The new global financial structure-
Evaluating the UK model

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Abstract

The recent global financial crisis calls for a financial structure both at national levels and international level devoid of instability. First, the authors try to analyze the causes of the current crisis and the current financial scenario in major countries .Then the current financial system in the major economies and the associated drawbacks are dealt with. Finally, an attempt is made to evaluate the model and strategy suggested by the UK financial authorities in overcoming any future crisis along with experts' observations.

It is noted that given the severity of the recent crisis, there should be a coordinated and collaborative response by the various actors of the financial structure to meet the challenge. This is so far not seen. It is thus apt time for international financial structure modification. Policy mistakes this time can prove to be detrimental in nature for the society as a whole. Suggestions from international bodies, economists, practitioners and other stakeholders must be taken into account before coming to any conclusion regarding changes in the financial structure along with proper supervision-national and international.

Introduction

The global financial crisis experienced in recent times suggests that the existing financial structure needs revisiting both at national international levels to avoid any further shock. The authors opine that the model put forward by the financial institutions of the UK be given due exposure to see if it can withstand the distresses caused by any irregularities.

But before this, the causes of the recent crisis need to be examined along with the current financial scenarios in the major economies. This is done in the first instance. Then the analysis dealing with the financial systems and the associated weaknesses in them in those economies is taken up. Finally, the global financial structure model proposed by the UK financial bodies is looked into to see if it is in a position to neutralize the effects of any

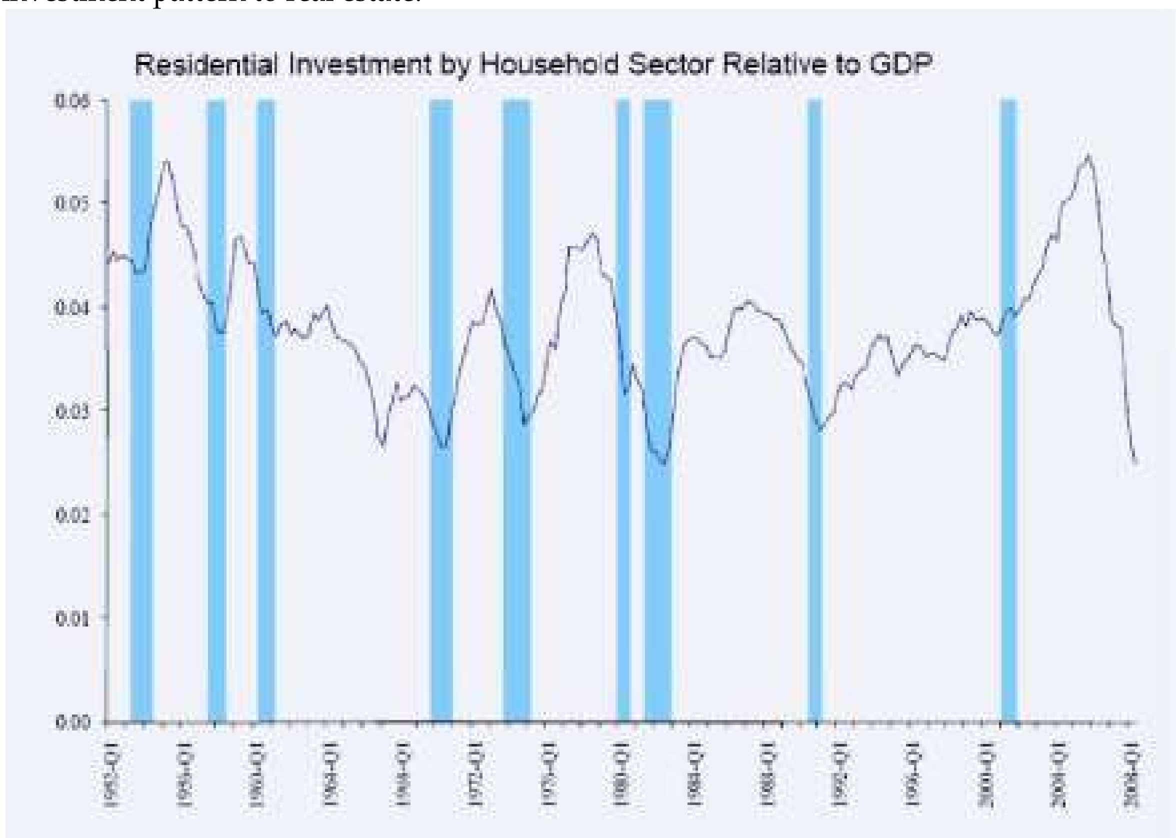
mishaps. A SWOT analysis of the components of the model is also attempted so that a roadmap for the implementation of this model can be laid out to make a transition from the current sorry state of regulatory systems.

Unfolding the crisis

The major causes behind the financial crisis are listed in brief as follows:

Subprime mortgages

The root cause of the financial crisis was the bubbled $20.15 trillion housing market in the U.S (mainly sub-prime). This was in the line of past episodes of crisis, which is evident from the figure shown below. Important point to be noted is that 2001 crisis did not affect the investment in housing sector significantly rather it reinforced investors to change their investment pattern to real estate.



