

Japan's financial regulatory responses to the global financial crisis

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responses

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Abstract

Purpose – This paper aims to understand Japan's financial regulatory responses after the global financial crisis and recession. Japan's post-crisis reactions show two seemingly opposing trends: collaboration with international organizations to strengthen the regulation to maintain financial stability, and regulatory forbearance for the banks with troubled small and medium enterprise [SME] borrowers. The paper evaluates the responses by the Japanese financial regulators in five areas (Basel III, stress tests, over-the-counter [OTC] derivatives regulation, recovery and resolution planning and banking policy for SME lending) and concludes that the effectiveness of the new regulations for financial stability critically depends on the willingness of the regulators to use the new tools.

Design/methodology/approach – This report evaluates the post-crisis responses by the Japanese financial authorities in five dimensions (Basel III, stress tests, OTC derivatives regulations, recovery and resolution planning and bank supervision).

Findings – The effectiveness of the new regulations for financial stability critically depends on the willingness of the regulators to use the new tools.

Originality/value – The paper is the first attempt to evaluate the financial regulatory trends in Japan after the global financial crisis.

Keywords Financial markets, Government policy and regulation, Financial institutions and services

Paper type Research paper



1. Introduction

The Japanese financial system did not suffer directly from the global financial crisis of 2007-2009. As [Harada *et al.* \(2011\)](#) argues, one important factor that reduced the exposure of Japanese financial institutions to the risks realized in the global financial crisis was Japan's (micro) prudential regulation regime that had been significantly improved following Japan's own financial crisis in the 1990s. The Japanese regulators had finally forced the banks to recognize and deal with non-performing loans, created the framework to deal with troubled but systemically important banks, recapitalized the banks using public funds when necessary and established the system of supervision that stresses safety and soundness. The process was slow, but all the major ingredients for the improved regulatory regime had been established by the mid-2000s. When the global financial crisis hit the major financial institutions around the world, Japan's financial institutions had little exposure to the securitized financial products that were at the epicenter of the crisis. Hence, although the ensuing global recession hurt the Japanese economy (especially through its export-oriented firms, which suffered from the decline of global trades), its financial sector remained healthy, compared to those of the USA and European counterparts.

Japan's financial regulatory responses to the global financial crisis and recession show two seemingly opposing directions. On the one hand, Japan eagerly cooperated with the regulators of other major countries to strengthen the financial regulation, trying to avoid another global financial meltdown. On the other hand, Japan's regulators relaxed the soundness standard for the bank regulation to protect the borrowers that suffered from the global recession.

This report describes the responses that Japanese financial regulators have taken since the global financial crisis, and evaluates them. The next four sections (Sections 2, 3, 4 and 5) examine the regulatory changes in Japan that have been adopted in coordination with the rest of the world to strengthen the existing regulation and to expand the scope of the financial regulation. Section 6 describes how Japanese regulators relaxed the bank supervision to help the troubled borrowers after the crisis. Section 7 offers concluding comments.

2. Basel III

Japan was one of the earliest adopters of Basel II framework, which was considered to be the improved version of the international accord on bank capital regulation known as Basel I. Thus, when the Basel Committee on Banking Supervision (BCBS) started to examine the need to revamp the capital regulation in light of the global financial crisis, not surprisingly, Japan embraced the idea again. [Table I](#) shows the dates of implementations of Basel frameworks for Japan. By the end of 2013, the domestic rule-making process toward the full implementation of Basel III rules was largely complete.

Soon after the global financial crisis, the BCBS started to coordinate the international efforts to revise the bank capital regulation framework to address a variety of challenges presented by the global financial crisis. The first outcome of the rule-making efforts appeared as Basel 2.5 of July 2009. Basel 2.5 was positioned as an enhancement of the Basel II, which was already implemented in many European countries and Japan (but not in the USA) before the global financial crisis.

The contents of Basel 2.5 are found in [BCBS \(2009b\)](#), [BCBS \(2009a\)](#) and [BCBS \(2009c\)](#)[1]. In addition to the risks considered in Basel II, Basel 2.5 introduced capital charges for banks' securitization tranche positions held in their trading books and

Regulation	Basel guideline	Japan
Basel 2	Finalized in June 2004	Fully implemented by March 2007
Basel 2.5	Finalized in July 2009	Fully implemented by December 2011
Basel 3: minimum common equity capital ratio (4.5%)	Full implementation by 2019	Full implementation by January 2015
Basel 3: capital conservation buffer (2.5%)	Full implementation by 2019	Implementation starts at 0.625% in 2016 Gradually raised to 2.5% by 2019
Basel 3: liquidity coverage ratio	Partial implementation starting in 2015 Full implementation by 2019	Start implementation in 2015 (60% of the full implementation)
Basel 3: net stable funding ratio	Finalized by 2018	Start implementation in 2018

