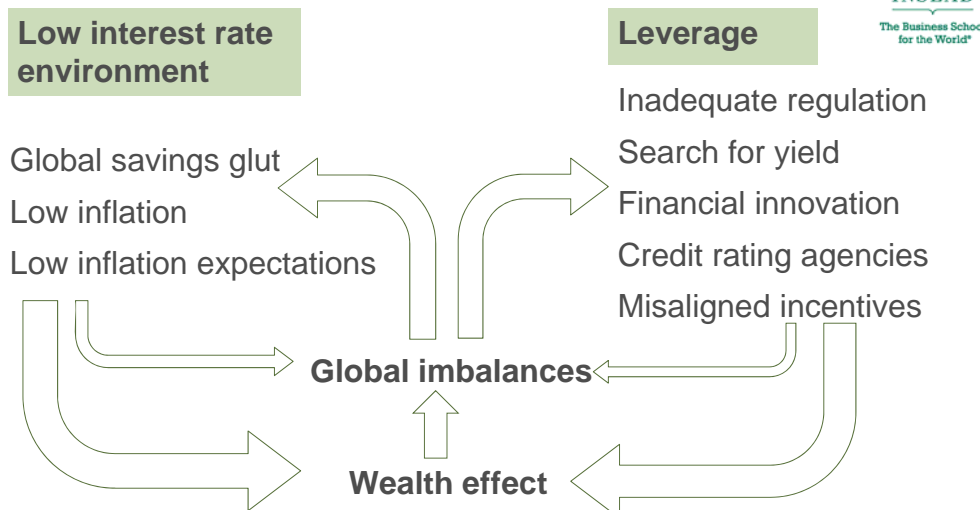
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The Vicious Circle of Depressions



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Current crisis

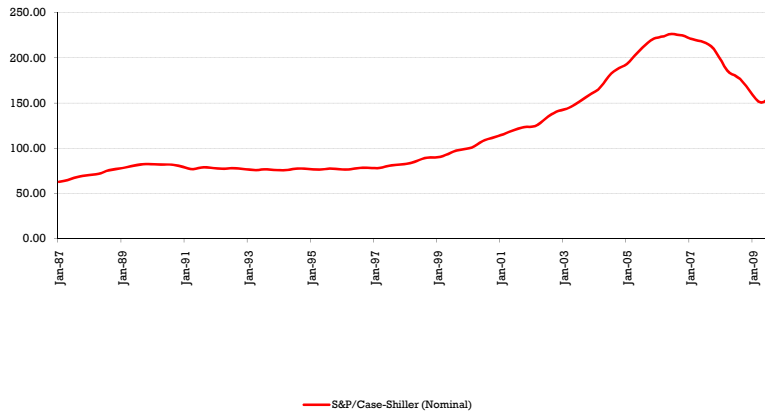


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The US House Price Index

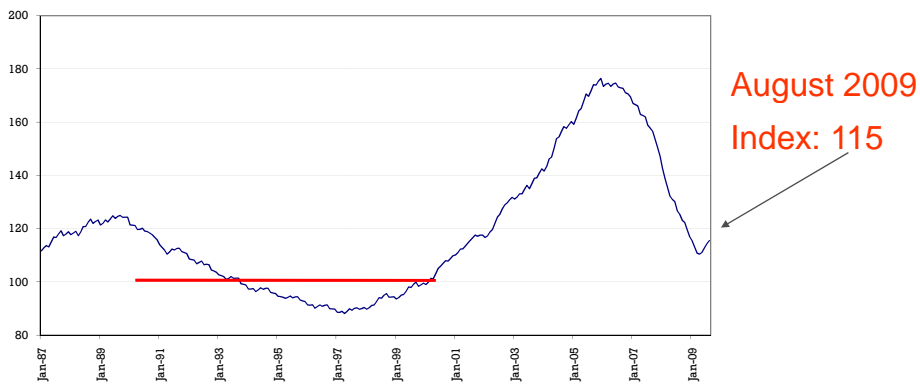


S&P/Case-Shiller (Nominal)



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The US House Price Index Relative to Income per capita



