Conference on
International Cooperation in
Times of Global Crisis:
Views from G20 Countries

Global Financial Reforms:

A Tragedy of the Commons?

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Content

I. Theory and Practice of Financial Regulation
II. Overview of recent reforms
III. Systemic View of Current Crisis
IV. Contours of Future Finance
V. Can we get out of the Collective Action Trap?

I. Objectives of Financial Regulation

- The goal of financial regulation is to influence the behaviour of market participants so that the policy objectives are achieved…Charles Goodhart

Regulatory Cycle

Policy Objectives $\Rightarrow$ Structure + Processes $\Rightarrow$

Enforcement $\Rightarrow$ Policy Outcomes $\Rightarrow$ Review

- **Since markets are evolutionary, path-dependent and time irreversible, regulation must change with the times.**

Regulation is Evolving Game between Market Participants and Regulators

- <u>Objectives</u>
- Property rights protection
- Value creation
- Lower Transaction Costs
- Higher transparency

- <u>Problem</u>
- Fairness + Stability + Principal-Agent Problem
- Innovation
- Efficiency goal
- Information Asymmetry/Complexity

Regulatory Trade-offs

- Efficiency vs. Stability
- Risks vs. Returns – at private & macro levels
- Moral Hazard: Private Gains vs Social Costs
- Theory vs. Practice - Feedbacks: Positive or Negative Feedbacks
- Self-Regulation vs. Third Party Supervision

Transparency: Fallacy of Composition/Complexity vs. Simplicity

Collective Action: Nash Equilibrium or Tragedy of the Commons

II. BIS Governors agree on Global Minimum Capital Standards (12 September 2010)

- Governing Council of Basle Committee on Bank Supervision endorsed capital rules agreed on 26 July 2010, which together with global liquidity standard, will be presented for agreement at G20 Seoul Summit in November 2010.
- Increases Minimum Core from 2.5% to 4.5%, plus buffer of 2.5% = 7%
- 4.5% will be phased in by 1 January 2015.
- Full 7% (including buffer) by 1 January 2019.
- Liquidity Coverage Ratio – introduce Minimum Standard by 2015
- Net Stable Funding Ratio – Introduce Minimum Standard by 2019

II. One World, Different Approaches

Richard Sutcliffe, Head of Prudential Banking & Investment Business Policy, FSA, London Stock Exchange 10 June 2010

- International debate no longer dialogue between 'Anglo Saxon' economies and the rest of the world, but more multipolar.
- EU has radically revised regulatory architecture with new European Supervisory Authorities (ESAs) with mandate to write binding rules and more oversight of supervision (at least on a cross-border basis). EU banking risks are different from US
- EU legislative process now in trialogue phase, between the Council, Commission and Parliament attempting to agree a compromise package.
- Japan, Canada, Australia and EME less affected by crisis and reluctant to overload regulatory reforms

US DODD-FRANK WALL STREET REFORM AND CONSUMER PROTECTION ACT, July 2010

- Consumer Protection: independent Consumer Financial Protection Bureau, housed at Fed, to ensure transparency and and protect consumers from deceptive practices.
- Ends Too Big to Fail Bailouts: safe way to liquidate failed financial firms; imposing tough new capital and leverage requirements
- Advance Warning System: Creates Financial Stability Oversight Council to identify and address systemic risks.
- Transparency & Accountability for Exotic Instruments: Eliminates loopholes that allow risky and abusive practices to go on unnoticed and unregulated
- Executive Compensation and Corporate Governance: Provides shareholders with a say on executive compensation and golden parachutes.
- Protects Investors: Provides tough new rules for transparency and accountability for credit rating agencies to protect investors and businesses.
- Enforces Regulations: Strengthens oversight and empowers regulators to aggressively pursue financial fraud, conflicts of interest and manipulation of the system.

Broad agreement on Basel capital and liquidity reform package 26 July 2010

- Broad agreement on：
  - definition of capital,
  - treatment of counterparty credit risk,
  - leverage ratio, and
  - global liquidity standard.
- The BCBS will finalise the regulatory buffers before the end of this year.

