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**Session 2.1: Impact of the Global Financial on Asia and
the Asian Response – Understanding the Strengths
and Vulnerabilities of Asian Financial Markets to the
Global Crisis**

by
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Key Issues

- 1. Current global financial turmoil brings into question the existing regulatory and financial architecture.**
- 2. What lessons can Asia learn from the current turmoil and markets?**
- 3. How should Asian financial markets build on their strengths in these difficult times and strategically position themselves in the new international financial architecture?**

I. Current Global Crisis

Macro - No Global Central Bank

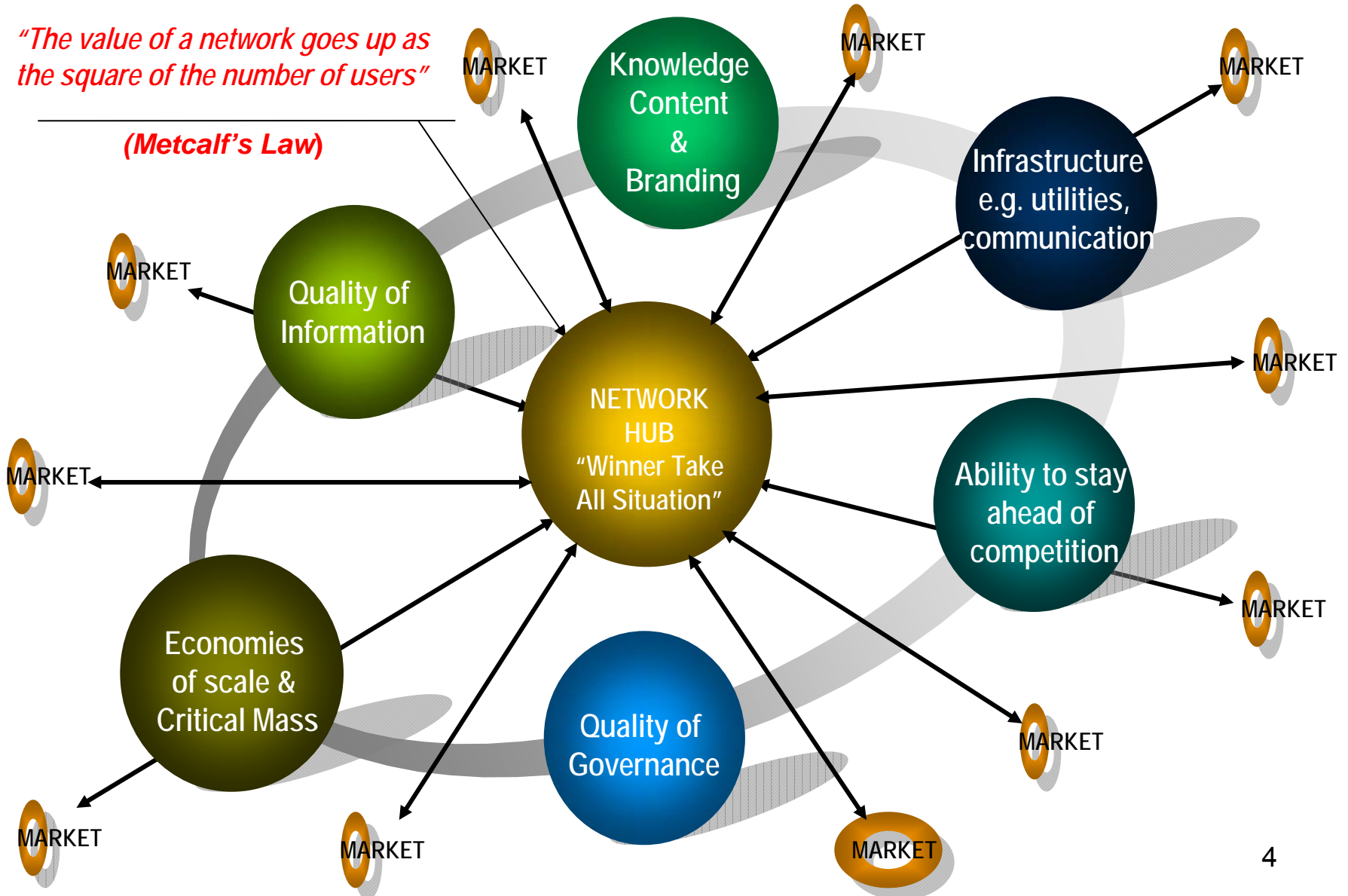
Micro - Failed Investment Banking Business Model