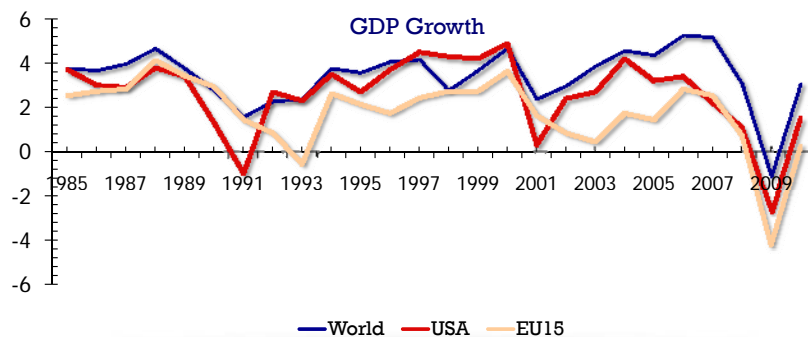
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The Shape of the Recovery

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What lies ahead? Economic Activity

	World	US	EMU	UK	Japan	Asia*
2009	-1.1%	-2.7%	-4.2%	-4.4%	-5.4%	6.7%
2010	3.1%	1.5%	0.3%	0.9%	1.7%	7.8%

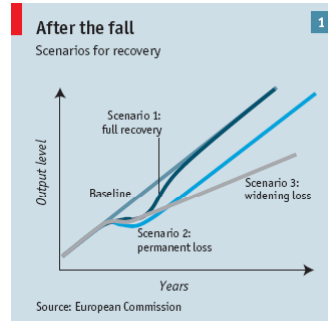
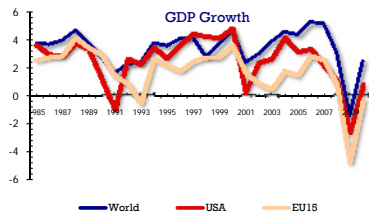


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Scenarios for the recovery

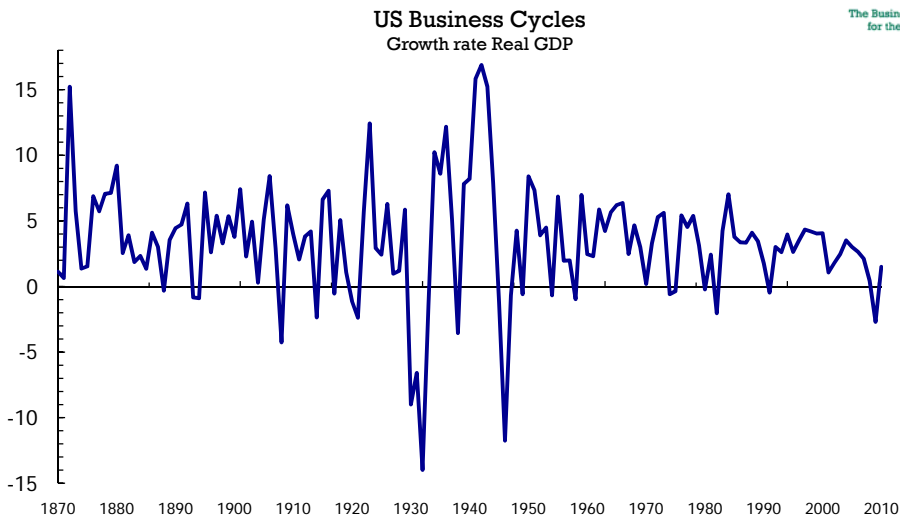
The alphabet soup: L, U, V, W or ∞ ?

N.B.: The shape of the recovery is different if we talk about (a) growth rates, (b) levels, or (c) the output gap.



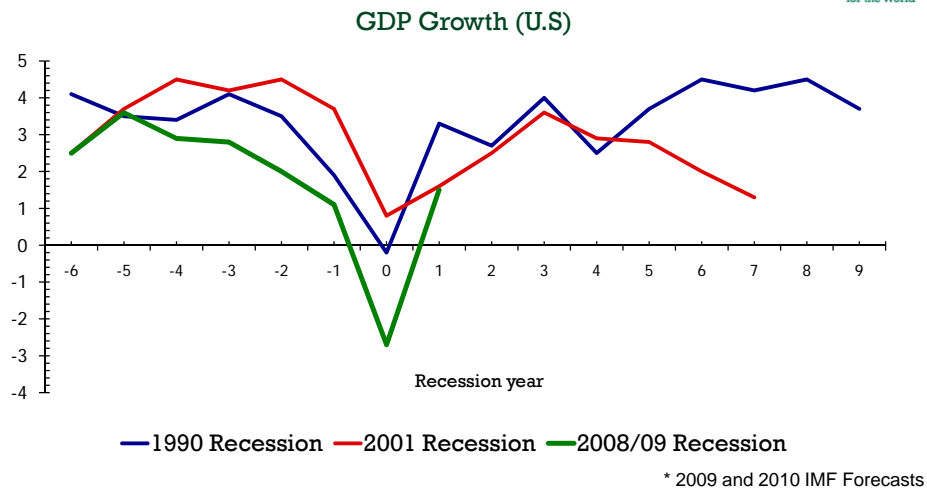
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How Different Is This Recession?



