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Negative Effects of Regulatory Changes on the Future of Investment Banking

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Nomura Institute of Capital Markets Research

Introduction

- The financial reforms currently being undertaken at the initiative of the G20 are intended to prevent a recurrence of the financial crisis. However, we need to consider carefully whether tougher rules are likely to achieve the desired effect.
- In this presentation we examine eight reforms related to investment banking and consider whether they are appropriate.

Agenda of Reform
1. Strengthening bank capital requirements (including investment banks)
2. Increase capital charges for trading books
3. Adopt a leverage ratio requirement
4. Extending banking regulations to non-banks
5. Tighten the rules on securitization markets
6. Adopt rules on OTC derivative markets
7. Regulate short selling
8. Regulate hedge funds

Strengthening Bank Capital Requirements

Stated Objectives

- Recapitalize the banks (including investment banks) in terms of both quantity and quality; adopt capital buffers

Rationale for Regulation:

- Until the financial crisis, the banks satisfied the minimum capital adequacy requirements. As a result of the crisis, however, their capital has been severely depleted, and bank regulators are considering recapitalizing
- International consensus on bank recapitalization prior to the Pittsburgh Summit

  ① **Improve quality, consistency and transparency of Tier 1 capital**: The predominant form of Tier 1 capital must be common shares and retained earnings

  ② **Raise minimum requirement**: currently 8% → in the future?

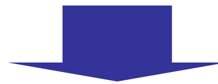
  ③ **Adopt countercyclical capital buffers above the required minima**: allowed to decline to facilitate lending in deteriorating economic conditions

  → to be phased in as financial conditions improve and economic recovery assured, with the aim of implementation by end-2012

  (Leader's Statement of the Pittsburgh Summit)

Strengthening Bank Capital Requirements

- **Market-oriented systemic risk**: The current financial crisis features a depletion of market liquidity on a global scale



- Reasons why market liquidity dried up and panic spread:
  ① Bank’s liquidity risk: leverage and maturity mismatches both on and off balance sheets; excessive reliance on short-term funding ("liquidity through marketability")
  ② Maturity transformation occurring not on the banking books: off-balance vehicle (such as SIV, Conduit), MMMF
  ③ Procyclicality: valuations and leverage, margins and haircuts, market value or ratings-based triggers, collateral arrangements, rehypothecation, etc

- **Fire sale externality**: One bank's disposal of some of its assets can lead to other banks selling some of their assets in a process of systemic deleveraging.

Strengthening Bank Capital Requirements

Perceived Problems

- For banks to reduce the risk of fire sales, they need to deal with the externality; internalizing it in their capital is difficult because it depends on various market conditions
- If banks are obliged to incur excessive cost of capital, this can be an incentive to engage in regulatory arbitrage to reduce cost of capital
- Adopting capital buffers would create considerable problems:

  (1) the policymakers would have the difficult task of having to perceive what phase the business cycle was in at any given time, and

  (2) investors would be concerned about the risk of dilution in the future business cycle upturn

Alternatives/ Proposals

- Decreasing the externality through strengthening bank balance sheet to liquidity shock, mitigation of over-reliance on liquidity through marketability, and improving market practice for risk control; implementing appropriate initial margin and haircut, and limiting rehypothecation etc.

Increasing Capital Charge for Trading Books

Stated Objectives

- Amendment to market-risk framework of Basel II: Increase regulatory capital charge for trading book, including stressed Value-at-Risk (VaR)

Rationale for Regulation:

