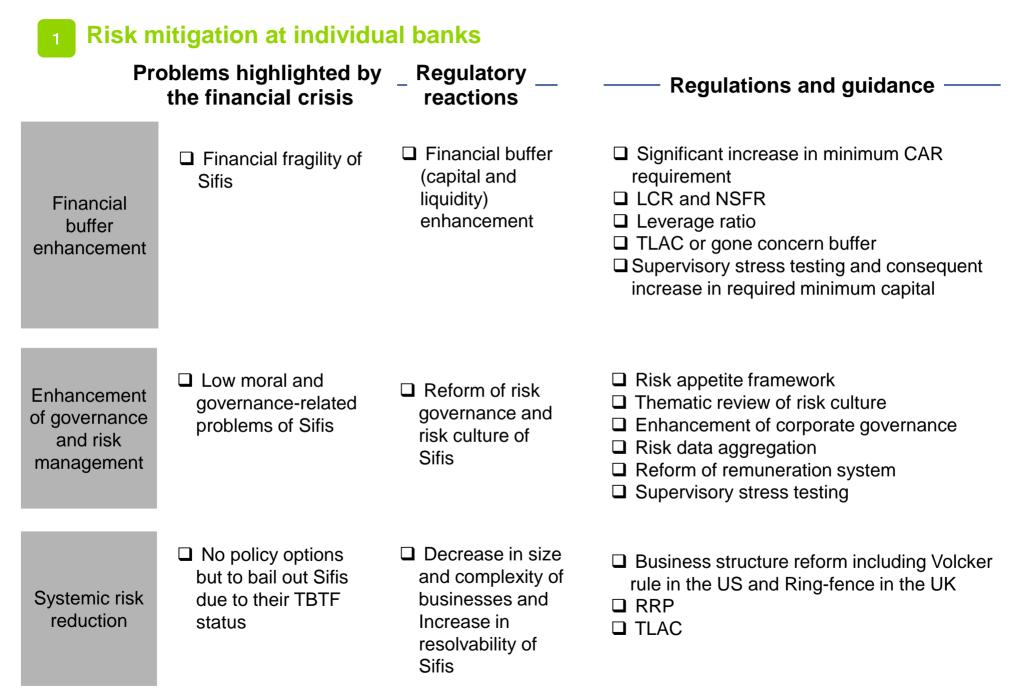
Global Regulatory Trend and Its Impacts on Financial System Stability

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9 trends of global financial regulation 1/4



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Risk identification at individual financial institutions

| Pro | oblems highlighted by the financial crisis | _ Regulatory reactions | —— Regulations and guidance —— |
|--|---|--|---|
| Re-evaluation of the risks under Basel 2 | Underestimation of major risks, which could derail even Sifis management | Identification of factors behind risk underestimation and their corrections | Risk associated with securitization and counter-party risk Fundamental review of trading book Review of ST, IRB of credit risk and BIA, ST, AMA of operational risks Review of Interest risk of banking book |
| Consideration of new risks | Huge losses due to materialization of some risks, which had not been covered by conventional risk management and regulations | Explicit consideration of some risks, which had been easily dismissed, or hard to be quantified before | Reputational risk Risk concentration Strategic risk Conduct risk Emerging risk |
| Disclosure enhancement | Insufficient market discipline due to a lack of disclosed comparable risk information | Increase in volume and comparability of disclosed risk information | Review of Pillar 3 of Basel 2 |