Originate and distribute Model

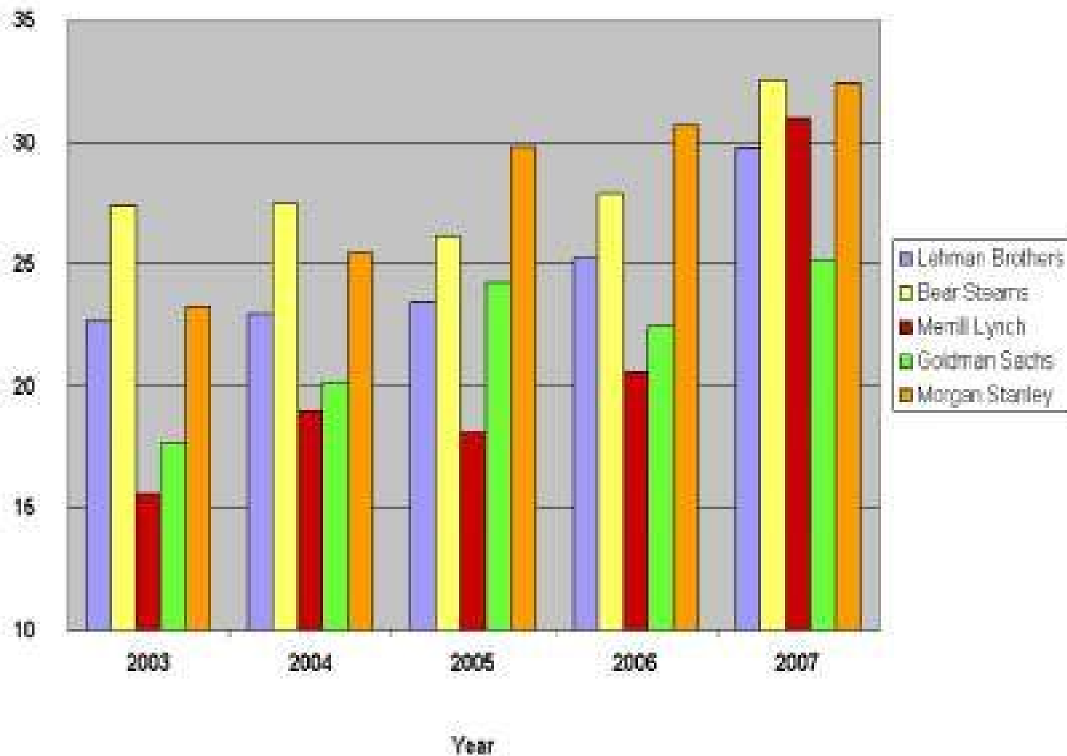
Further subprime mortgages were not confined to banks but it was distributed globally under the practice of originate-and-distribute model leading to global financial crisis. Proper risk-modeling techniques were also not there to assess the risk of loans at origin and for securitized products. Fed Chairman said in May: "Weaknesses in the application of the originate-to-distribute model became increasingly apparent last year.... At the point of origination, underwriting standards became increasingly compromised.

Securitization and excessive leverage

Situation was aggravated by securitization of mortgages and further by credit default swaps etc. (financial innovation). The notional value of derivatives held by U.S. commercial banks was $175.8 trillion in third quarter of 2008. The major investment banks of U.S. increased financial leverage significantly during 2004-2007.

Leverage Ratios For Major Investment Banks

The leverage ratio is a measure of the risk taken by a firm, a higher ratio indicates more risk.
It is calculated as total debt divided by stockholders equity. Each firm's ratio increased between 2003-2007



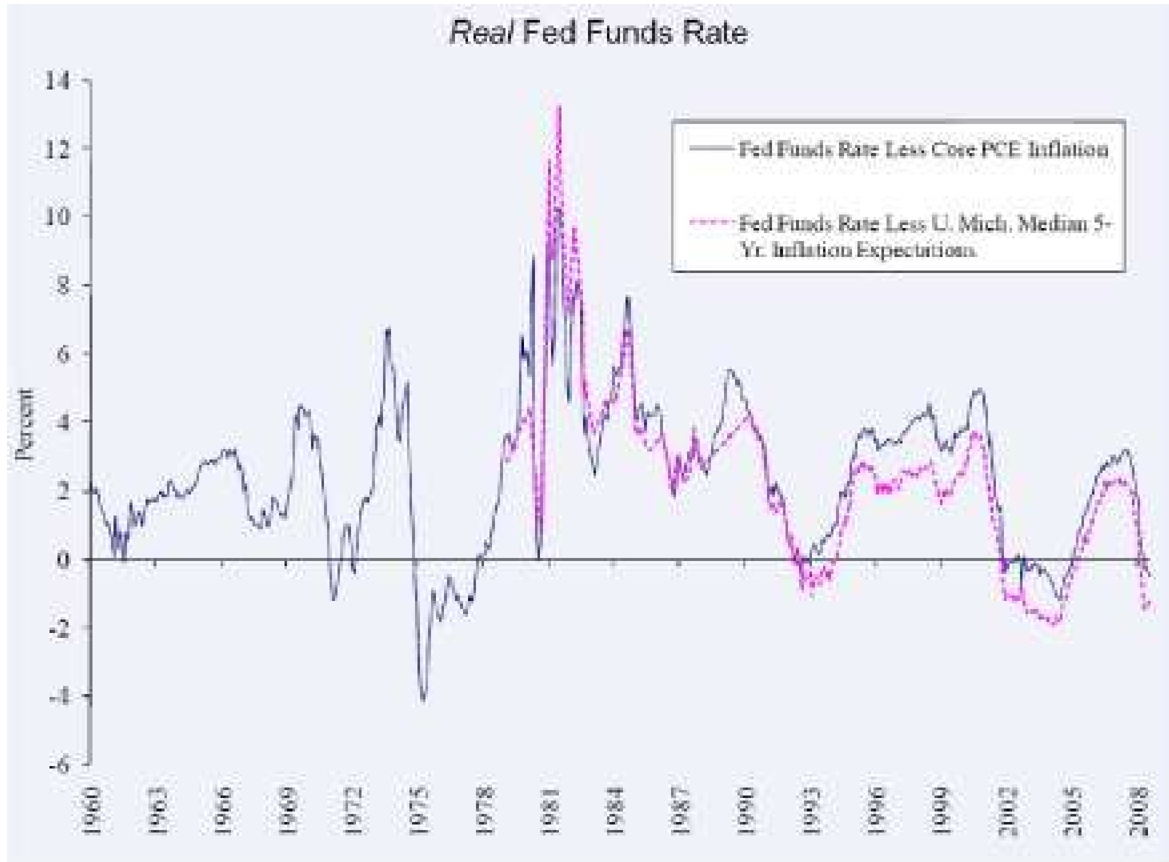
Source Data: Company Annual Reports (SEC Form 10K)

Rating Agencies' role

Credit rating agencies helped in the transformation of riskier securities into Special Investment Vehicles with prime and triple-A ratings greatly which smoothed the way for the advent in a whole range of structured products, like collateralized debt obligations, asset-backed commercial papers and so on. Complex mathematical models were used for financial products, which showed the risk much smaller than they actually proved to be in practice.