Table I.
Dates of
implementations of
Basel frameworks

Sources: [Basel Committee on Banking Supervision \(2010b\)](#) and [Financial Services Agency of Japan \(2013b\)](#)

off-balance sheet vehicles (e.g. asset-backed commercial paper conduits). In addition, substantially higher-risk weights for resecuritizations compared to securitization tranches were introduced[2]. The new standard also introduced a leverage ratio as a backstop to the Basel II capital ratio.

The enhancement of Basel II to address such new “market” risks was a direct response to the global financial crisis. Many banks in the USA and Europe built up significant exposures to off-balance conduits. They also accumulated massive losses in their trading books.

Although many Japanese banks did not have much exposure to these market risks, the Financial Services Agency of Japan (JFSA) duly implemented Basel 2.5. The resecuritization exposure regulation rule introduced in March 2011 requires banks to hold higher capital for “resecuritized” products, which are collateralized debt obligations (CDOs) that packaged together asset-backed securities and other CDOs. In response to banks’ requests to clarify the range of securitized products that are considered to be resecuritized, the JFSA published the list of securitized products that are not considered to be resecuritized.

Enhancement of Basel II framework, however, was considered insufficient to address major problems that were revealed by the global financial crisis. The BCBS developed a more fundamental reform of the capital regulation, which was termed Basel III. The Basel III rules were published in December 2010. They are detailed in the following two documents:

- (1) *Basel III: A global regulatory framework for more resilient banks and banking systems.*
- (2) *Basel III: International framework for liquidity risk measurement, standards and monitoring.*

The former presents the details of the Basel III framework, including definition of capital, risk coverage, capital conservation buffer and countercyclical capital buffer.

The definition of risk-weighted assets was expanded to cover exposures to off-balance sheet conduits. Basel III also introduces the minimum amount of liquidity that banks are required to hold. The banks are required to satisfy two minimum liquidity ratios:

- (1) The liquidity coverage ratio.
- (2) The net stable funding ratio.

The national implementation of Basel III in Japan started in January 2013, but the final implementation is not expected until as late as 2022. In Basel III, banks are required to satisfy several levels of minimum capital ratios. Initially, the core capital must be higher than 3.5 per cent of the risk-weighted assets, Tier 1 capital must be higher than 4.5 per cent of the risk-weighted assets, and the total capital must be higher than 4.5 per cent of the risk-weighted assets. The minimum capital ratios will be increased gradually over time. By 2019, the banks will be required to hold core capital that exceeds 4.5 per cent of the risk-weighted asset, Tier 1 capital higher than 6 per cent of the risk-weighted capital and total capital larger than 8 per cent of the risk-weighted assets.

Basel III proposes to add two conservation buffers over and above these minimum capital ratios, starting in 2016. The capital conservation buffer increases gradually to 2.5 per cent by 2019. The countercyclical buffer, which goes up to 2.5 per cent during a boom, aims at mitigating the problem of pro-cyclical nature of the capital regulation.

The largest and most connected banks in the world whose failure might trigger a financial crisis, called global systemically important financial institutions (G-SIFIs), are required to hold additional capital ranging from 1 to 3.5 per cent of risk-weighted assets, depending on the level of systemic importance. The list of G-SIFIs will be updated annually and published by the Financial Stability Board each November. As of November 2013, 28 banks and one insurance company are designated as G-SIFIs[3].

In Japan, the Basel III requirement is imposed only on 16 major banks that are internationally active[4]. Three of these major banks, Mitsubishi-UFJ Financial Group, Mizuho Financial Group and Sumitomo Mitsui Financial Group, are G-SIFIs and, thus, required to hold additional capital. For the domestic banks other than the 16 major banks, the required minimum (total) capital remains at 4 per cent of the risk-weighted assets, although the definition of capital has been slightly changed under Basel III. Thus, the gap between international banks and domestic banks has expanded with the introduction of Basel III.

3. Stress tests

The traditional approach to bank capital regulation represented by the Basel regulations has often proven to be inadequate. Time and again, financial institutions that had met regulatory capital requirements failed shortly thereafter. The problem was observed in the global financial crisis again. As a dramatic example, the Financial Services Authority (FSA) judged Northern Rock Bank to be well-capitalized and allowed the bank to increase its dividends shortly before its failure in February 2008. With this background, some regulators, especially the US Federal Reserve Board (FRB), advocated stress tests to ensure that individual banks hold sufficient capital in an ongoing basis in the face of potential adverse conditions as a complementary regulatory tool.