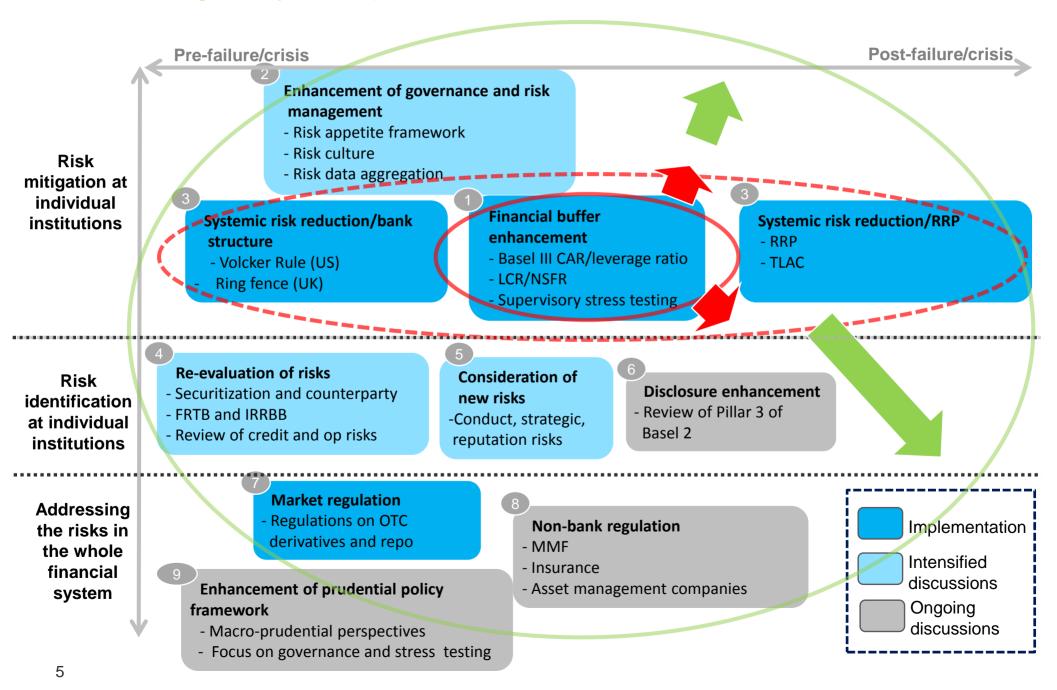
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Addressing the risks in the whole financial system

| | Problems highlighted by the financial crisis | _ Regulatory reactions | —— Regulations and guidance —— |
|--|---|---|--|
| Market regulation | Expediting risk ramification due to a lack of information of the flow of derivative transactions | Visualilzation of derivative transactions by concentrating them into CCPs, and requirement of margin call for the others | CCP concentration of derivative transactions Margin call requirement of OTC derivative transactions Enhancement of data collection of derivative transactions |
| Non-bank regulation | | Expanding the scope of financial regulation so as to cover a variety of systemically important non- bank businesses | Securitization, repo transactions MMF Insurance Asset management companies Finance companies |
| Enhanceme of prudentia policy framework | al poor risk assessment by | Enhancement of macro-prudential perspectives More focus on banks' governance and forward-looking risk assessment | Introduction of macro-prudential perspectives into bank supervision More focused assessment of financial system stability Counter-cyclical buffer Supervisory stress testing Enhanced cross-border cooperation Peer-review of bank supervisions |

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Global regulatory development after the financial crisis



Direction of global regulatory trends 1/2

| | 2015/16 | 2018/19 (Possible future pictures) | Possible challenges facing Japanese banks |
|--|--|---|--|
| Financial buffer enhancement | Minimum required levels of leverage ratio and TLAC to be determined Treatment of supervisory stress testing to be discussed LCR implementation | Leverage ratio → far more than 3%? Possible big increase in RWA even with the currently expected TLAC ratio Uncertainty over Pillar 1 status of supervisory stress testing Big change in liquidity risk management style due to LCR/NSFR | High level of uncertainly be continued Very different picture of portfolio optimization depending on whether CAR or leverage ratio is binding Hard to balance between the regulatory demand for and capital penalty against high liquid assets |
| Enhancement of governance and risk management | Intensified discussion on RAF building and business model analysis Hard to come up with the regulatory expectation of RDA | Business strategy be effectively assessed from the risk management viewpoints Huge IT investment for RDA continues | Not so easy to change to the Anglo- Saxon type governance style including having enough number of independent directors Individual accountability and remuneration system to be reviewed in the Japanese context |
| Systemic risk reduction-bank structure | Further downsizing and simplification of Sifis be pursued in the US | Subsidiaries of Japanese banks in the US and others might be affected | Japanese Sifis' strategy to seek for bigger size and more global businesses might be questioned |
| Systemic risk reduction-RRP | Following the discussion on RCP, RSP discussion is now intensified in the US and Europe | Globally accepted RSP style might be agreed and Sifis' resolvability will increase At once, global financial market might be more fragmented | Still very uncertain on the impacts of RSP discussion in the US and the UK on Japanese banks |