**Mindset - Shadow banking was “permitted” regulatory
arbitrage**

The Network Economy

"The value of a network goes up as the square of the number of users"

(Metcalfe's Law)



Financial Services Integration: Current Trends

- In the 1980s, network integration caused concentration of financial markets into Large Complex Financial Institutions (LCFI) that engage in banking, securities, insurance and fund management business.
- Network integration occurred VERTICALLY AND HORIZONTALLY, across geography, product integration and platform integration, particularly through FINANCIAL DERIVATIVES.
- Current crisis demonstrates that there are huge governance risks when universal banking tries to cope with excess leverage in their investment banking arm.

This is a Network Crisis with profound implications

- 1. Complexity** – One global market, national rules
- 2. System-wide effects** – black-holes in regulation e.g. shadow banking system
- 3. Inter-connectivity** – Contagion through network
- 4. Inter-activity** – positive and negative feedbacks
- 5. Transparency** – crisis happened in front of everyone, despite major reforms
- 6. Incentive Structure** – Management compensation, moral hazard all pushed risk-taking
- 7. My currency – your problems; losses will be borne world-wide.**

Global Four Mega-trends

1. **Wage Arbitrage** - cheap labour created low inflation and boosted global trade
2. **Interest Rate Arbitrage** - Low interest rates e.g. in Yen, gave rise to Carry trade,
3. **Knowledge Arbitrage** - Financial Engineering permitted faster trading and higher leverage
4. **Regulatory Arbitrage** - Accounting, Tax and liberal regulation allowed higher disguised leverage through SIV, OTC markets etc.

Four Excesses

- **Excess Liquidity** - Excess savings, low interest rates and willingness by banks to lend, especially in derivative areas
- **Excess Confidence** - markets became bubbles as momentum trading was pushed higher, and regulators were sanguine over dangers
- **Excess Leverage** - Leverage caps were removed in 2004 for investment banks and leverage levels exceeded 30 times
- **Excess Greed** – high bonuses induced risk taking, mis-selling and also fraud, e.g. Madoff, Stanford etc.

Global Leverage (ex. Derivatives) rose from 108% in 1980 to 421% in 2007 US\$ trillion (IMF GFSR, April 2008: Table 3)

Region	GDP	Reserves (ex.gold)	Stock Mkt Cap	Debt Mkt	Bank Assets	Total Finan. Assets	Total as % of GDP	Fin. Assets % share
World	54.5	6.4	65.1	69.2	84.8	229.7	421.1	100.0
EU	15.7	0.3	14.7	28.2	43.2	86.1	548.8	37.5
US	13.8	0.1	19.9	29.9	11.2	61.0	441.8	26.6
Japan	4.4	1.0	4.7	9.2	7.8	21.7	495.7	9.5
Other Asia, inc. Middle East	9.0	3.3	15.1	4.6	10.6	30.3	336.7	13.1
Asia inc Japan	13.4	4.3	19.8	13.8	18.4	52.0	388.0	22.6

Size of Derivative Markets - Notional Values (US\$ trillion) - December 2007

Source: BIS data

Total OTC Derivatives contracts: \$596 trillion;
Gross market value \$14.5 trillion
Exchange Traded Derivatives: \$94.9 trillion (3Q07)
Size of "shadow banking" \$10.5 trillion

Size of US traditional
banking system \$10 trillion

How can you claim financial stability when half
of system is unregulated "black hole"?

Bill Gross (PIMCO) – Bank Leverage grew from 1987-2007 by securitizing and moving liabilities off-balance sheet