Example: Leverage ratio definition delayed

- **Agreed only on rough definition as basis for testing during the parallel run period**
- **For off-balance-sheet items, use uniform credit conversion factors (CCFs);**
- **For all derivatives, apply Basel II netting plus a simple measure of potential future exposure to ensure all derivatives converted consistently to a "loan equivalent" amount.**
- **The leverage ratio will be calculated as an average over the quarter.**
- **Supervisory monitoring period commences 1 January 2011. Parallel run period commences 1 January 2013 until 1 January 2017.**

Volcker gives B- rating on reforms

- **Paul Volker feels that US legislation doesn't go far enough in curbing potentially problematic bank activities like investing in hedge funds.**
- **"A lot of financial engineering is governed by the notion that repetitive and predictable patterns can be applied to human behaviour – and, if I may go so far - substitute for common sense. …we have all sorts of example in recent years where such hubris has gotten us into a lot of trouble."**

www.huffingtonpost.com/.../paul-**volcker-gives-financ_n_641952.html**

Interview with Paul Volcker, June 13 2010, available at www.gailfosler/featured/growth-interest-rates-and-financial-regulation

Posner on Causes of the Crisis

Financial Overhaul Is Politics in Worst Sense: Richard Posner - June 29, 2010

1. Incompetent monetary policy, which produced housing bubble that brought down financial industry
2. Inattention of Fed and SEC, which didn't understand changing nature of banking industry, particularly rise of shadow banking.
3. Over-indebtedness of the American people and government, which has hampered the restoration of credit.
4. Failure of the Treasury Department under former Secretary Henry Paulson and the Fed under Bernanke to rescue Lehman Brothers Holdings Inc. Didn't realize that Lehman's bankruptcy would trigger run on banking industry, causing a global credit freeze

Basic Regulatory Failures

1. Know your industry
2. Know your risks
3. Know your counterparty
4. Know yourself

1. Did not realize that shadow banking larger than regulated banking
2. Did not understand systemic risk and rise of unmonitored leverage
3. Industry is more powerful than regulators through capture and politics
4. Not willing to stand up and be counted – Silo approach to Systemic risks

Structural Systemic Problems

1. Moral Hazard of private Proprietary trading profits at social cost
2. Too Big to Fail – Finance bigger than real sector
3. Conflicts of Interest
4. Procyclical monoculture accounting
5. Silos that encourage regulatory arbitrage

1. Not stopped with diluted Volcker Rule
2. Size limited by increased capital, leverage ratio and living wills
3. Regulatory capture – crisis is failure of governance
4. As long as accounting not resolved, model will be short-term biased.
5. Silos not resolved – still segregated between banking and non-banking

III. System/Institutional view of Financial Markets

1. Objectives
2. Transparency/Complexity
3. Structure
4. Power balance
5. Incentives
6. Standards
7. Mindset/Values
8. Interdependence and Connectivity

1. Efficiency vs Stability
2. Puzzle or Mystery
3. Silos vs Systemic view - Global and National Imbalances
4. Too Large to Fail/Capture
5. Moral Hazard/Private Gain at Social Cost
6. Procyclical regulatory and accounting standards
7. Theoretical/Model bias vs practical and realistic
8. Externalities not measured

1. Conflicting Objectives: Efficiency vs. Stability

- Conventional economic and monetary theory assumes that efficient markets will lead to stable domestic markets = efficient and stable global markets
- Policy to allow high speed, low transaction costs and high innovation led to highly leveraged non-transparency risky financial markets
- We now know that pro-cyclical feedback, interconnectivity and contagion can lead to global crisis
- National Stability ≠ Global Stability

2. Transparency vs Complexity

- **Efficient markets are supposed to work on high transparency, but complex derivatives, off-balance sheet and off-shore accounting led to inability to see problems and risks.**
- **Complexity facilitates cheating and fraud**

Is Systemic Risk a Puzzle or Mystery?