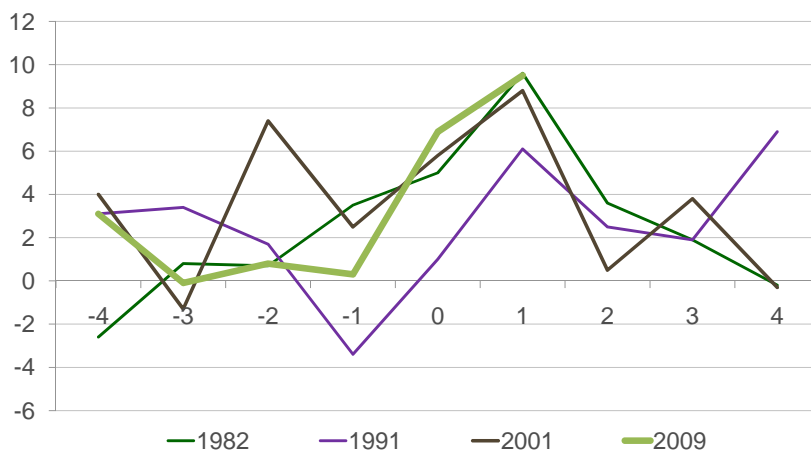
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How Different Is This Recession?



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Labor Productivity (quarterly growth) (0 is the quarter of the start of the recovery)



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Policy reactions

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Policy actions

1. Deal with the financial sector:

(a) Liquidity; (b) Recapitalization; (c) Deposit guarantees; (d) toxic assets

2. Monetary stimulus:

(a) interest rates at 0%; (b) quantitative easing; (c) credit easing;

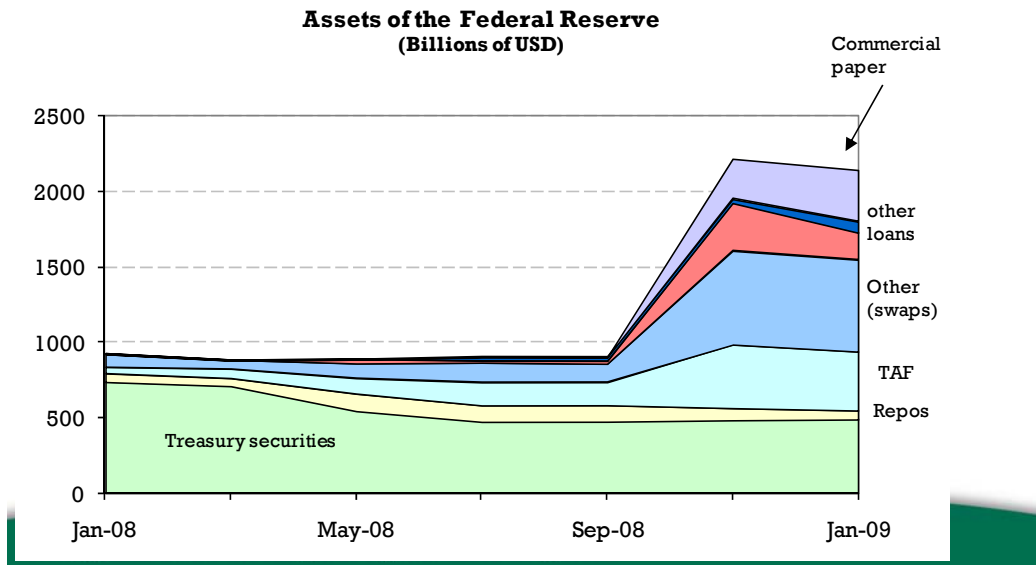
3. Fiscal stimulus:

(a) Tax cuts; (b) government spending; (c) expectations

4. Regulatory reforms

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Unorthodox Monetary Policy



Fed's Balance Sheet (September 30, 2009)