Into the Shadows

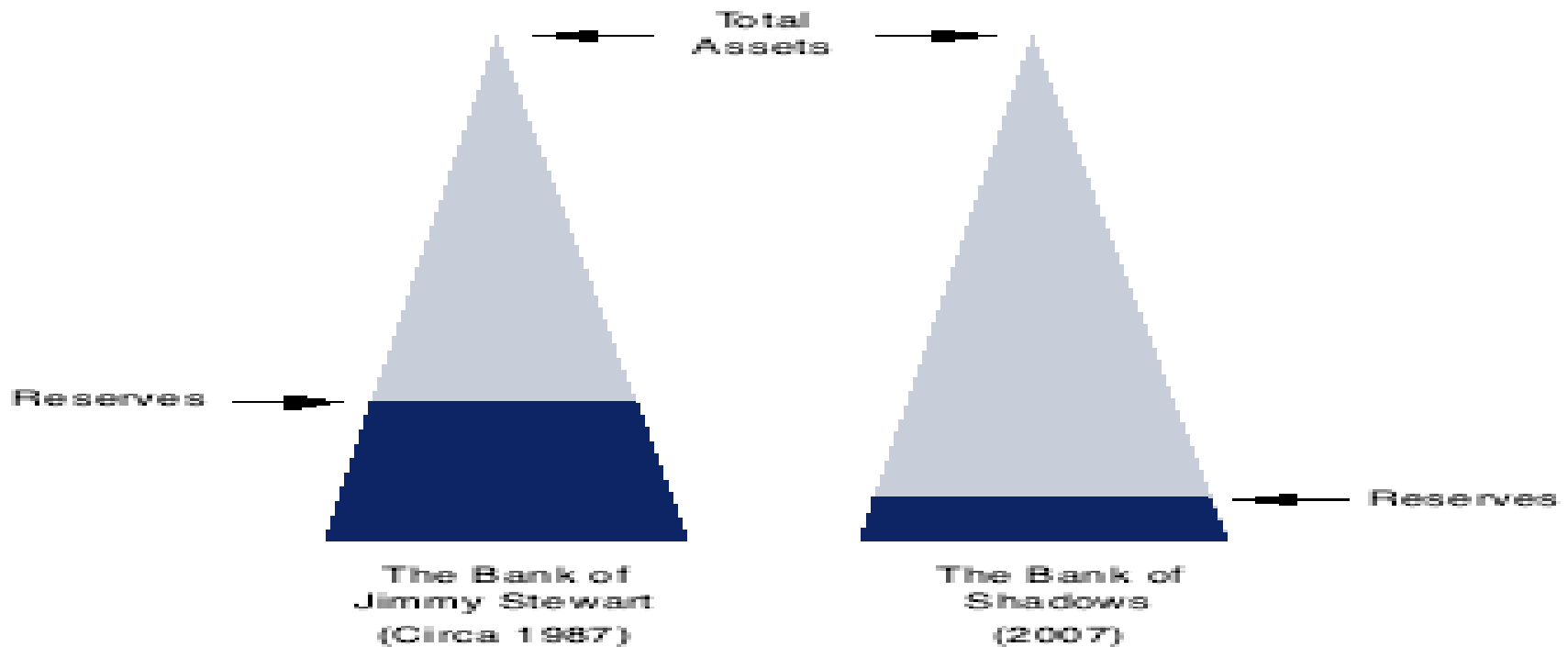
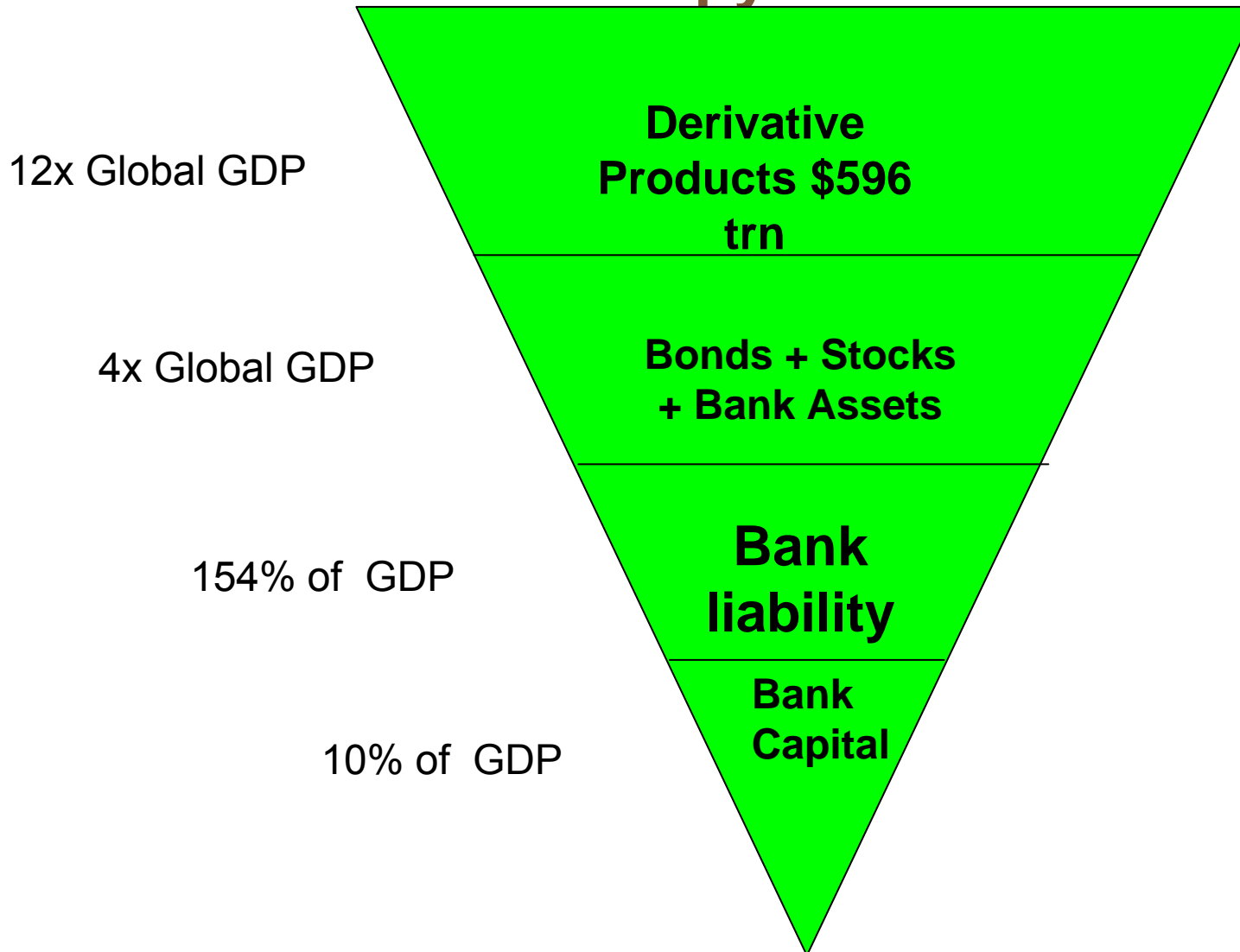