Direction of global regulatory trends 2/2

| | 2015/16 | 2018/19 (Possible future pictures) | Possible challenges facing Japanese banks |
|--|---|--|---|
| Re-evaluation of the risks under Basel 2 | Discussions of reviewing Basel 2 credit and op risks, IRRBB in addition to FRTB are intensified Sovereign risk is also on the agenda now | All the discussions on FRTB, IRRBB, credit and op risks as well as floor treatment of SA will be finalized Sovereign risk might be required to be recognized in Pillar 1 or Pillar 2 | Potentially huge impacts on RWA and thus on Japanese banks' business model themselves Floor level could be a key issue for many IRB banks IRRBB could have significant impacts even if this risk is recognized in Pillar 2 Recognition of sovereign risk could impact financial stability as well as individual banks' CAR |
| Consideration of new risks | Increasing attention to conduct and strategic risks Pressing needs to address cyber security risk | Systematic framework to deal with top risks or emerging risk including conduct and strategic risks be established Enhanced management of cyber security risk only to see more accidents due to more sophisticated attacks | As conduct risk threshold tends to be a moving target depending on supervisory expectation, its impact would continue to be highly uncertain Introduction of the regulations on cyber security and conduct risks could be possible |
| Market regulation | The regulation on OTC derivatives is close to be finalized despite a possible lack of harmonization between the US and Europe Systemic risk of CCP is becoming an important agenda | More regulation on SFT through enhanced hair-cut and reporting requirement could further dampen liquidity in the short-term financial market Systemic risk will continue to concentrate on CCP | Financial market fragmentation between the US and Europe could also affect the business style as well as risk management style of Japanese banks |

Typology of global financial regulation in terms of the way to increase the resilience of financial system

Enhancement of financial buffer

- Measures in this category mainly address the decline in regulatory risk appetite and underestimation of risks the following way
 - The decline in regulatory risk appetite is addressed by an increase in minimum requirement of CAR, introductions of leverage ratio, liquidity ratios, and TLAC and supervisory stress testing
 - ✓ Underestimation of risks is addressed by the review of Basel 2 risk formula and explicit consideration of new type of risks

Reduction of systemic risk with Sifis

- Measures in this category mainly address the moral hazard issues of Sifis the following way
 - ✓ Reform of risk governance and risk culture
 - ✓ Reform of remuneration and performance evaluation system
 - ✓ Zero tolerance for possible bail-out that could be a source of moral hazard of Sifis
 - Downsizing and simplification of banking structure
 - RRP
 - ✓ Enhancing disclosure of risk information

Enhancement of supervising financial market-wide and macro-prudential issues

- Measures in this category mainly address the financial market-wide and macroprudential issues the following way
 - Concentration of derivative transactions on CCP and the introduction of margin call for OTC derivative transactions and more information reporting requirements
 - ✓ Enhancement of non-bank regulation/supervision
 - Enhancement of macro-prudential policy framework including supervisory stress testing

Impacts of the global regulation on financial system stability 1/3

Enhancement of financial buffer

- > Difference in the perspectives between the US/Europe and Japan (Regulatory risk appetite)
 - The US and European regulators' risk appetite on financial system stability dramatically declined after the crisis mainly by 1) political factors such as main street's increasing frustration against Wall street (or bail-out of Sifis), and 2) overheating financial markets as a side effect of ultra loosening monetary policy
 - ✓ Japanese authorities might share some with them on 2) but not necessarily on 1) –they have no big incentive to deal with remote risks and consequently not necessarily agree with the zero tolerance for the bail-out of Sifis (or the bail-in with long time horizon), which sometimes could rather contribute to the financial system stability
- > Difference in the perspectives between the US/Europe and Japan (Underestimation of risks)
 - ✓ The issues of risk underestimation by banks in the US/Europe have been mainly driven by the regulators' suspects on banks' strong incentives for regulatory arbitrage, which do not necessarily exist in Japan → consequently, Japanese regulators do not have big appetite for the review of Basel 2 risk models
 - Meanwhile, the Japanese regulators as well as the US/European peers are positive in considering new type of risks including emerging, strategic, conduct, reputational and cyber security risks into the scope of risk management