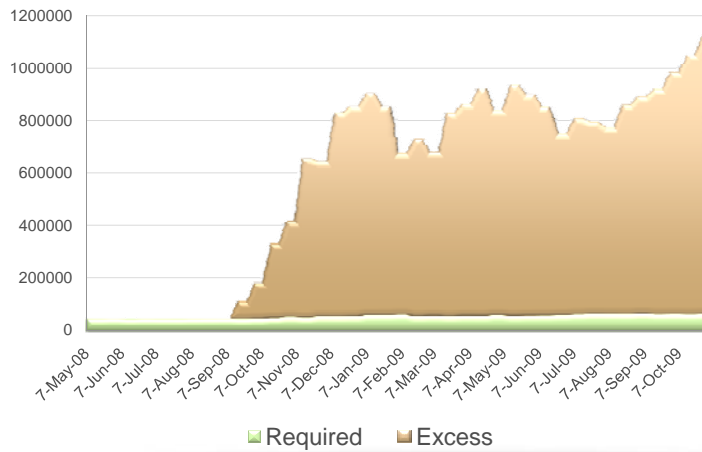
Balance sheet of all Federal Reserve Banks (Billions of USD)

Assets		Liabilities	
Gold	11.0	Banknotes	873.5
US Treasury Securities	769.2	Deposits of depository institutions	848.1
Mortgage-backed Securities	692.4	US Treasury	273.3
Commercial paper	41.0	Other	109.2
Other portfolio holdings	61.4	Capital	51.1
Liquidity swaps	57.7		
Other assets (TAC, Repos,..)	511.5		
Total	2144.2	Total	2144.2

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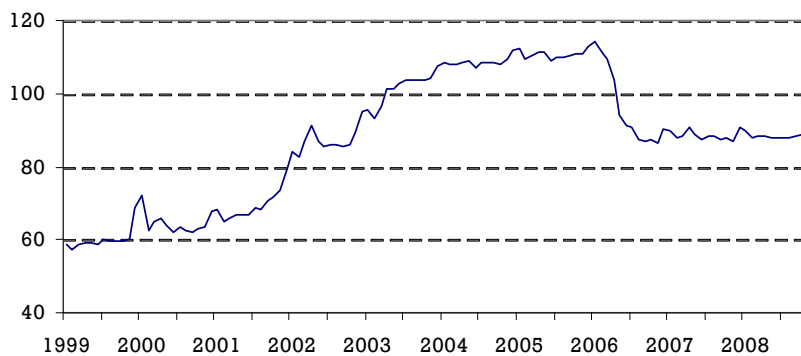
Concern 1: Will there be hyperinflation?

**Reserves in US commercial banks
(Millions of USD)**



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Monetary Base in Japan (Yen, trillions)



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How to control money supply?

1. Open market operations.
2. Closing down of lending facilities. For example Commercial Paper Funding Facility went down from \$350 billion on Jan. 21, 2009 to \$41 billion on September 30, 2009.
3. Change in reserve requirements.
4. Increase interest rates paid on bank reserves.
5. Issue central bank bonds.

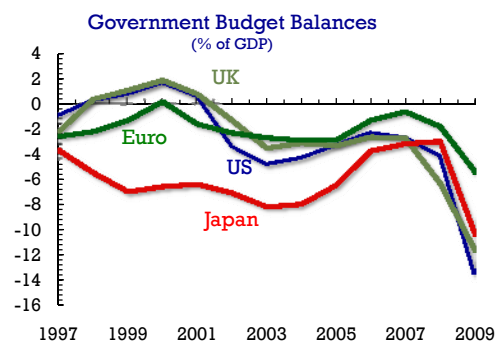
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Concern 2: Fiscal policy will generate excessive burdens for future generations.

Yes. But what is the alternative?

Japan 1991-2005: Lack of decisive policy actions led to an increase of debt-to-GDP ratio from 64% to 175%

It is important to insist on fiscal conservatism, but it is in good times when government spending is unjustifiably high.