Chart 1

Source: PIMCO

Financial System Leverage: the unstable pyramid



How Shadow Banking Functioned:

1. **Insufficient due diligence at Origination level (allowed by “silo” regulatory structure)**
2. **Insured by Monoline insurers and covered by CDS [where was oversight?]**
3. **Leverage moved off-balance sheets into SIVs and conduits [current IAS + Basle rules]**
4. **Credit rating misleading and methodology flawed**
5. **High fees from origination and trading - bankers and hedge fund compensation rewarded risk taking**
6. **No transparency because all OTC trading**
7. **Clearing and market-making all at Prime Brokers, who were too highly leveraged relative to risks**

Four elements of financial innovation and deregulation helped create toxic products

1. **Securitization** into mortgage-backed papers, using special investment vehicles (SIVs) that were off-balance and not supervised.
 2. **Accounting and regulatory standards** permitted such liabilities to be moved off the balance sheet so that banks benefited from capital efficiency
 3. **Use of insurance cover and credit default swap (CDS) markets** to enhance credit quality of the underlying paper.
 4. **Credit rating agencies** gave these structured products AAA ratings, for a fee.
- ⇒ **insufficient due diligence at origination & distribution**

Regulators underestimated Shadow Banking risks

- **true level of leverage hidden,**
- **grossly underestimated the liquidity required to support the market,**
- **grossly misunderstood the network interconnections in the global markets and**
- **enabled key players to over-trade with grossly inadequate capital.**

Acknowledged Regulatory Weaknesses

- **Need for System-wide Supervision [silo oversight does not work]**
- **Insufficient attention to Liquidity issues**
- **Lack of understanding of risks in derivatives and their leverage**
- **IFRS + Basel II both pro-cyclical**
- **Rating Agencies weaknesses**
- **International Financial Architecture still not representative of world reality**
- **Huge coordination machinery needed for all forms of cross jurisdictional regulation**
- **Incentive structures drive risk-taking/excess leverage**

Estimated Costs so far

- **February 2007 - US\$150 bn subprime losses**
- **April 2008 - IMF estimate US\$945 bn**
- **September 2008 - IMF revised \$1.4 trn**
- **October 2008 - Bank of England \$2.8 trn**
- **February 2009 - Roubini \$3.6 trn**
- **To date, \$8 trn of Central bank liquidity injection to money markets**
- **Obama \$3.6 trillion fiscal injection**

How Bad is US Recession? Is TARP II enough?