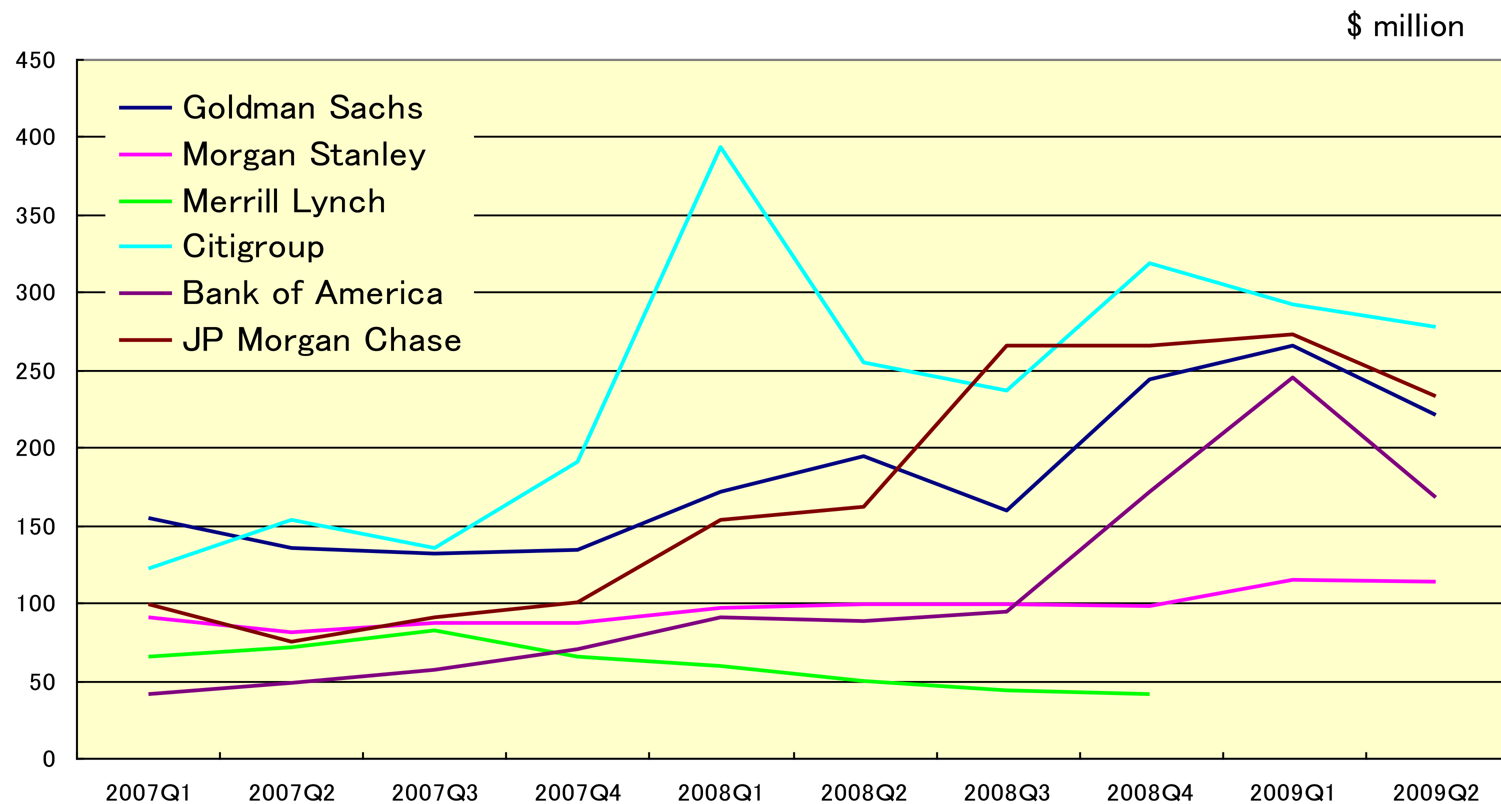
- Consider increasing capital charge for trading book as many of the losses from the financial crisis and most of the leverage occurred on trading books
- Amend Basel II market risk rules (final paper published in July 2009)
  - ① **Adopt stressed VaR**: levy a capital charge on stressed VaR as calculated using historical data from 12-month period of significant financial stress; for example a period relating to significant losses in 2007/2008
  - ② **Adopt incremental risk charge (IRC)**: measure incremental risks including credit risk in trading books
  - ③ **Revise charges on securitization exposure**: increase risk weight of resecuritized products, etc

    → Implementation by end-2010

Increasing Capital Charge for Trading Books

- The financial crisis demonstrated **VaR's strong cyclicality** and suggested the strong procyclicality of capital charges on VaR.
- If we then add capital charges on stressed VaR to those on cyclical VaR, …

The VaR of US Banks in the Financial Crisis



(Source): Corporate financial statements

Increasing Capital Charge for Trading Books

Perceived Problems

- Capital charges on stressed VaR in addition to those on exiting VaR, despite the latter's procyclicality, could exacerbate this procyclicality
- We can see little justification for adding stressed VaR to existing VaR
- Risk that excessive capital charges on trading books could have a negative impact on trading and market liquidity, and actually lead to volatility

Alternatives/ Proposals

- We see regulatory arbitrage as a result of the different capital charges on banks' banking and trading books as the cause
- Banks should only be allowed to include certain assets in their trading books with regards to liquidity and tradability