Loose monetary and fiscal policy

The economy was very slow in recovering from the 2001 recession, the weakness of the recovery forced Federal Reserve Board to continue to cut interest rates. Loose monetary policy and fiscal policy exacerbated the situation by inflating the housing bubble.



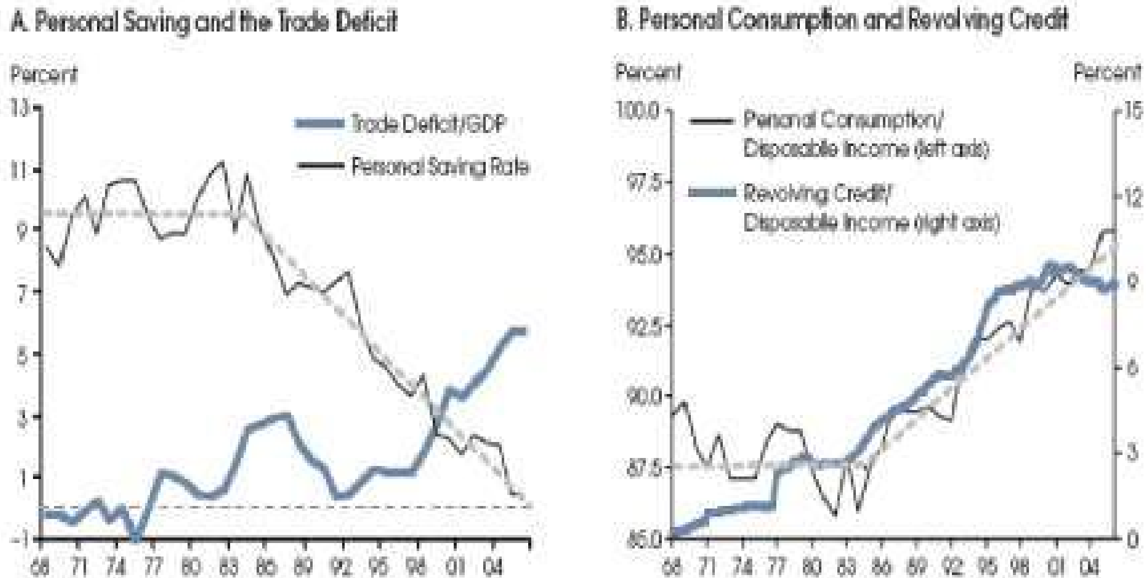
Source: *Subprime turmoil, Charles Calomiris, Columbia University, NBER,*

IMF -regulatory flaws

U.S. Government subsidies of borrowing (Fannie Mae and Freddie Mac, and other elements) promoted excessive risk taking. In November of 1999 Congress repealed the Glass-Steagell Act with the establishment of the Gramm-Leach-Bliley Act, which eliminated the GSA restrictions against affiliations between commercial and investment banks. Furthermore, the Gramm-Leach-Bliley Act allows banking institutions to provide a broader range of services, including underwriting and other dealing activities.

Foreign funds flows and over-consumption

Emerging countries such as China supplied funds by purchasing USA Treasury bonds and other assets because of huge fiscal surplus and forex reserves. This is how dollars is reaching back to U.S. causing over-consumption along with loose monetary policies. (Saving rate was almost zero in U.S. and very high in China and India.)



Source: *Federal Reserve Bank (Consumption Trends)*

Multiple bubbles

Apart from housing bubble other assets bubbles were also created that increased the scale of crisis. Economist Nouriel Roubini wrote in January 2009: "There were many bubbles, and they extended beyond housing in many countries to commercial real estate mortgages and loans, to credit cards, auto loans, and student loans. There were bubbles for the securitized products that converted these loans and mortgages into complex, toxic, and destructive financial instruments. And there were still more bubbles for local government borrowing, leveraged buyouts, hedge funds, commercial and industrial loans, corporate bonds, commodities, and credit-default swaps..."

After looking at various causes which collectively gave birth to this crisis, we will look how this crisis got unfolded hitting all corners of this globe.

Given below is sequence of **few major financial events during crisis** in their chronological order to take a bird's eye view:

July 2007: The financial crisis came into light in July 2007 with the loss of investors' confidence in securitized mortgages in US. This resulted in a liquidity crisis that further accentuated in august 2007.

September 2007: Northern Rock, a medium-sized British Bank, was in liquidity crisis. It was rescued by Bank of England by providing a liquidity support facility.

February 2008: Northern Rock was taken into state ownership by the Treasury of the United Kingdom.

March 2008: The Federal Reserve Bank announced that it will provide term financing to facilitate JP Morgan Chase & Co.'s acquisition of The Bear Stearns Companies Inc.

September 2008: The Federal Housing Finance Agency (FHFA) placed Fannie Mae and Freddie Mac in government conservatorship. On September 15th, Lehman Brothers Holdings Inc. filed for bankruptcy and Bank of America announced its intent to purchase Merrill Lynch & Co.

October 2008: In Europe, there was a severe economic crisis because of inability on the part of major banks to refinance their short term debts and run on deposits in UK.

November 2008: Dow Jones Industrial Average (DJIA) touched recent low point of 7,507 points along with major stock indexes world over.
December 2008: Madoff Ponzi scheme scandal erupted.
January 2009: Government of Iceland collapsed.
February 2009: The Dow Jones, S&P 500 and other indexes witnessed new lows.

Major highlight of this crisis was that it was related to asset side of balance sheet rather than liabilities side. It is spreading from financial market to real economy throughout the globe. Throughout the globe, major central banks pumped liquidity and Governments announced various fiscal incentives.

Overview of current financial scenario area wise

U.S: United States is the epicenter of the global crisis and has witnessed the greatest turbulence. Decrease in consumption levels and diminishing interbank lending is aggravating the current scenario. These days the very busy regulatory system of US consists of Federal Reserve System, Department of Treasury, Securities and Exchange Commission, Federal Deposit Insurance Corporation and National credit Union Administration. President Bush signed into law the Emergency Economic Stabilization Act of 2008, which establishes the $700 billion Troubled Asset Relief Program (TARP). Obama administration has introduced an economic stimulus package of $819 billion, in which 22% will be as tax cuts and rest fairly divided into different sectors.