1. **In 2008, US suffered 105% of GDP wealth loss**, arising from 20% drop in property price [225% of GDP] and 40% drop in share prices [150% of GDP]
2. Based on past crises, 3½ years peak to trough, 35% drop in property prices and 60% drop in share price, therefore another 15% and 20% to go, equivalent to **another 45% of GDP of wealth loss to come**
3. Capital of US banks only 10% of GDP
4. TARP II or Financial Stability Trust only 5% of GDP
5. Expect more losses and more unemployment

Asian Global Supply Chain Model in Deep Trouble as model of consumption based on leverage is reversing

- **Business Model of Western Banking based on leverage failed, leading to Real Sector Crisis, as consumers and corporations have credit cuts**
- **Business Model of Asian Global Supply Chain in deep trouble – the more export-oriented, the worse, e.g. Taiwan, Japan, South Korea, Singapore.**
- **Therefore, Business Model of Asian Financial System needs to be re-thought!**

Lessons from Asian Crisis and Restructuring

- **Crisis is an event but bank restructuring is a process:**
 - **Diagnosis**
 - **Damage control**
 - **Loss allocation**
 - **Changing the incentive structure.**
- **Assessment of Action so far:**
 - **Diagnosis – ad hoc and grossly underestimated the scale, depth and complexity of crisis**
 - **Damage control – although central banks have partially replaced banking system as lenders to real sector, the damage to the real sector stemmed from curtailment of credit and loss of confidence.**
 - **Loss allocation – the authorities have accepted the fact that the public will pay for the mistakes of a few.**
 - **Incentive structure – banks have been bailed out, but savers and taxpayers will bear huge losses.**

Three Models of Financial Stability and Reform - Crisis as Window for Reform

- **Static Financial Stability - Do we reform back to old failed model?**
- **Dynamic Financial Stability - Do we repair current system, but do not fix the incentives, so that Crisis will dynamically occur again?**
- **Evolutionary Financial Stability - Do we fix the incentives and change the real economy to deal with rising protectionism, unemployment, vulnerability to Global Warming (drought, disease and disasters), plus social instability real threats.**
- **We must have new model of real sector growth and financial stability.**

II. Financial Services Integration and Structure

Three Models of Financial Integration

1. European Universal Bank, everything within commercial bank.

1a. UK bank with subsidiary insurance etc.

2. US Bank Holding Company with specialist subsidiaries

3. Financial Holding Company with bank, insurance, asset management and investment bank arms.

Advantages and Disadvantages of Financial Services Integration

+ Pro

- Economies of Scale
- Capital Efficiency
- Financial Supermarket that provides whole range of services

- Cons

- Conflicts of Interests
- Connected Lending
- Opacity of risks
- Contagion
- Difficulty of measuring risks and leverage on consolidated basis

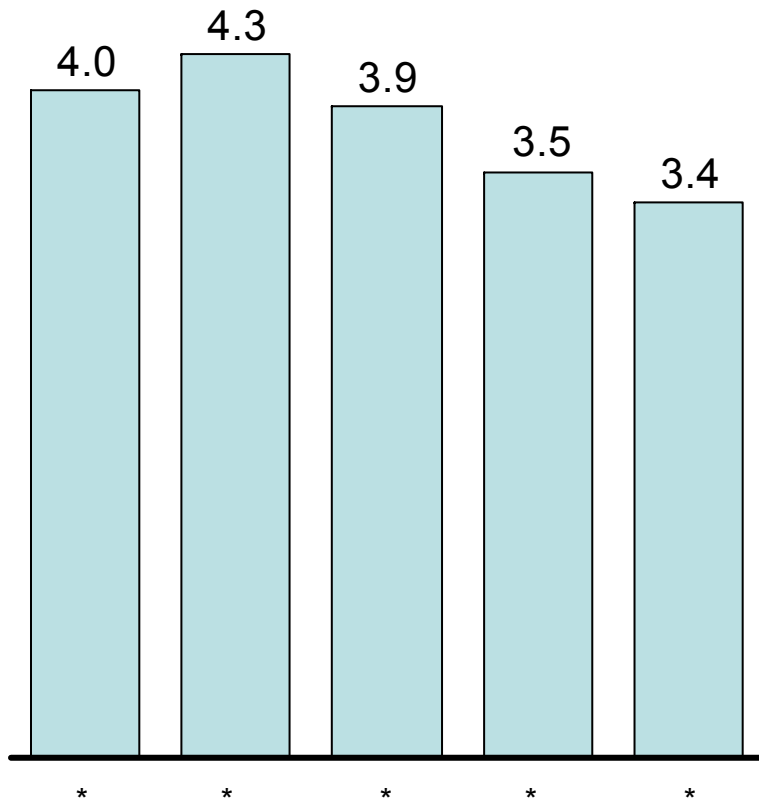
Change in banks' business model

- **Bank margins in traditional lending and product sales have seen severe compression.**
- **Banks in US and Europe changed their business models to generate higher yields.**
- **Distinct move from the traditional retail banking “lend and hold” model to the “originate to distribute” [wholesale] model.**
- **Shift in business model made possible by abundant liquidity, mature derivatives markets and financial deregulation.**