- **“Regulatory Science assumes it is Puzzle – solution can be found from getting “right” information.**
- **Regulation as Art thinks systemic risk is Mystery, with Unknown Unknowns, both exogenous shocks or Acts of God (accidents, terrorism and natural disasters) and endogenous from interactive behaviour of market participants: this requires regulators to be more humble, allow larger margin of prudence and being more pro-active to stop risky behaviour.**

3. Structural Imbalances

System wide problems cannot be solved by Silos

a) **National financial architecture vs. Incomplete Global Financial Architecture**

b) **Domestic fragmented regulatory functions create silos that allow regulatory arbitrage, collective inaction and even regulatory capture**

c) **Domestic Imbalances vs. Global Imbalances**

3a. National financial architecture vs. Incomplete Global Financial Architecture

1. **Domestic Financial Architecture has legitimate trio of Ministry of Finance, Central Bank and Financial Regulator functions to ensure that monetary policy, exchange policy, regulatory policy are consistent with each other to maintain overall financial stability.**
2. **Global Financial stability has no legal mandate – loose cooperation of monetary policy, financial regulation, but zero fiscal policy, and no one-size fit all view or solution of global issues.**

3b. Fragmented Domestic financial architecture

1. **Multiple domestic regulators cannot deal with one global highly interconnected financial market with universal banking**
2. **Basic reforms have not deal with institutional segmentation of regulators [banks, securities, insurance] and conflicts with monetary policy and investor protection.**
3. **Banking is Global in Life but National in Death** **(Mervyn King, 2009).**

3c: Global Imbalances are source of Potential Conflicts

Global Net Foreign Asset (NFA) and Liability Position 2008

Region/Country	Net Foreign Asset (+), Deficit (-) US$ bn	GDP 2008 US$ bn	NFA/GDP %	Exchange rate impact due to 10% change in USD	Impact as % of GDP
Asian Surplus	+ 4,994	12,309	+ 40.6	- 499	- 4.1
Other Surplus	+ 2,863	3,706	+ 77.3	- 286	- 7.7
Total Surplus	+ 7,857	16,015	+ 49.1	- 786	- 4.9
Euro Area	- 2,584	13,631	- 16.9	+258	+ 1.9
USA	- 3,690	14,441	- 25.6	+369	+ 2.6
Australia	- 501	1,062	- 47.2	+ 50	+ 4.7
Subtotal Deficit	- 6,775	29,134	- 23.3	+ 678	+ 2.3
Other Countries	- 1,082	16,070	- 6.7	-108	+0.1
Global Total	0	61,219			

4. Power balance: Finance is more powerful than Real sector

- Finance is no longer agent for the principal (real sector savers, borrowers)
- Proprietary trading and leverage means that finance is larger than real sector and more powerful.
- Superior trading volume, size, speed of transactions and information assymetry enable Finance Sector to engage in Ponzi trading and huge moral hazard (private [management] gains at public costs)
- Finance lobby stronger than regulators.

SLT3

TBTF = Too Interconnected to fail

- **Too-big-to-fail financial institutions were both a source (though by no means the only source) of the crisis and among the primary impediments to policymakers' efforts to contain it…*Bernanke (FCIC September 2010)***
- **Shadow Banking larger than "formal banking".**
- **Off-balance sheet and off-regulatory leverage huge**
- **Crowded exits panics market**