EU: The main problem with EU is supervising the integrated markets in fragmented governances. Due to financial market integration along with globalization has resulted into massive banks, which are too big to save. Various countries of EU have come up with stimulus packages to take control of the situation.

UK: UK has played a leading role in taking measures to ensure the stability of the UK's financial system and protect ordinary savers, depositors, businesses and borrowers. The current tripartite arrangement (Regulator FSA, Central Bank BoE and Treasury) in UK is trying to contain the current financial situation in the country.

Japan: Second largest economy (absolute terms) in the world, however losing the say in the global financial system. The economy has been shrinking since 1974. Prime Minister Taro Aso announced the Y2 trillion handout, part of an emergency package worth Y5 trillion, however it has increased individual consumption in the total gross domestic product by just 0.1 percent, hardly delivering any positive benefits to the economy.

China: China is highly regulated financial structure, however recently it has started expanding monetary policy to integrate to its overall economic policy. With of US$586 billion

economic stimulus package of November 2008, Chinese government trying to stimulate various sector. China's economy is weakening faster than expected.

Rest of the World: The economies of considerable sizes like India, Russia, and Brazil etc are also in the midst of the crisis. The governments in these countries are coming up with various rescue packages to ameliorate the current situation in their respective countries.

Current financial system

If we look at international scenario major players in global financial structure include U.S., U.K., E.U., Japan, China, India, Latin America, Australia and Gulf countries inter alia. Within individual countries Governments, central banks, financial market regulators, financial institutions are major pillars of financial structure among others. International bodies like WTO, IMF, BIS, IMFC, OECD, FSF, World Bank etc. present to stabilize global financial structure are also integral part of financial structure.

Major trends, issues and policies (along with flaws) are discussed below regarding capital flows and currencies (trade is not discussed because trade forms small part of total financial capital flows internationally):

International financial issues: Current financial crisis is demanding a paradigm shift in international financial systems. The concerns regarding current financial structure are discussed below:

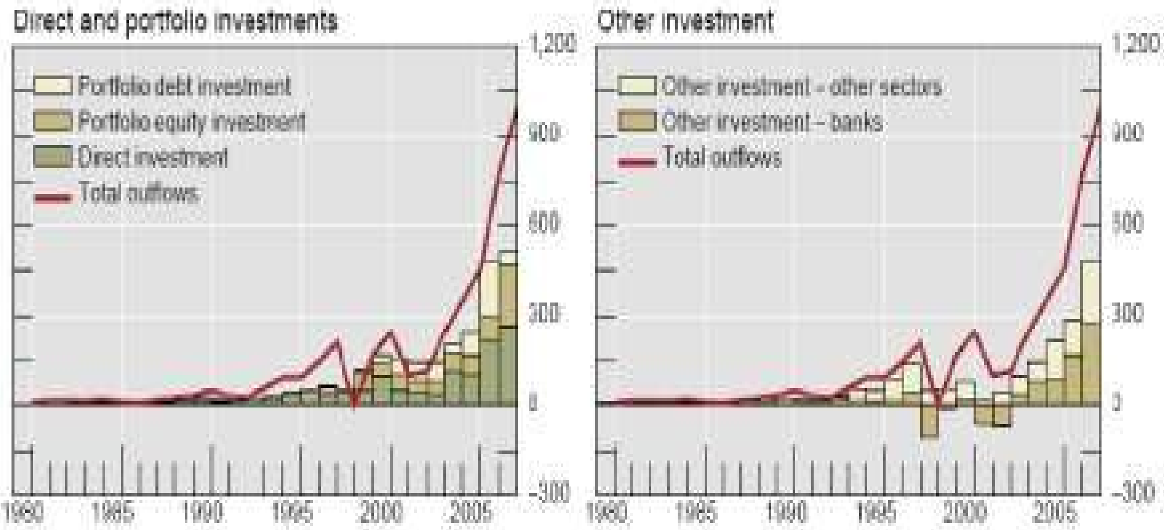
International monetary fund restructuring:

According to latest IMF reports it requires:

- o Rebalancing of quota shares, which determine a member's voting power in the Fund and cap the amount of financing it can receive in normal circumstances.
- o Movement to a more representative Board and IMFC less tilted toward advanced countries to the detriment of emerging and developing countries.
- o $150 billion fund to help emerging and low-income countries to tide over from the crisis.
- o other governance reforms, such as advancing accountability and the effectiveness of decision making and creating a truly open, transparent and merit-based system for selecting Fund management.

Forex Reserves Issues: With the increasing forex reserve of emerging countries like China and deficit in developed countries, basic financial structure of world is changing. Flows of fund to developed countries from emerging countries is causing huge imbalance. Ben Bernanke called this as "Saving Glut". But benefits of forex reserve like cushioning in crisis is also being discussed.

Capital outflows from emerging countries (in $ bn):



Source: *IMF balance of payment statistics, Report submitted by a Working Group established by the Committee on the Global Financial System by Rakesh Mohan.*

Dollar vs. Gold: Economists are now referring to Austrian economists and their suggestions of reverting back to gold reserve system. Dollarization of global economy is questionable because of volatility involved.

Concerns regarding China: Concerns regarding Chinese practices of high forex reserve, artificial devaluation of Yuan are also prevalent. Also it is understood that countries like China, India, Russia, and Brazil can save the world by increasing consumption thereby increasing world demand.