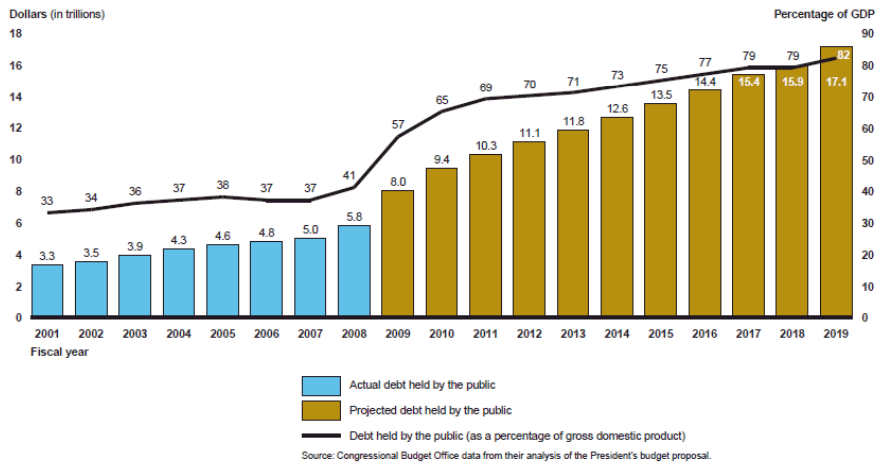
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US Debt Evolution



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Figure 4: Debt Held by the Public and Percentage of GDP, 2001 through 2019



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Monitoring the economy



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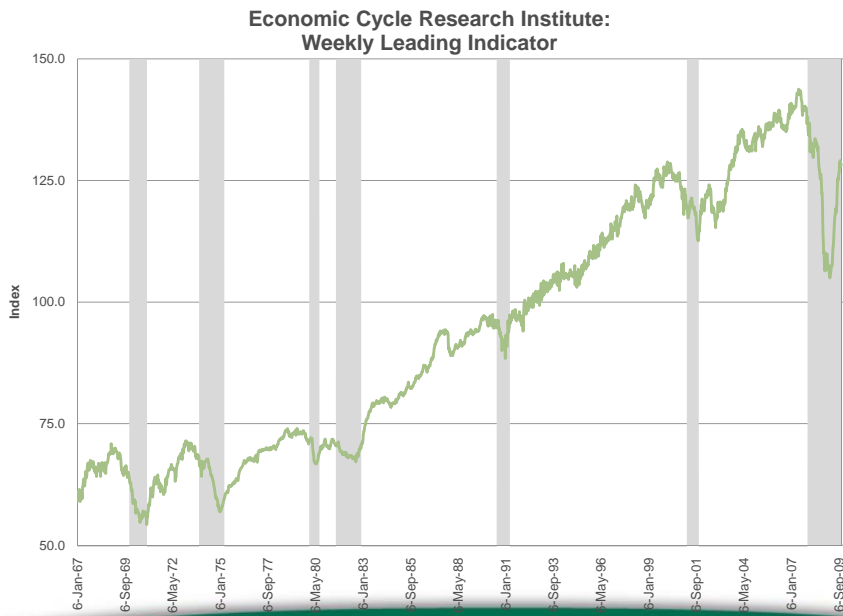
Policy	Financial conditions	Labor market	Consumption	Supply, Construction	Other
Money* Inflation	S&P 500*	Employment situation*	Confidence*	Vendor performance*	Exports
Yield curve*	Credit spreads	Unemployment*	Wealth/Debt	New orders*	Flows
Fiscal policy	Credit conditions	Vacancies*	Financial obligations	Building permits*	
Debt	Banks				

* These variables in the Conference Board **Index of Leading Indicators**

For medium term analysis, one has to look also at potential **imbalances**: (a) excessive consumption; (b) overinvestment; (c) large deviation of house prices relative to income from historical data; etc.

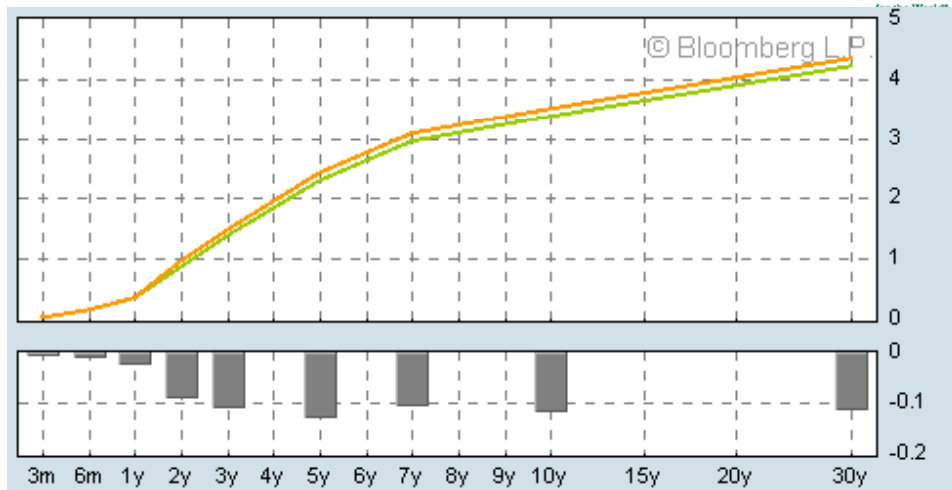
For long-term analysis, focus on the determinants of trends – innovation, institutions...