Adopt a Leverage Ratio Requirement

Stated Objectives

- Adopt leverage rules using a simple leverage ratio

Rationale of Regulation:

- Use leverage ratio to limit leverage as risk-based capital adequacy rules failed to figure out excessive leverage of banks
- International consensus on leverage rules prior to the Pittsburgh Summit

① A supplementary measure to the Basel II risk-based framework with a view to migrating to a Pillar 1 treatment

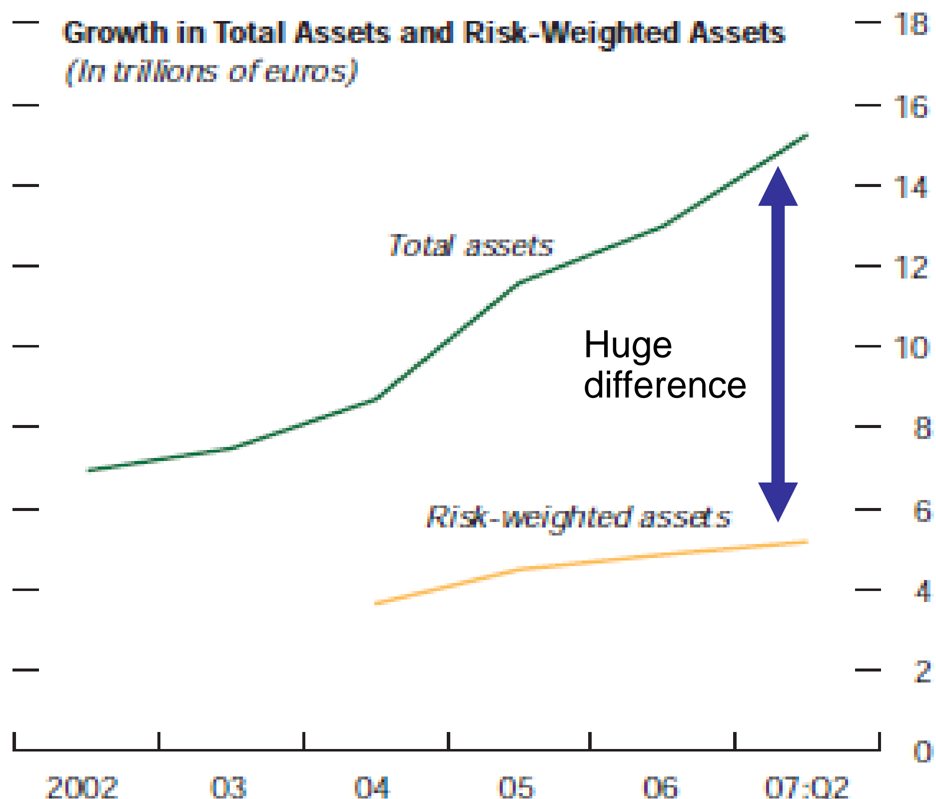
② The details of the leverage ratio will be harmonized internationally, fully adjusting for differences in accounting

→ to be phased in as financial conditions improve and economic recovery assured, with the aim of implementation by end-2012

(Leader’s Statement of the Pittsburgh Summit)

Adopt a Leverage Ratio Requirement

- The reason why risk-based capital adequacy rules failed to figure out bank's excessive leverage is **the regulatory arbitrage**



(Source) IMF (2008)

Causes of difference:

① Arbitrage between capital charges on banking and trading books, and include assets in trading book

② Consolidate off-balance vehicles of banks that used IFRS, and exclude them from their capital adequacy ratios

Adopt a Leverage Ratio Requirement

Perceived Problems

- Quality of leverage (e.g., over-reliance on short-term funding and liquidity through marketability) ignored
- Opposite outcome from that intended, depending on balance sheet structure ; constraint on growth of balance sheets, especially in Asia, where traditional banking is central of finance sector

Alternatives/ Proposals

- Sensible solution would be to amend capital adequacy rules to prevent regulatory arbitrage and excessive leverage
- Implementing leverage ratio will be basically;

  (1) as a measure of systemic risk in the financial system from macro-prudential view

  (2) If necessary, as a regulatory measure implemented to each bank under a Pillar 2, which takes account of the situation in individual countries.