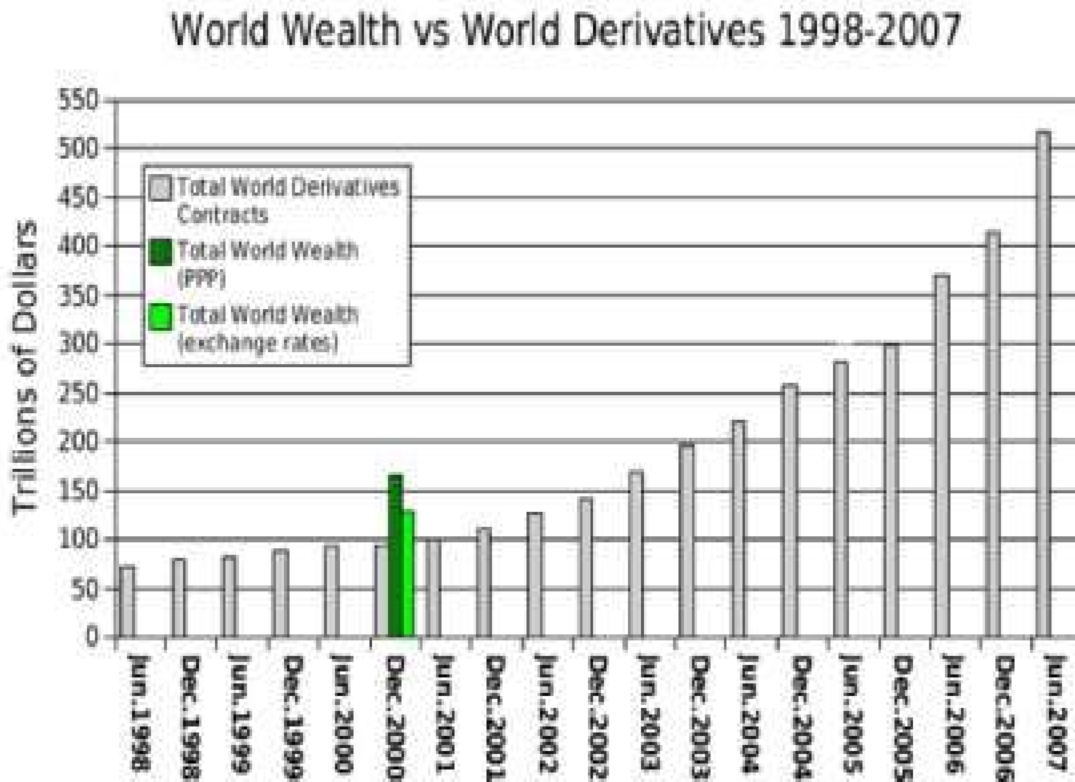
Transnational Authorities: Due to increased capital flows across globe suggestions of restructuring transnational authorities of banking like BIS is also coming to remove policies flaws and asymmetries and also to take cognizance of developments and issues in the global economy which is missing hitherto.(Despite the increased flow of trade, capital and information in world)

Interest-rate parity, external imbalances and exchange rate misalignment: Interest rate differential between countries created bubbles and spread contagion throughout globe. It is proving to be a win-lose game due to external imbalances and exchange rate misalignment.

Capitalism review: Derivative market of Wall Street was many times worlds GDP which is causing implosion in economy. Economist like Joseph Stieglitz called for reformulation of capitalism while ace investor like Warren Buffet called derivatives as "Weapon of financial destruction".

Systemic Risk: Crisis emanating from one corner spread to globe because of interconnections of world capital and financial market thereby is shedding light on systemic risk involved.

Imploding derivatives market: At the end of 2005, (IMF, Global Financial Stability Report, April 2007) total financial assets stood at an astonishing level of 3.7 times world GDP. The notional amount of total derivatives was double than the volume of total financial assets, which means 11 times global GDP.



Source: *BIS, Wikipedia.*

As this crisis originated from U.S. some fundamentals questions raised regarding U.S. financial systems are given below (some regards to other countries also):

Banking regulations

- **Bank bailout and nationalization:** Banks bailout throughout globe is facing the criticism from experts on various issues like "Moral Hazard", Nationalization, taxpayers' money etc.
- **Risk-modeling:** Risk-modeling techniques for mortgages by banks and securitized products by I-banks and other financial institution were quite complex. It missed actual risk involved because of complicated correlation and copula statistics.
- **Mark-to-model approach:** Mark-to-model valuation techniques, FASB 157,FASB 159 and other accounting standards and repeal of Glass-Steagell act is also blamed for the crisis.
- **Asset liability mismatches and leverage:** Asset-liabilities mismatches (maturities) and leverage of banks and I-banks made crisis situation worse because of bank run and

confidence crisis.