One of the earliest examples of stress tests is the Supervisory Capital Assessment Program (SCAP), which was conducted by the FRB in 2009 on the 19 largest bank holding companies (BHCs) in the USA[5]. The SCAP brought about a large-scale

recapitalization of BHCs and helped restore confidence in the US financial system.

The stress test is now an integral part of the regulation of major BHCs in the USA. The Comprehensive Capital Analysis and Review mandates that large BHCs must submit to the FRB their capital distribution plans, along with internal evaluations of how they will maintain capital ratios in adverse economic scenarios, some of which are supplied by the FRB. For an FRB stress scenario, the FRB conducts a stress test using its own models, instead of BHC's models, and evaluates the capital plan. Based on its assessment, the FRB can object to BHCs' capital plans and ask them to resubmit the plans. The Dodd-Frank Act also requires major banks to run stress tests and publish the results periodically.

The first wave of stress tests in Japan actually happened well before the global financial crisis during Japan's own banking crisis in the late 1990s. As the FRB did in the SCAP, the Bank of Japan (BOJ) and the Ministry of Finance (MOF) examined each major bank in early 1999 to determine how much additional capital it needed to withstand stressful scenarios. If a bank was deemed to be undercapitalized, it was forced to recapitalize by accepting public funds.

The stress test is now an integral part of bank regulation in Japan ([Financial Service Agency of Japan, 2014a](#)). The JFSA mandates in its "Inspection Manual for Deposit-Taking Institutions ([Financial Service Agency of Japan, 2014b](#))" that banks must undertake stress tests using their own stress scenarios and submit a report that details the method and the result of stress tests to the JFSA every quarter. This is important because stress scenarios and statistical models that are appropriate for each bank are highly heterogeneous. Upon the receipts of the report from the banks, the JFSA examines the appropriateness of stress scenarios and statistical models, and more importantly, if the test indicates that the banks cannot withstand stressful scenarios, the JFSA mandates that banks must raise capital and improve their risk management.

In addition to the aforementioned micro-stress tests that have been implemented by individual banks as a risk management tool, the BOJ has also performed macro-stress test by setting up a financial-macro econometric model and assessing the vulnerability of banking system as a whole to stress scenarios. The first implementation of such test took place in 2011-2012, when the BOJ, jointly with the JFSA and the ([International Monetary Fund \(IMF\) \(2012\)](#)), undertook macro-stress tests of Japanese banks as a part of IMF's Financial Sector Assessment Program. In this test, four stress scenarios were considered:

- (1) A global double-dip mild recession with a one standard deviation shock to real gross domestic product (GDP) growth.
- (2) A global double-dip severe recession with a two standard deviations shock to real GDP growth.
- (3) A protracted growth slowdown over the medium- to long-term with further deflationary pressures.
- (4) A global double-dip mild scenario combined with a 100 bps parallel shift of the yield curve, which represents a moderate market yield shock in line with Japan's experience in the past 15 years.

The results of the test indicated that the financial institutions in Japan were in aggregate resilient to all of the above adverse scenarios. Although Japanese banks were projected to experience a sizable decline in capital ratios under some of the stress scenarios, they were judged to have enough capital to withstand those shocks and continue their normal operations. Nonetheless, the report pointed out some areas of concern as well. First, stress scenario 4 was deemed to pose the largest risk to the Japanese financial system and was the only scenario with some systemic implications. Second, stress scenario 4 put regional banks at a greater risk than major banks, given that the former had lower capital ratios, larger credit risk and larger holdings of the Japanese Government Bonds. Namely, in stress scenario 4, the report found that regional banks' Tier 1 ratio would decline by 1 percentage point from 10 to 9 per cent. Even though the required ratio for regional banks in Japan was 4 per cent, it was pointed out as an area of concern.

To date, the BOJ has continued to undertake its own macro-stress tests and report its results in the semiannual publication of Financial System Report (FSR). The 2014 FSR reported that Japan's financial system is well-capitalized and its financial conditions are improving in part as a result of favorable economic conditions (Bank of Japan, 2014). As was the case with the results of the first macro-stress test of 2011-2012, the report shows that the financial system will be resilient to global recession or a moderate rise in the market yield (2 percentage points), while it warns that some banks, in particular regional banks, will be under-capitalized under a scenario in which both global recession and rising yield affect the balance sheet of financial institutions.