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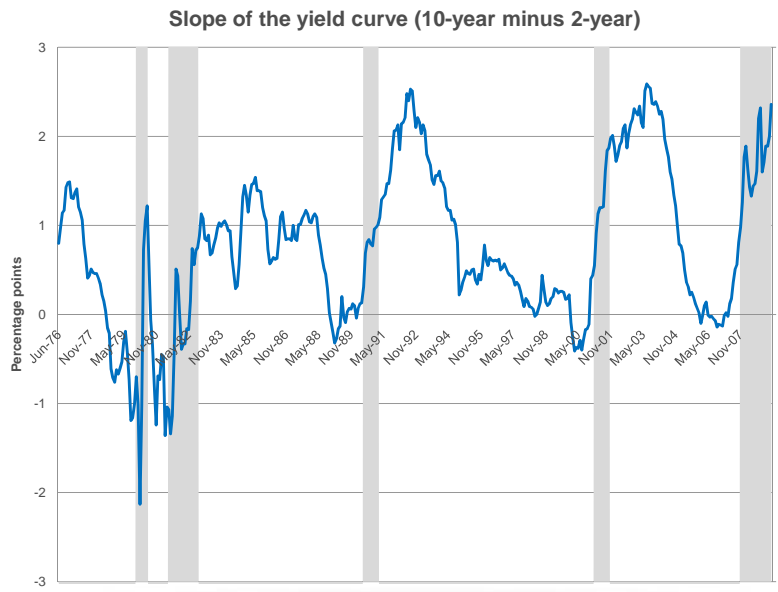


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US Yield Curve October 30, 2009