Traditional lending and product sales have seen severe margin compression

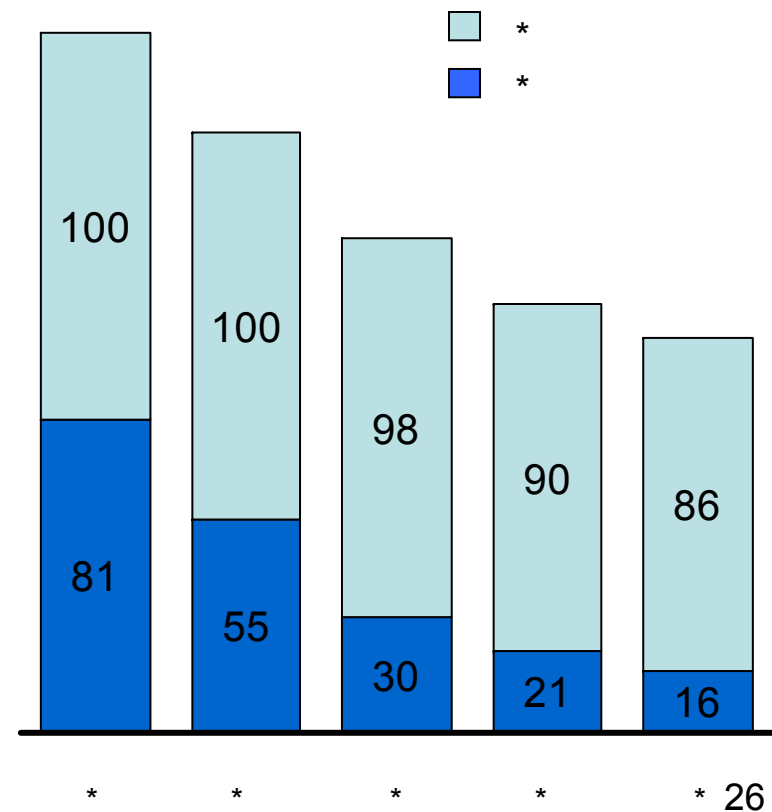
US banks net interest margin

Percent



US mutual fund distribution fee

Basis points on Avg. AUM



Current Bank Governance and Incentive Models not good at controlling risks

- **Bankers Compensation overdone -**
Huge silos within Universal Bank, so risks not identified and controlled
- **People**
Service quality has deteriorated and values are short-term and not concerned about reputational and long-term solvency risks.
- **Platform**
Very often, large banks and insurance companies have become mixture of systems and financial infrastructure (especially back office) not integrated (hence risks unclear and uncontrolled).
- **Products**
Product innovation did not do enough due diligence and often so complex that no one understood how toxic they were.

III. Implications for Asia

Banks in U.S. and Europe changed their business model from traditional "lend and hold" to the "originate to sell" model