Impacts on the financial system stability

- ✓ Some increase in financial buffer should be very important to the stability of Japanese financial system as Japanese economy also tends to depend on QE effects at the risk of financial bubble
- ✓ However, an excessive financial buffer requirement could dampen banks' financial intermediary capability and might invite more appetite for taking the risks that are not recognized by regulators
- Zero-tolerance for bail-out of Sifis, if it will be applied to Japan, could also increase the uncertainty over the financial system stability partly because all bail-in measures have not yet been tested in actual crisis cases
- More one-size fits all type regulations for credit and op risks could introduce negative biases into banks' behaviors. Also, the re-allocation of supervisory and bank risk management resources to deal with the complex standardised appproahces might increase the possibility of overlooking more important emerging risks and thereby jeopardizing the financial system stability

Impacts of the global regulation on financial system stability 2/3

Reduction of systemic risk with Sifis

> Difference in the perspectives between the US/Europe and Japan

- ✓ The US and European regulators regard the irresponsible risk taking by Sifis, which were driven by their moral hazards as an important factor to destabilize the financial system
- The fact that their moral hazards were mainly driven by their TBTF status and also that the wrong risk culture actually encouraged them to capitalize on this externality pushed regulators to deprive them of TBTF status by downsizing and simplifying their business structures, and also to reform their risk culture, governance and remuneration system
- The Japanese regulators do not necessarily agree with the idea that bank nature is fundamentally evil and accordingly deal with them. Also, even in the case of Japanese mega-banks, their business structures are relatively simple and not so sizeable in terms of GDP compared to European peers
- Meanwhile, the Japanese regulators are rather positive in enhancing banks' corporate governance through e.g. building RAF but with a slightly different motivation – Japanese regulators often push banks to take more risks and thereby enhance banks' profitability or sustainability rather than pulling them

Impacts on the financial system stability

- The US regulators still stop short of reforming banks' remuneration system the comprehensive way and thus have to depend on the other measures such as depriving Sifis of TBTF status to reduce their systemic risks
- ✓ The bans on some trading businesses could contribute to the evaporation of market liquidity, which might weaken the financial system stability
- For the above reasons, Japanese regulators are not so enthusiastic about introducing the measures to reduce systemic risk of Sifis. However, they might need to consider some measures to address Japanese unique corporate governance issues, which are recently highlighted, and also mega-banks' aggressive stance in expanding their businesses in foreign countries particularly in Asia as they could destabilize the Japanese financial system through mega-banks' unexpected huge losses in the future

Impacts of the global regulation on financial system stability 3/3

Enhancement of supervising financial market-wide and macro-prudential issues

- Difference in the perspectives between the US/Europe and Japan
 - No big differences between the US/European and Japanese regulators in understanding the importance of increasing transparency of derivative transactions and of enhancing macro-prudential policy framework
 - However, Japanese regulators also show some concerns of possible negative side effects of the market regulation, which might push many SME entities out of derivative transactions due to their high costs
 - Unlike the case of the US/European peers, Japanese regulators face challenges in establishing the macro-prudential policy framework (including the supervisory stress testing) as they are separated from the central bank, which is naturally well-positioned to support this function with many experienced staffs, and also due to a lack of consensus on the need to significantly enhance supervisory human resources.
 - Worsening fiscal balance and the possible future sovereign crisis in Japan also requires the regulators and banks in Japan to deal with macro-prudential issues slightly differently from the US/European peers, for example, seeking more cooperative style between regulators and banks rather than the style of "resolution or not" to overcome the crisis

Impacts on the financial system stability

- Increase in costs of derivative transactions could limit SME's use of derivative transactions (or their capabilities to mutualize their facing risks with other parties) and thereby increase their risk exposures to financial crises
- Increase in systemic risk as more and more derivative transactions will be concentrated on CCP
- ✓ In the case of Japan, insufficiently staffed macro-prudential policy framework could make it difficult to react to the possible future sovereign crisis in Japan, for example, as this crisis needs well-coordinated actions of policy makers and banks to deal with emerging risks the forward-looking and flexible way

Thank you very much!!