Extending banking regulations to non-banks

Stated Objectives

- G20 agreed, in view of their systemic importance, on the need to supervise large and complex financial institutions (as systemically important institutions)
- In US, under the Bank Holding Company Modernization Act of 2009, the Federal Reserve would designate large, highly leveraged, and interconnected financial companies as Tier1 financial holding companies (Tier1 FHCs)

Rationale of Regulation:

- G20 intend to consider adopting even more rigorous requirements to reflect the even higher cost of the collapse of systemically important institutions
- US Treasury intend to confine risks to the banking system to ensure that the non-bank sector never again poses a threat to the stability of financial markets

Extending banking regulations to non-banks

Perceived Problems

- As Basel II would become the sole standard of capital requirements, non-banks would burden a cost of capital as much as banks (depository institutions) do for protecting depositors
- Shirakawa (the Governor of BOJ) has argued:

  (1) Heterogeneity, on the one hand, in financial institutions is quite important in enhancing the robustness of the financial system against shocks

  (2) On the other hand, one-size-fits-all treatments of heterogeneous financial institutions in designing prudential regulation, such as capital adequacy regulation and liquidity regulation, entail a risk of deteriorating the robustness of the financial system.

Alternatives/ Proposals

- Even if systemically important non-banks are required to comply with capital adequacy rules, this should be done in a different way to Basel II

Regulating securitization markets

Stated Objectives

- Give originators an incentive to improve the quality and safety of structured products

- OTD model is seen as having failed to give originators an incentive to maintain the quality of their structured products
  - (1) Adopt retention rules that would require originators to retain a certain proportion of these products
  - → apply to all tranches? /or just equity tranches?
  - (2) Move structured vehicles onto balance sheets
  - (3) Improve disclosure
  - (4) Representation and Warranty
  - (5) Development of repurchase procedures

  In the US, progress has been made by industry initiative (applies to items 3–5)

Regulating securitization markets

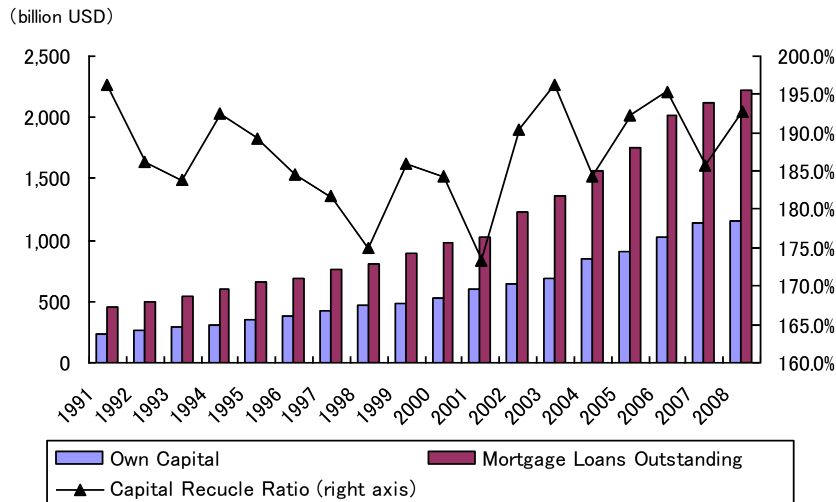
Perceived Problems

- Moving structured vehicles onto balance sheets would negate the very reason for securitization. The aim of risk retention rules also overlaps, both likely to discourage origination and impair the ability of financial institutions to recycle their capital

Alternatives/ Proposals

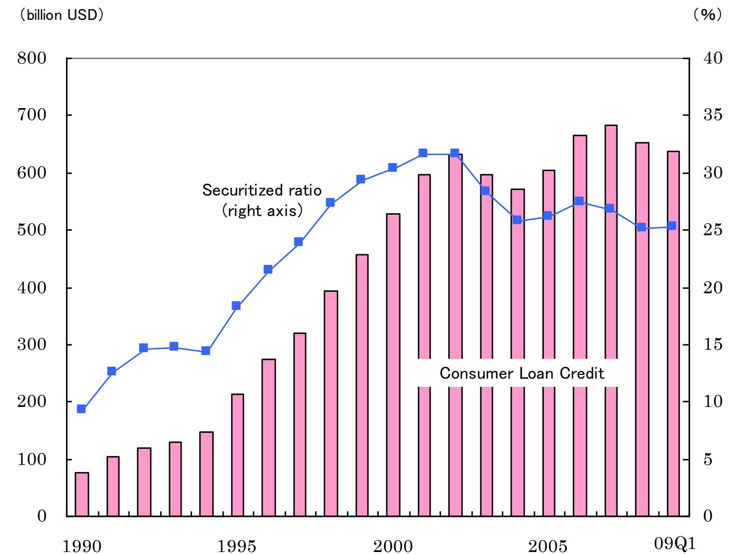
- No need for additional rules such as risk retention rules and rules requiring on-balancing of SPEs. These can be achieved by letting the market work by self-regulation.