Slide 24

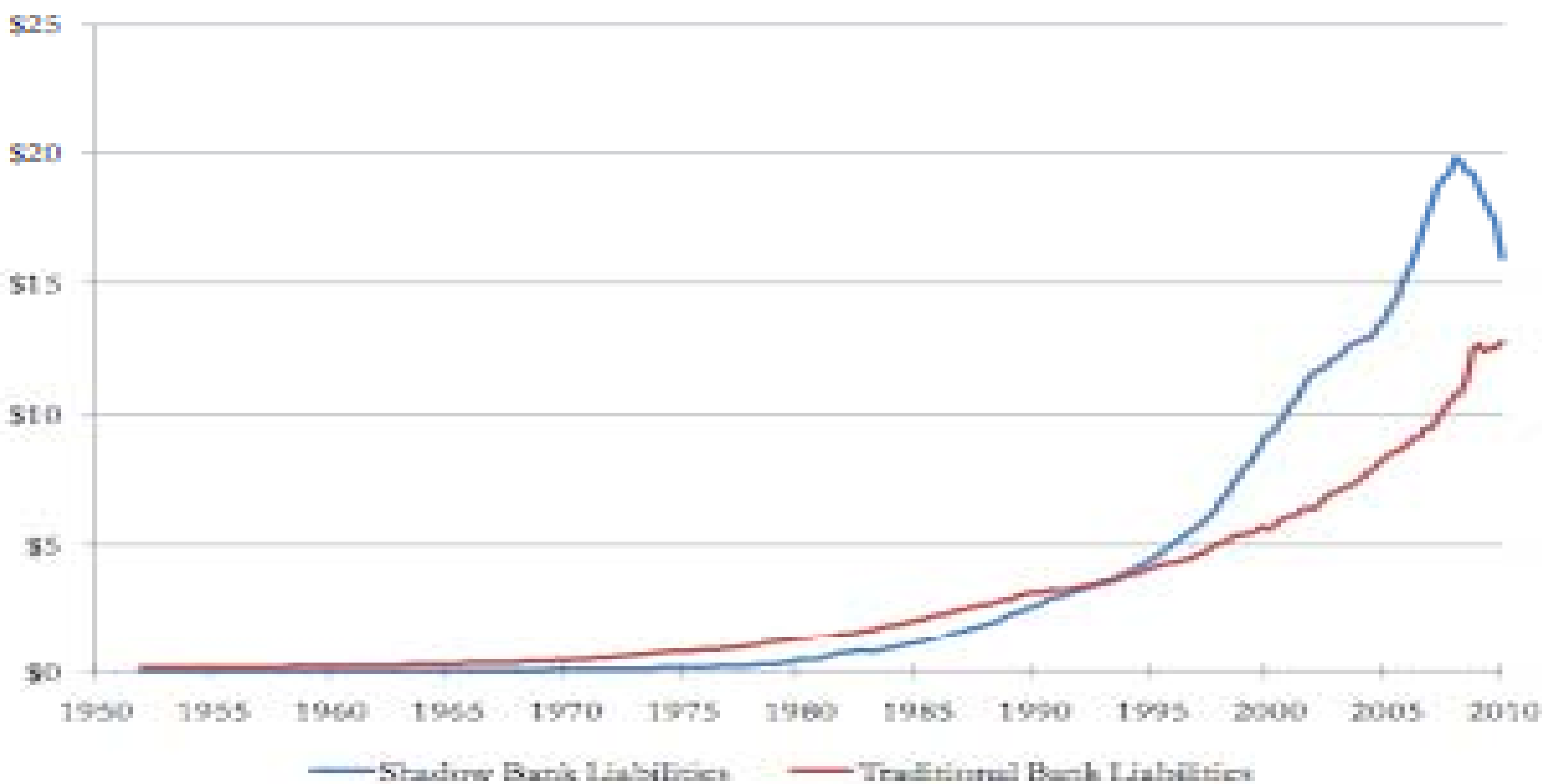
SLT3 Sheng Len Tao, 9/5/2010

Financial services industry 5 times larger than real sector Niall Ferguson and Oliver Wyman (2007)

- **Leverage of financial sector 5 times global GDP in 2008, compared with 1 time in 1980**
- **Total industry value exceeded US$6 trillion, up 60% over the last ten years**
- **Total revenues are US$2.7 trillion, accounting for 7% of global GDP and rising**
- **Return on capital is the highest ever: 20% at year end 2006**
- **Employment in the sector is at its highest level ever**
- **Loss rates are still below cyclical averages, despite recent write-downs arising from the subprime mortgage defaults.**

Under-regulated Shadow Banking larger than Traditional Banking

Figure 1: Shadow Bank Liabilities vs. Traditional Bank Liabilities, *$ trillion*[4]



Source: Flow of Funds Accounts of the United States as of 2010:Q1 (FRB) and FRBNY.