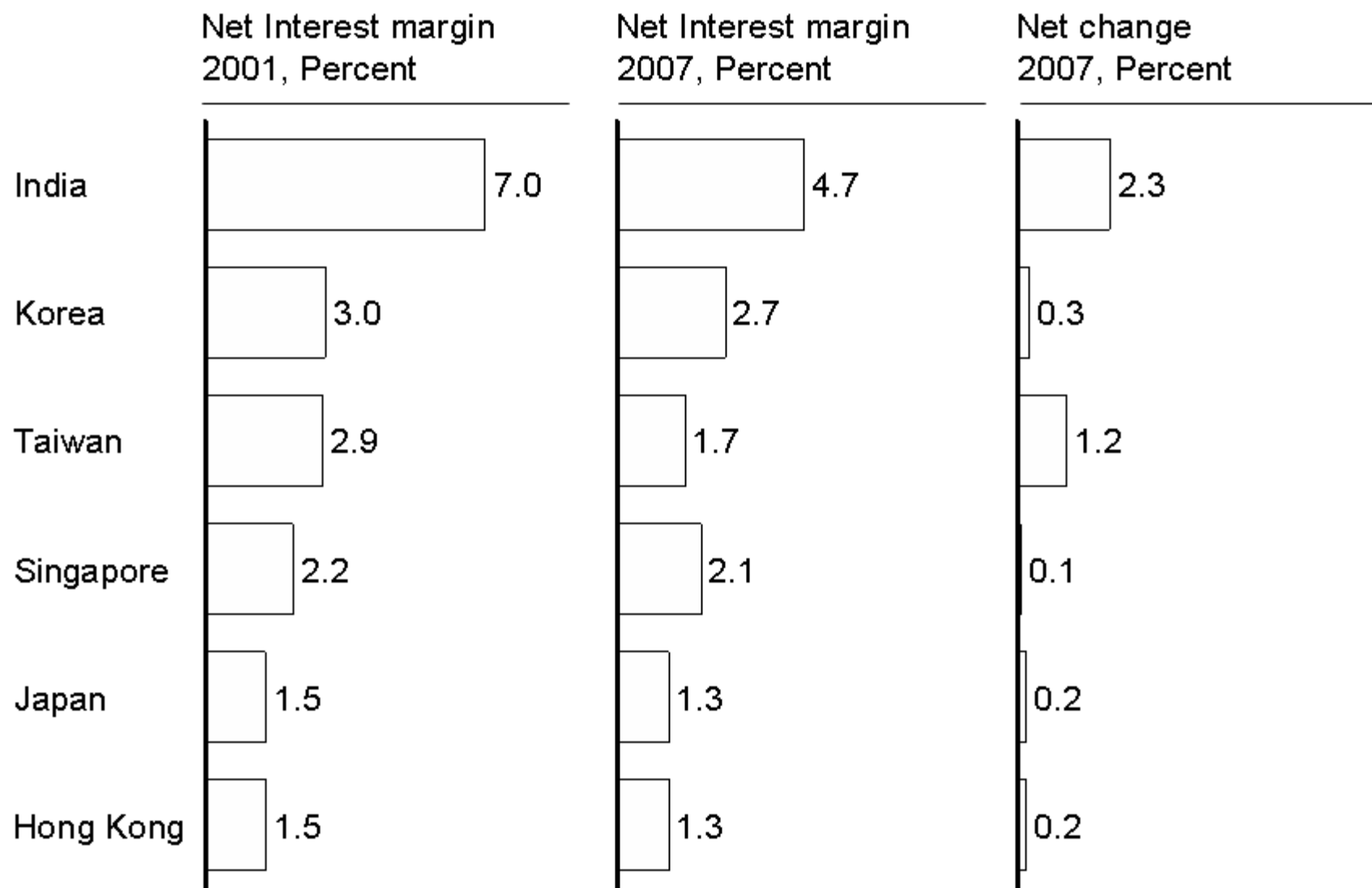


Recent credit crisis revealed risks of this business model



**Where do we go from here?
What are the implications for Asian banks and financial system?**

Asian markets are seeing traditional business profitability decreasing over time



Asia's Financial Sector remains unevenly developed and not strong in derivatives markets and investment banking skills

- **Asia (including Japan and Middle East) accounts for:**
- **66.8% of official reserves (ex. Gold)**
- **55% of global population**
- **24.5% of GDP**
- **23.6% of stock market cap**
- **22.0% of bank assets (13.2% exc. Japan)**
- **17.8% of bond market (5.2% exc. Japan)**
- **Ex-Japan, Banking Assets account for 42.4% of total financial assets in Asia (19.7% in North America and 50.7% in EU).**

**Asian financial system cannot afford Shadow Banks -
need to get back to basics of improving service quality
and help risk management - don't add to risks**