Capital recycling by US commercial banks in the residential mortgage market



(Source) Nomura Institute of Capital Markets Research based on data from FDIC

Proportion of restructured consumer loans



(Source) Nomura Institute of Capital Markets Research based on data from FRB Flow of Funds

Regulating OTC derivatives

Stated Objectives

- Deal with interconnectedness and opaqueness of CDS market

Perceived Problems

- Measures such as position limits, requirements on "major swap participants" to provide trading reports, and a ban on naked CDS would reduce the efficiency of the CDS market and, by extension, that of the cash bond market

Alternatives/ Proposals

- Auction settlement, standardization and the use of central counterparties should suffice

Regulating short selling

Stated Objectives

- Deal with stock market declines and ensure secure settlement (notably of naked short sales)

Perceived Problems

- Impact on liquidity and market's price discovery function

Alternatives/ Proposals

- Some regulation of naked short selling inevitable, but scope for measures such as penalties for failure to deliver

Regulating hedge funds

Stated Objectives

- Extend regulatory coverage to hedge funds, which were previously unregulated

Perceived Problems

- Decline in market liquidity (especially during crises)
- Risk of regulatory arbitrage because of differences in the degree of regulatory tightening in Europe and the US

Alternatives/ Proposals

- It should be possible to deal with systemic risk stemming from hedge funds by supervising prime brokers more closely and obtaining information from them about matters such as hedge funds' leverage

Impact Analysis of Proposed Regulatory Changes

Assessment of 8 regulatory changes and its impact on 8 major investment banks

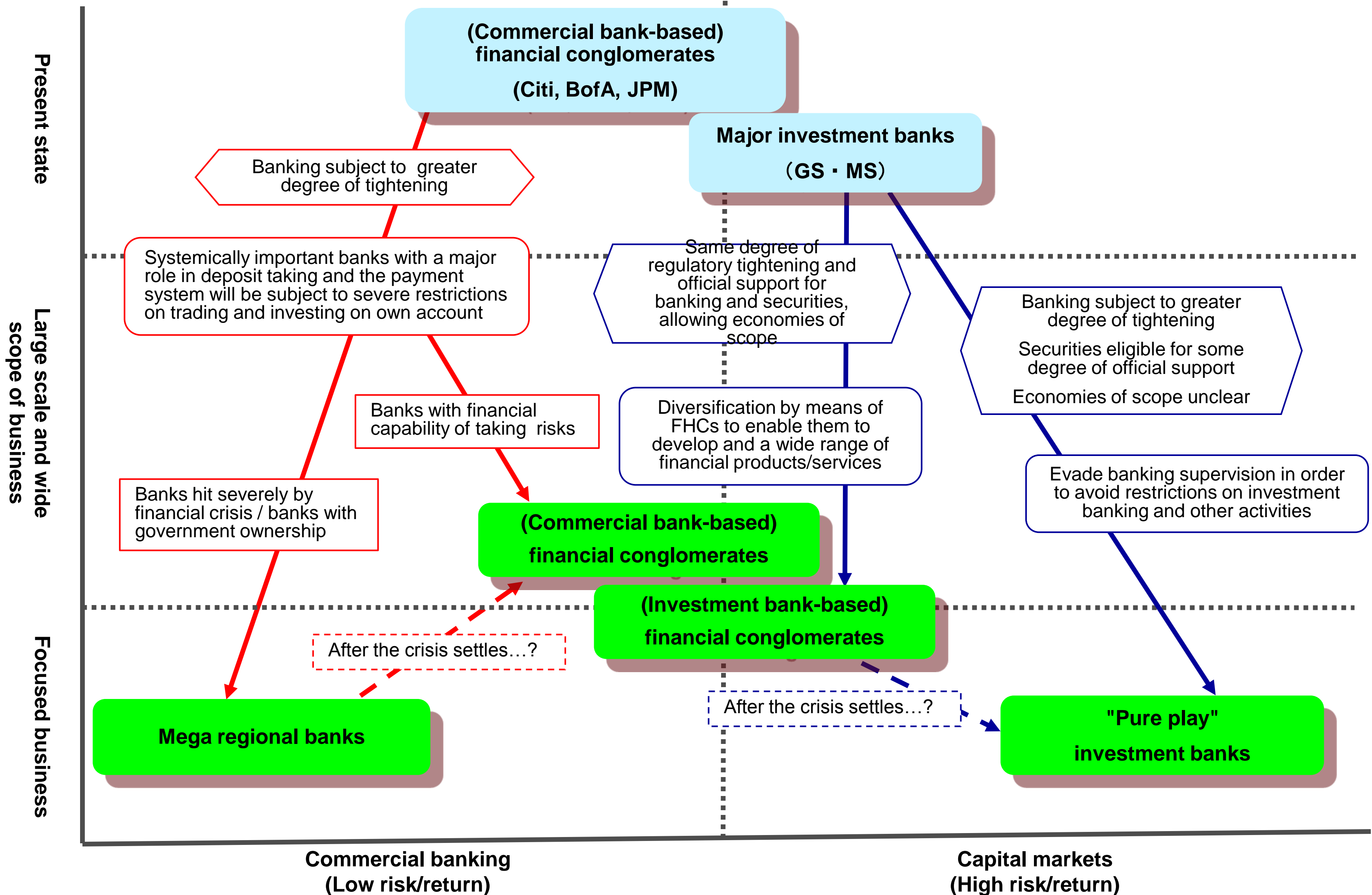
Centralized Clearing of OTC derivatives	Mitigation of counterparty credit risk leads to some regulatory capital relief
OTC derivatives moving to exchanges or alternative swap execution facilities	Compression in bid/ask spreads leads to 0.3-2.6% decline in EPS
Post trade transparency	Decline in bid/ask spreads and trade size leads to 1.4-4.5% decline in EPS
Commodities position limits by CFTC	Up to 5% negative impact on EPS depending on level and scope of the position limit
Mitigating pro-cyclicality of market risk capital through use of stressed VAR	Adds to the current formula stressed VaR, and leads to 0-0.8% reduction of core tier 1 capital
Introducing an Incremental Risk Charge to the market risk methodology	Increase in risk weighted assets and leads to 0.2-1.0% decline in core tier 1 ratio
Revised securitization capital requirements	The future of securitization becomes questionable, especially re-securitization
Increased capital requirements on non CCP-cleared derivatives	Adverse impact on the economic profit from originating complex/exotic derivatives, and will lead to 0.1-1.3% decline in core tier 1 ratio