Industry has become much more concentrated

- Combined assets of the five largest banks in US tripled between 1998 and 2007, leaping from $2.2 trillion to $6.8 trillion.
- The 10 largest banks expanded their share of assets in the banking industry from 25 percent to 55 percent between 1990 and 2005.
- Prior to their collapse, Fannie Mae and Freddie Mac held or guaranteed assets of approximately $5 trillion.

Concentration in Selected Global Financial Services

Financial Services	Number of top players	Combined global share of business (%)
Asset Custodian	Top 4 firms	60
Insurance brokerage	Top 3 firms	64
Foreign Exchange trading	Top 10 firms	64
Accounting Services	Top 4 firms	53
Equity underwriting	Top 10 firms	70
Debt underwriting	Top 10 firms	62

Source: Nolan Zhang & Liu (2007)

5. Distorted Incentives

- **Most reforms concentrate on Financial Institution management incentives – Bonuses that encourage Risk taking**
- **They ignore two other critical incentives:**

a) **Incentives for Authorities [regulators + central bank] to enforce laws and take counter-cyclical policies**

b) **Moral Hazard/Ponzi scheme behaviour that socializes private losses to Taxpayer and Saver**

5a. Distorted Incentives

Given Bureaucratic Inertia and Risk Adverse behaviour, what incentives are necessary to ensure that authorities enforce laws, take preventive action and take counter-cyclical policies?

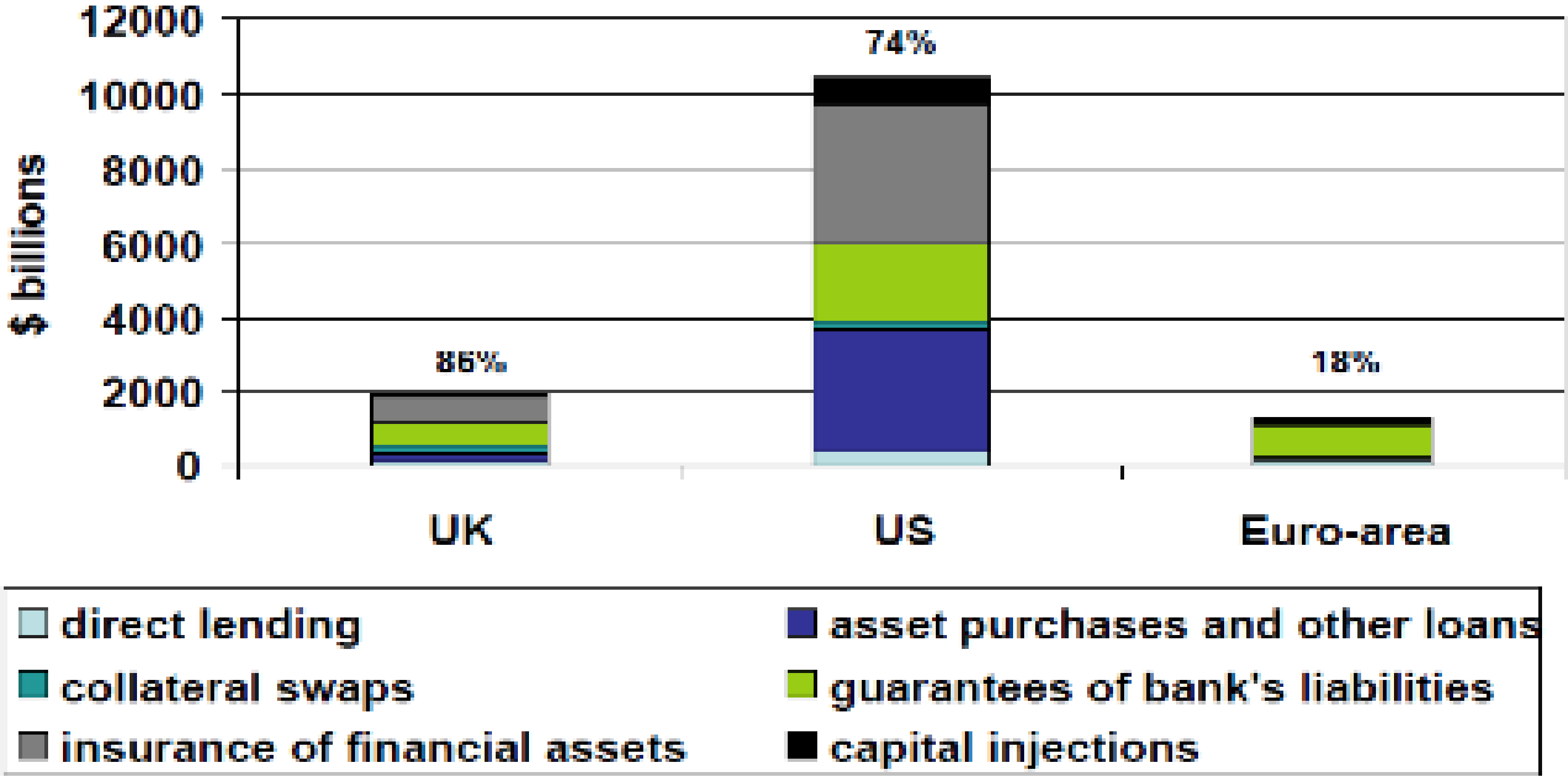
Example is taking action to prevent Bubbles from forming.