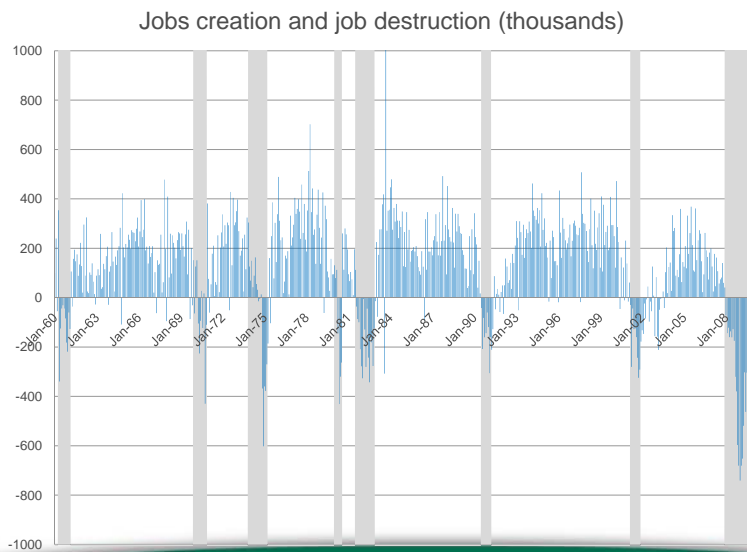


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Employment situation

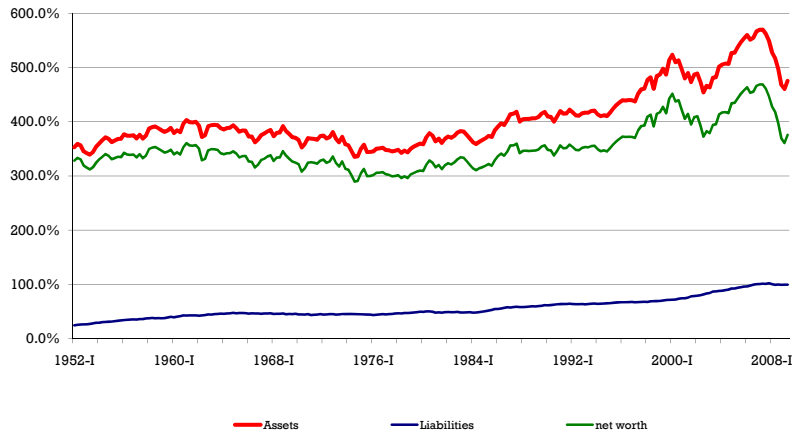


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Households' balance sheet



Assets, Net Worth and Liabilities (% of GDP)

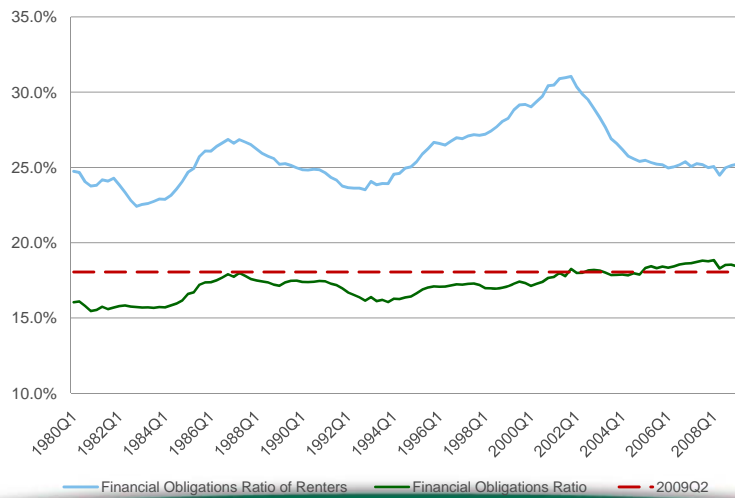


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Households' Financial Obligations Ratios



Financial Obligations Ratio

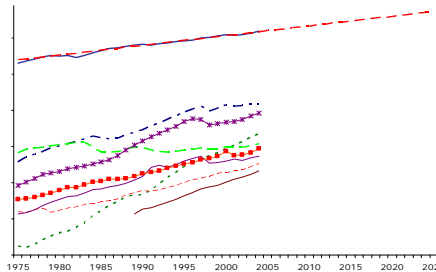


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Scenarios: Long Term



In the long run the dynamics of the global economy will be dominated by the countries converging to the world technological frontier. Whether these countries will deliver depends on their institutional reforms.



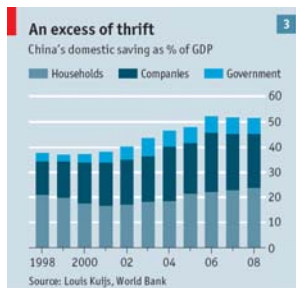
Even after deep recessions, resolution of imbalances, credit crunches, financial turmoil, the advanced economies have always returned to a relatively stable potential growth rate.

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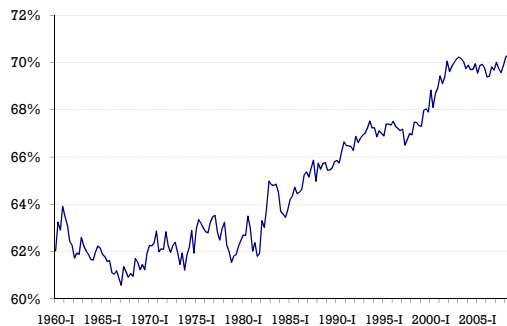
Scenarios: Medium Term



Somewhere along the way, the global economy has to sort out the **global imbalances**.



US consumption as % of income



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Scenarios: Near Term – 2009/2010



The global economy is expected to resume growth in 2010 with 3.1% increase in world GDP (US at 1.5%, euro area at 0.3%, emerging economies at 5.1%). For the growth rate, this implies a **V-shaped** recovery.

Needless to say, it is **the deepest V** in the post-WWII period.



What about **U**, **L**, **W**? In post-WWII period it is difficult to find **U** and **L** recessions for the advanced economies. Japan is the only candidate for an **L**.

W have occurred only due to policy reactions (1981-82). **W** has a non-zero probability if policy turns contractionary. Hence, the big question is:

What will happen to inflation and deflation?

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