The 8 regulatory changes will lead to 12% decline in earnings, 25% increase in risk weighted assets, 1.5% decline in core tier 1 ratio, and 4% decline in IB ROE

(Note) 8 banks are Credit Suisse, UBS, Deutsche Bank, Goldman Sachs, Morgan Stanley, BNP Paribas, Societe Generale and Barclays

(Source) JP Morgan analysis

The Future of U.S. Financial Industry



(Source) Nomura Institute of Capital Markets Research

Concerns about a global standard

Core Tier 1 capital

US and European banks that have been supported by their governments would benefit while Japanese banks that have managed without government support (e.g., by funding their lending by issuing preferred stock) would suffer

Rules on leverage ratios

Commercial banks in Japan and other Asian countries that rely mainly on retail deposits for their funding would be put at a disadvantage by having to reduce both loans and deposits

International accounting standards

The adoption of uniform international accounting standards would remove the incentive to devise better standards

Lobbying would be concentrated at the IASB; it would take longer to devise new standards; and standards would be distorted as a result

Concerns about a global standard

Takafumi Sato (former commissioner of Japan's Financial Services Agency)
A global community adopting a uniform platform is vulnerable to a virus, as we have witnessed during the current financial pandemic. Capital adequacy regulations should be designed to foster diversity in business models, demanding the right level of capital for the business type of the bank in question. (Financial Times, June 30, 2009)

Chen Siqing, Vice-president of Bank of China
New Basle Accord is based on the events that took place in the Western banking industry, and there is no uniform model for regulation and supervision

New Basle Accord should be promoted gradually, taking into consideration the state of developing countries（China Financial, No.12, 2009）

Hal S. Scott and Shinsaku Iwahara
Competitive inequality (which the Basle accord sought to "diminish") between banks in two countries are caused primarily not by differences in capital ratios but by differences in comparative advantage, the fundamentals of each economy, and government support in the form of safety net policies

（In Search of a Level Playing Field, The Implementation of the Basle Capital Accord in Japan and the United States, G30, 1994）