Having just Financial Systemic Council may not be enough.

5b. Moral Hazard – Wall Street Ponzi Scheme?

- **Ponzi schemes leverage until the debt pyramid collapses. But when leverage is larger than the real sector, then private losses are socialized.**
- **Financial engineering Ponzi Scheme works through combination of:**
  - – **Infinite derivative of underlying assets [securitization + leveraging]**
  - – **Zero transaction costs [removal of transaction taxes]**
  - – **Higher upfront fees**
  - – **Lower and lower interest rates [Greenspan Put]**
  - – **Misleading Ratings**
  - – **Fair Value + Off-balance sheet accounting**
  - = **Bailout by Taxpayers, ZIRP and Quantitative Easing (Print Money)**

A $13 trillion cheque:
Official support to the financial system, 2007 to 2009



Source: Bank of England, Financial Stability Report June 2009; figure in percent above the column represents total support relative to GDP

6. Procyclical Standards

a) **Regulatory standards** – e.g. counter-cyclical capital buffers, provisioning etc are being addressed.
b) **Accounting Standards** – combination of fair value accounting, discounted cash flow valuation and total returns create Short-term behaviour that postpones or ignores Long-term costs.
c) **Bonus Standards** – Self-serving Remuneration benchmarks inflate payments
d) **Credit rating Standards** – conflicts of interest
e) **Governance Standards** – unable to stop short-term risk behaviour at long-term value destruction.

6b. Accounting and Valuation Standards

- Profits are calculated on net revenue + trading capital gains
- Hence, derivative practice is to take profits up-front through front-end fees and achieve “apparent” higher returns through leverage
- Fair Value Accounting use DCF models depending critically on interest rates. With lower and lower interest rates [obtained through higher leverage and help from central bank put], this permits profits booked upfront from derivative trading, that actually pushes costs and risks either below the line or to the future.
- Government Bailout proves Moral Hazard behaviour by Ponzi creators were right.