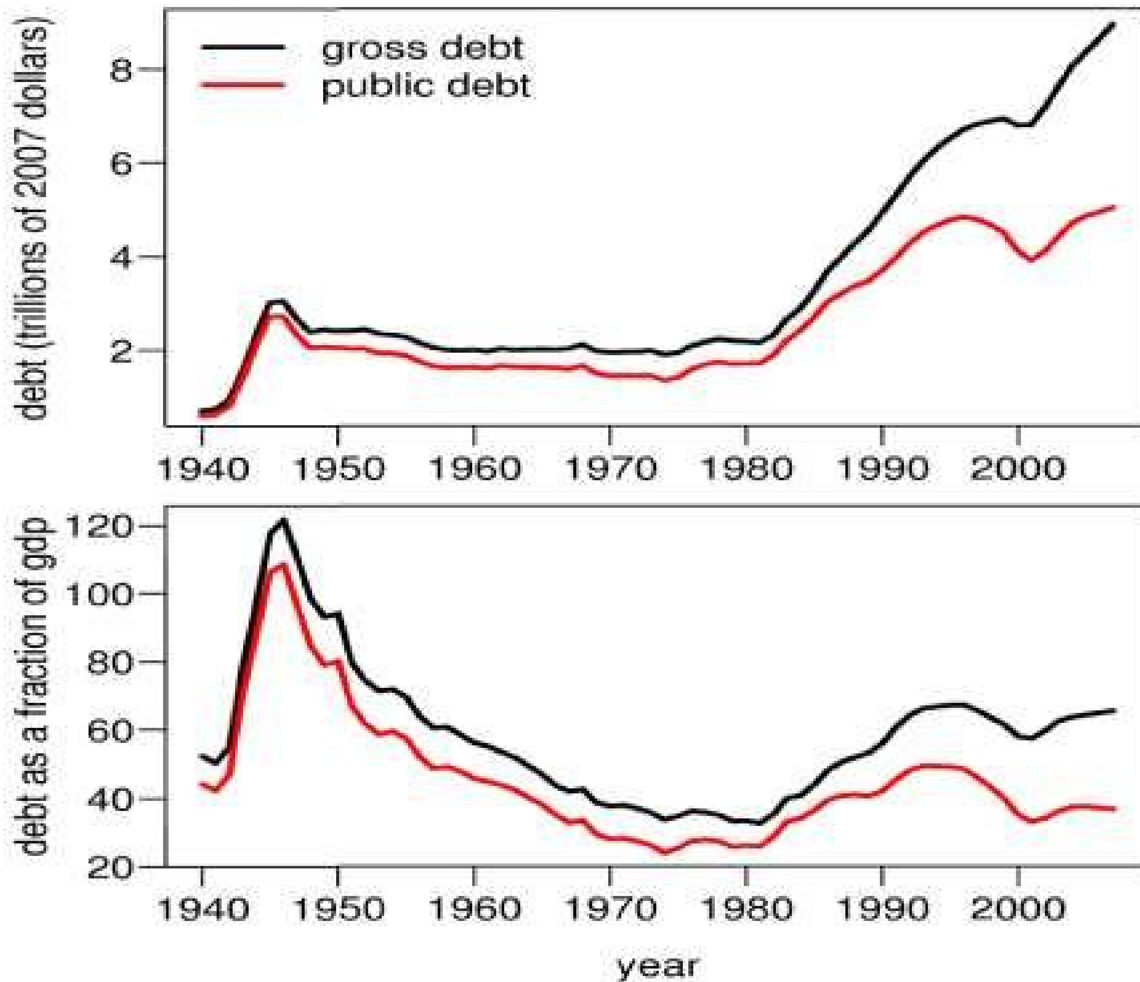
- **Contribution and effect on real economy:** Fundamental question is being raised regarding the banks contribution to real economy that is bank loans disbursed to economy, which can be measured by bank loans/ financial assets ratio.
- **Deposit insurance:** Deposit insurance in banks is also a topic of discussion among regulatory agencies and economists.
- **Separate regulatory authority:** Separate regulatory authority of banking is being prescribed to prevent future crisis. It can be within central bank or outside.

Central banking and monetary policy

- **Economic Cycle:** Few economists and experts are raising concerns over pro-cyclical nature of monetary and regulatory policies which cause boom and bust cycle. In current crisis cycles got amplified due to derivatives amounting many times the world's GDP.
- **Lender of Last Resort:** Central bank acts as lender of last resort in economy but in crisis times it practices get distorted (MMLR) raising questions of accountability and policies transparency.
- **Illiquidity vs. Insolvency:** In times of crisis central banks cannot identify between illiquid and insolvent financial institution that is also a concern.

Government bailout and Fiscal policy

- **Moral hazard in bailouts:** Moral hazard issues related to bailouts is being raised because bailouts are burden on taxpayers due to greed of financial institutions. **(Lemon Socialism)**
- **Huge deficits and debt:** Huge debt in countries like U.S. is along with huge fiscal deficit in past years is causing overt inflation and other implications according toBIS.



Source: *whitehouse.gov/omb*

Credit rating agencies and other financial institutional issue:

- **Principal agent problem:** Credit rating agencies involved in crisis were biased towards financial institutions thereby raising questions regarding principal agent problem because their first job is to rate products and institutions fairly.
- **Risk modeling:** Risk modeling techniques used by all including credit rating agencies is also facing heat of experts.
- **Supervision:** Separate supervisory authority is also proposed by some experts for tighter supervision along with convertibility of ratings of one agency to another to enhance transparency.

Concept of new financial structure model

This will be based on pillars of:

- Sound banking regulation
- Central banking Reforms
- Government bailout and fiscal reforms
- Credit rating agencies reforms
- International co-ordination and co-operation
- Restructured international bodies

These pillars will remove the drawbacks of current financial structure mentioned in section 2 in long-run and simultaneously taking care of short-term problems of fixing the crisis also. Analysis of different components of model is given below:

Sound banking regulation

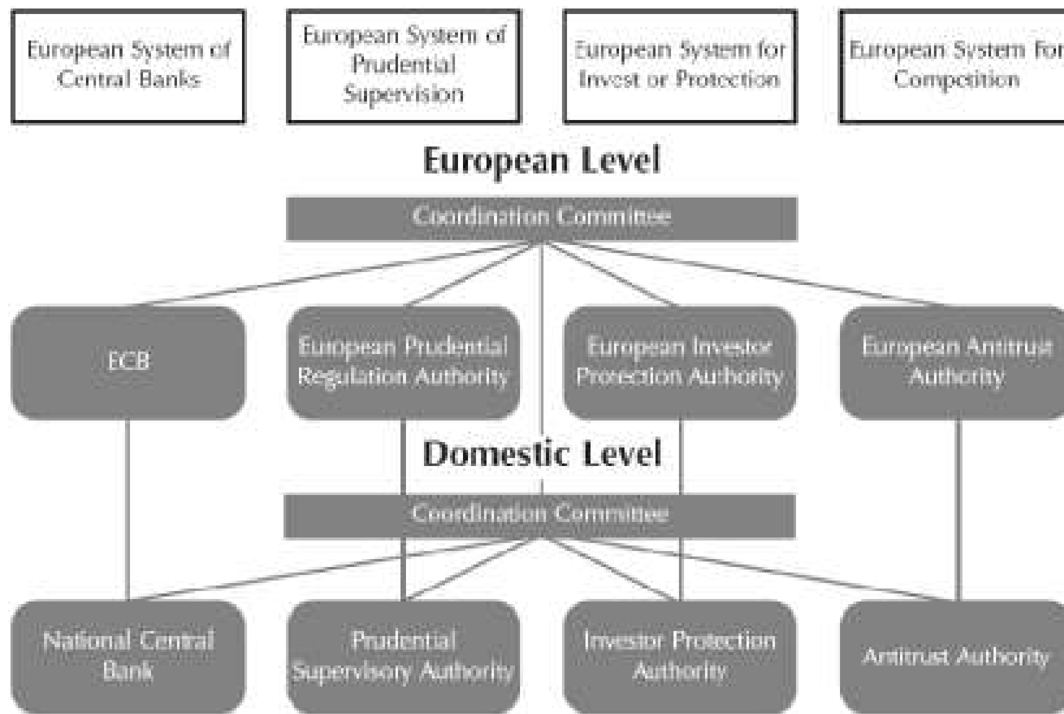
Insists on simpler financial structures and products, instead of financial engineering masterpieces that cannot be priced even by their designers, let alone by buyers and sellers in the secondary markets. Impose the requirement of equity (first-loss tranche) retention by the originator of loans, to mitigate the adverse impact of principal-agent chains on the incentive for information-collecting and monitoring of ultimate borrowers. Subject all off-balance sheet vehicles that act like banks to the same regulatory requirements and fiscal regime as banks (a principles-based 'duck test' for banks). Reform OTC disclosure and accounting which would encourage more exchange based trading, which would help transparency and risk management.