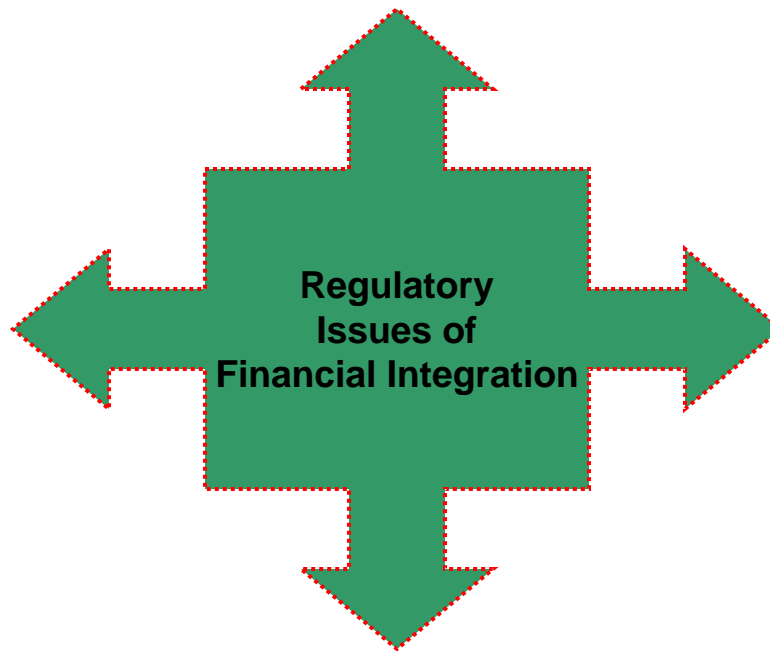
- **The key issue is simple: Finance serves the Real Sector**
- **Financial sector robustness and stability is as important as financial innovation**
- **Hence, regulatory reform will have to take into consideration system-wide review of “contagion” risks, higher transparency in institutional and system leverage and end-to-end examination of how financial products may evolve into toxic products.**
- **Asian financial integration therefore needs to have better cooperation between financial sector, regulators and policy makers to build a stronger regional system.**

Financial Markets, Structure and Oversight

Foreign Exchange Market	OTC, cleared mostly at bank level	Domestic market under central bank, but no oversight on global trades
Domestic Money Market	OTC, cleared at Central Bank	Supervised by central bank
Bond Market	OTC, but in some markets cleared centrally	Overlapping between central bank and securities regulator
Equity Market	Central net clearing at stock exchange	Securities Regulator
Derivatives Market	Mostly OTC, only in some areas on exchange	Overlapping but generally light oversight

① Global financial services integration is about establishing a capital market that is **competitive, robust and fair**, but there is no global authority to achieve these objectives, since national objectives are by definition self-interested.

④ Emerging Asian capital markets are less hurt directly by current crisis, but must work together to **improve Asian financial integration, so as to reduce global imbalance**



② Global excess liquidity, capital flows and excess leverage led to declining risk spreads, but market fundamentalist mindset ignored impact on asset bubbles and hidden leverages

③ Current global crisis will create **major review** of existing regulations and architecture, but if there is no global cooperation, world is in Prisoners' Dilemma: further protection and domestic fencing of losses will increase deflationary pressure and further losses.

Rationale for regional financial services integration

<p>✓ Domestic capital market development and reform is necessary pre-condition for integration into regional and global markets</p>	<p>✓ Regional integration can in turn provide the liquidity, scale and capacity to enable individual markets to compete globally and to manage volatility more effectively</p>	<p>✓ Hence, aligning national regulatory approaches will reduce transaction costs and enhance competitiveness</p>
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Guiding Principles of Regional Financial Services Integration

- Regional Integration only works if it proves win-win to all participants
- Hence, transparent process of building consensus towards commonality of purpose key to integration
- This requires acceptance by parties that are hurt by openness and integration and requires process to gain credibility and acceptance by market participants

Seven key principles:

- ① **Value creation and protection of property rights**
- ② **Lower transaction costs + better market liquidity**
- ③ **Improved corporate governance**
- ④ **Better risk management**
- ⑤ **Greater financial innovation and range of products**
- ⑥ **Access to wider markets and knowledge**
- ⑦ **Ownership and fairness**

IV. Concluding Remarks

- **The current global credit crisis is also an opportunity for Asia.**
- **The way forward for Asia is to join forces and create an Asian capital market (with skills and strong institutions) with the capacity to absorb surplus savings for investments within the region.**
- **Maintaining financial stability at domestic and regional level, with input into global level requires the coordination of ministries of finance, central banks and financial regulators.**
- **Mechanism to drive this coordination process would be the establishment of an Asian Financial Stability Forum, supported by Asian BIS or BIS secretariat?**

Three phases towards international financial architecture

- 1. Strengthen domestic financial system based on international standards**
- 2. Build on regional strength to create regional financial markets, taking advantage of economic geography**
- 3. Work on global international financial architecture, building on regional FSF to feed into global FSF.**

Thank You

Questions to as@andrewsheng.net