7. Theory vs. Practice

- **Too much reliance by this generation of financial regulators on financial models, stress tests, risk management models and the like, without enough understanding that adding complexity to market is only worsening the situation.**
- ***"Markets, which play a huge role, especially in the United States in the credit process, need to have a degree of "constructive uncertainty" to temper the urge to excess.***
- ***"The trend today is to make everything more transparent – for the Fed's policy and interest rate intentions to be clear and understood. People count on this "certainty", which can create an artificial sense of stability and predictability. Sometimes the market should be left off balance so that market makers have to exercise a bit of caution – of self-restraint. Paul Volcker***

A Forensic Approach to Risk Evolution

1. New financial regulator must develop market skills through forensic approach. This means that a crack team of examiners take a single product, e.g. mortgages and forensically examine its due diligence from origination to trading and final investor, looking at how the product evolves and whether market participants understand their risks and whether law, infrastructure and internal control processes are sufficient to control product risks.

This has the following advantages:

- Regulator really learns what is going on at ground level
- Market participants understand that regulators are kicking the tires and patrolling the perimeter”.
- This is not looking at compliance, but understanding how and if risks evolve out of control, as well as where the market weaknesses are.

8. Interdependence, Interconnectivity and Externalities

- **Silo and Fragmentation means that there is little understanding and appreciation of externalities of individual institution behaviour, collective behaviour of subsector and national behaviour on system as a whole.**
- **Hence, most of the problems are Fallacy of Composition and Collective Action Traps.**
- **Theory not good guide on how to achieve Nash Equilibrium or getting out of Collective Action Traps.**
- **This is particularly true when global economy may be going into deflation cycle – vicious circle causing losses unevenly.**

IV. Contours of Financial Landscape
Kodres and Narain (IMF) 2010

1. **Will the global financial system be safer and simpler?**
2. **What will be the role of banks versus the role of nonbanks?**
3. **Will the financial system be smaller as a proportion of the economy?**
4. **At the global level, will financial expansion and integration continue?**
5. **What kind of banking system will we have?**
6. **What type of markets will we have?**
7. **What will happen to Innovation?**

1. ***Yes***
2. ***With banks constrained, nonbanks are bound to thrive.***
3. ***Banking system is likely to be smaller overall.***
4. ***Degree of cross-border financial flows is difficult to predict and thus no easy answer is possible.***
5. ***Most likely outcome a more bifurcated system.***
6. ***Simpler and more transparent***
7. ***Use of standards defining acceptable use by certain types of investors and greater disclosure of the product's risks and returns.***

V. Not all Financial Regulation is Global

Rottier & Veron, Aug. 2010

Policy makers should prioritize four key components:

1) **building stronger global financial regulation, set authoritative standards, and foster and monitor the consistency of regulatory practice;**
2) **globally consistent financial information;**
3) **a globally integrated capital- markets infrastructure; and**
4) **addressing competitive distortions among global capital market intermediaries.**

National and Global Collective Action Traps

- At national and regional levels, there is difficulty getting consensus in pushing ahead the necessary reforms.
- Even though crisis pain and costs are obvious, the issues are extremely complex (both macro and micro), with huge vested interests.
- Given different levels of financial sophistication, there are different approaches and views on how to move reforms forward.
- All Politics is Local, but it is easy to blame Foreigners.
- Hence, there are signs already that policy conflicts and protectionist measures are increasing.

Need Clarity of Global Functions

- **What is division of labour between FSB, IMF, standard setters (BCBS, IOSCO, IAIS, IASB etc), and national financial regulators?**
- **What should Asian regulators do to have more voice on these issues?**
- **How can we deal with these Collective Action Traps?**
- **What is the right sequencing of Reforms so that key building blocks are in place to prevent the next crisis?**

Different approaches:

- Given no "One Size Fit All", must segregate Global Principles from National approaches
- Simpler EME financial systems do not require too complex regulatory rules
- Easy to learn, easy to comply, easier to regulate and accountable
- Need to re-write simpler set of rules for EMEs, e.g. IFRS for SMEs – Simplified Core Principles {BCBS, IOSCO, IAIS) for EMEs.
- There should be global body to check global consistency and ensure that national systems do not encourage regulatory arbitrage

Thank You

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