Central banking Reforms

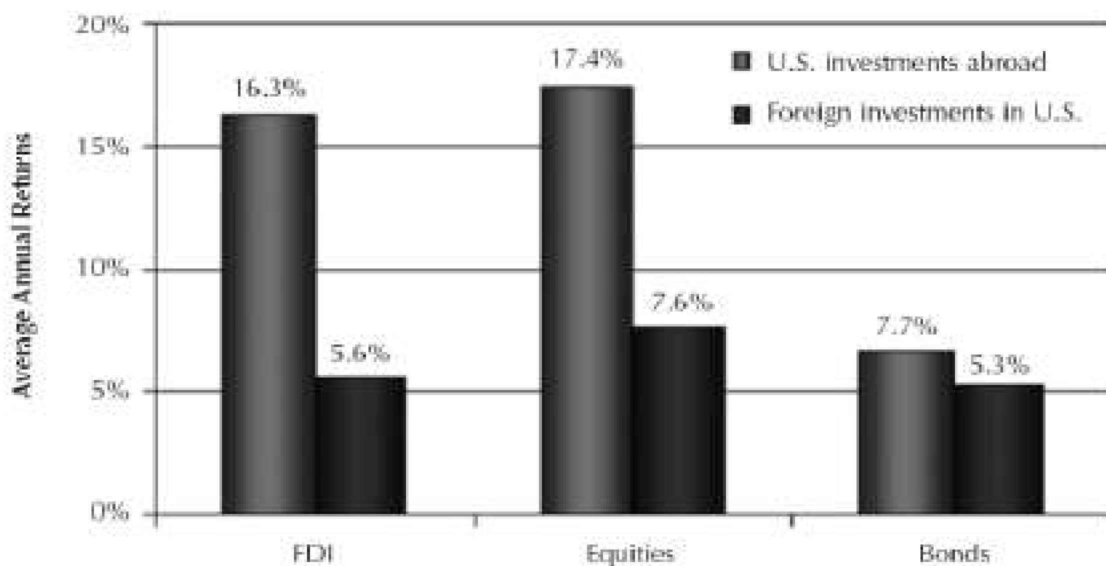
Central bank should have these characteristics:

Clear objectives, independent and accountable, adequate resources, effective enforcement powers, and comprehensiveness of regulation, effectiveness criteria and industry structure, regulatory flexibility, competitive neutrality, regulatory efficiency, professional expertise, improved accountability. Suitable policies and structure will be integral to our model designed to address those issues.

Proposal of new financial system regulation of EU by Carmine Di Noia, Assonime and LUISS-Guido Carli University.



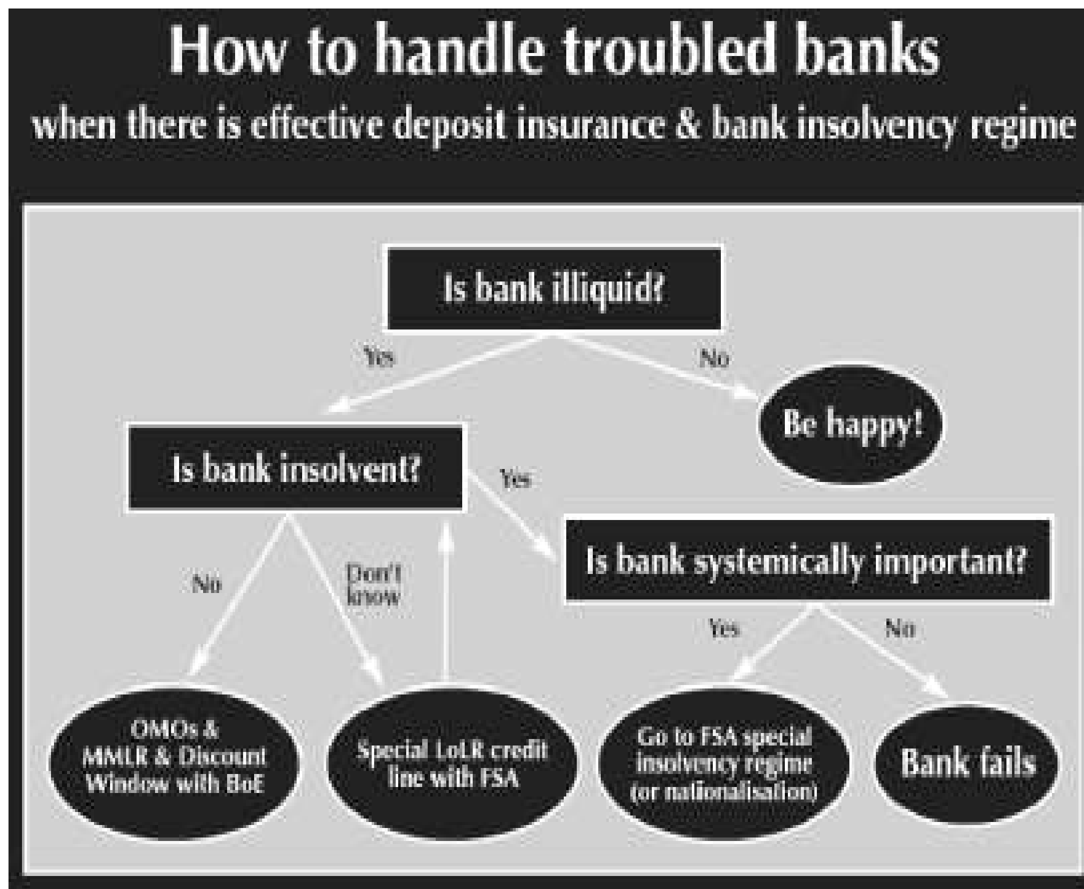
uge money invested by major countries in U.S. is also coming under question as returns are very less as compared to money invested by U.S. elsewhere as shown below:



Source: *Kristin J. Forbes (2008), 'Why do Foreigners Invest in the United States?' NBER Working Paper #13908.*

Government bailout and fiscal reforms

Economists throughout the world are prescribing capital infusion, selling off bad assets and nationalization of banks (as in U.K.) etc. to revive the illiquid and almost insolvent banks throughout globe. Persaud advocated a debt-for-equity swap. Gros argued that governments should prefer to implement fiscal policy via tax cuts rather than infrastructure development. Bailout should be designed to take care of above. Also real economy got hurted because of deteriorating liquidity and confidence crisis, bailout should try to take care of that also by giving sops to various sectors and tax cuts. Increasing govt. expenditure will also boost economy but blueprint for long-term fiscal consolidation should be embedded in it to reduce future fiscal deficit (U.S. will have deficit of $1.75 trillion in year 2009 and it has at present huge debt of $10.96 trillion approx.) Given below is solution provided by U.K. central authorities to handle troubled banks after implementing effective deposit insurance and bank insolvency regime:



Credit rating agencies reforms

1) Eliminate the quasi-regulatory role of the rating agencies in Basel II.

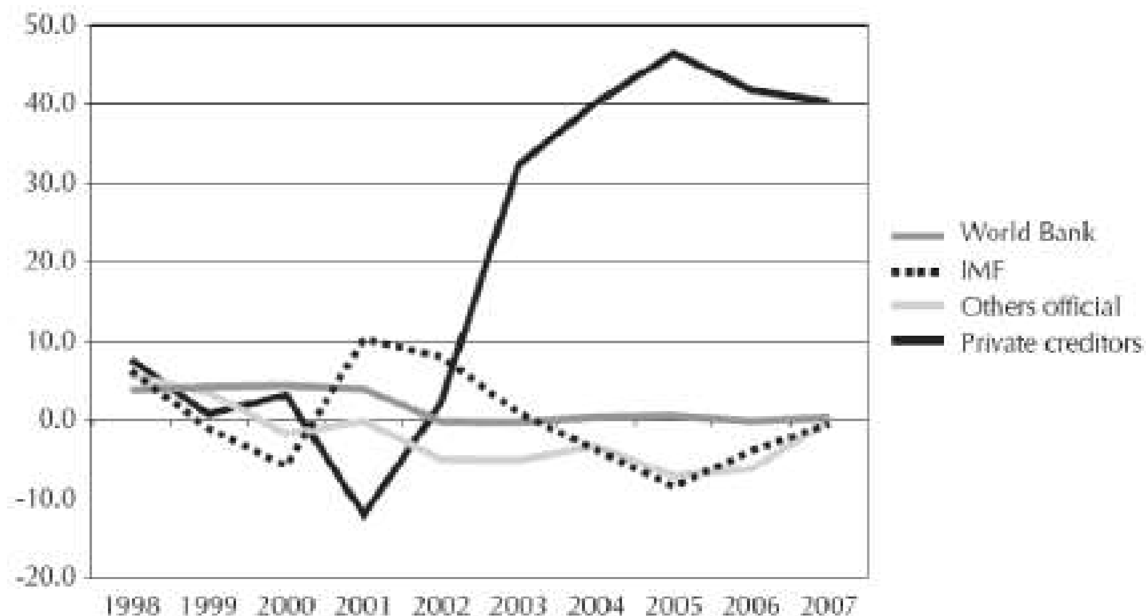
2) Require rating agencies to sell nothing but ratings, to reduce conflict of interest.
3) End the payment of individual rating agencies by the individual issuers of securities they rate.

International co-ordination and co-operation

Various economists worldwide discussed international steps to be taken. Freytag and Pehnelt wanted to use the financial crisis to spur reform in emerging-market debt relief programs. Muellbauer argued forcefully for a large, internationally coordinated interest rate cut. Gros and Micossi called for a European Financial Stability Fund to issue euro bonds to recapitalize the financial system. Di Noia suggested that Europe create a new financial regulatory system based on the four objectives of macroeconomic stability, microeconomic stability, investor protection and competition. Pagano's was also in favor of a Euro-area bank supervisory authority. Kobayashi recapped some of the mistakes that Japan made during the 1990s, specifically with regard to the choice about recapitalizing 'zombie' banks. Similar to Gros and Micossi, he called for a global 'Financial System Stabilisation Fund.'

Restructured international bodies

Fulfillment of requirements of IMF mentioned above under heading of IMF restructuring should be our first step towards international structural reform. Eichengreen questioned whether the IMF will have a useful role to play in this crisis - and if it does not, what that portends for its future status. He suggested that the Fund increase it's lending to middle income countries to help them through the current liquidity squeeze. A joint Fund-FSF early warning system is proposed by experts.
Given below is percentage share of IMF in lending to developing countries showing phenomenon of crowding out:



Concluding remarks

It is an apt time for international financial structure modification. Given the severity of crisis, national and international response to this challenge by various actors of financial structure should be well coordinated and should be collaborative. This is so far not visible. Suggestions from international bodies, economists, practitioners and other stakeholders must be taken into account before reaching to any conclusion regarding change in international financial structure. Bailout should not take refuge in protectionism, as it will aggravate the world demand hitting real economy worldwide. Restructuring of international bodies according to contemporary demand can reduce the impact of financial crisis on developing countries.

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