The stress test is a relatively new regulatory tool in Japan and elsewhere. The method is still evolving and can benefit from efforts to improve it. There are three issues that are important to examine, concerning stress tests in general. The first is a classical question of how stressful stress scenarios should be. For example, the BOJ considers a 200 bps market yield shock based on historical volatility in its stress tests of Japanese banks in the most recent macro-stress test. This may not be stressful enough. Similarly, stress tests of European banks conducted by European Banking Authority were repeatedly criticized to be insufficiently stressful. It is important to consider a scenario that seems unlikely and yet can pose catastrophic outcomes. Second, financial macro-econometric models used for macro-stress tests are still evolving and undergoing refinements. The feedback effects through the real sector are complex and might be difficult to capture, given the uncertainty about how financial institutions de-leverage in response to negative shocks. Third, the experiences of different countries have varied dramatically in terms of the extent of information disclosure; for example, the Fed makes the results of stress tests on individual banks publicly available, whereas the BOJ only reports the aggregate results. The academic literature has yet to reach any consensus on whether or not authorities should disclose all information pertaining to stress tests, as there might be an important trade-off between market discipline and run (Goldstein and Leitner, 2013; Schuermann, 2013).

4. Regulating over-the-counter derivatives

Another area of concern highlighted by the global financial crisis was the OTC (over-the-counter) transactions of financial derivatives. The highly interconnected yet opaque nature of the OTC derivative transactions was believed to be an important factor that intensified the crisis. Japan's regulatory reform in this area has been following the lead of the G20 (the Group of Twenty).

Since the onset of the global financial crisis, the G20 has taken a leadership role in coordinating international financial regulatory reforms and implementations. It held the first summit in Washington, D.C., in November 2008 and held four more summits in 2009 and 2010. Since 2011, the summit has been held annually.

At the Pittsburgh summit, held in September 2009, the G20 agreed that by the end of 2012:

- Standardized OTC derivatives should be traded on exchanges or ETPs.
- Standardized derivatives transactions should be cleared through central clearing parties (CCPs).
- Data relating to OTC derivatives transactions should be reported to trade repositories (TRs).

This G20 agreement has set in motion a series of regulatory changes that affects how OTC derivatives are transacted, recorded and reported in Japan. Following the agreement, the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended; the “FIEA”) was amended in May 2010 (the “2010” Amendment) and came into effect on November 1, 2012. The 2010 Amendment of the FIEA addressed items (2) and (3) of the Pittsburgh agreement, namely, it required clearing of certain standardized OTC derivatives transactions through a CCP and reporting of certain data relating to certain OTC derivatives transactions to the JFSA. The details and scope of the mandatory clearing and reporting requirements are laid out in the Cabinet Office Ordinance (COO). Below we describe how the amendment of the FIEA addressed clearing and reporting of OTC derivatives that the Pittsburgh agreement required[6].

4.1 Clearing

All financial instruments business operators (FIBOs) and registered financial institutions (RFIs) registered under the FIEA are required to clear certain OTC derivatives through a CCP. FIBOs include securities firms, investment advisors and investment managers registered in Japan under the FIEA. Thus, foreign entities are not included unless they are registered in Japan. RFIs include banks, insurance companies and certain other financial institutions that are licensed and registered in Japan to operate certain securities business or derivatives business under the FIEA. Again, foreign banks and other institutions not licensed in Japan are not included[7].

Just two categories of OTC derivatives transactions were initially covered by the FIEA. First, credit default swap (CDS) transactions on the iTraxx Japan index, of which reference entities are 50 or fewer domestic corporations, must be cleared through CCPs. An existing product that meets these criteria includes iTraxx Japan 50. Second, yen-denominated plain vanilla interest swaps on three- or six-month Japanese yen London interbank offered rate (LIBOR) interest rate also must be cleared through CCPs. As of June 2011, nearly three-quarters of the outstanding notional amount of domestic OTC derivatives contracts in Japan were in the interest swap category; among the OTC interest rate swaps, about 30 per cent had remaining maturities of one year or less ([Bank of Japan, 2013b](#)). No other types of OTC derivatives are included in the initial phase of the FIEA. Thus, even if transactions involve FIBOs and RFIs, if they fall into other product categories (e.g. dollar-denominated interest rate swaps), then they are currently not required to clear through CCPs.

CDS transactions on the iTraxx Japan index can only be cleared through licensed Japanese CCPs, whereas interest swap transactions can be cleared through any of licensed Japanese CCPs, licensed foreign CCPs and foreign CCPs with approved linkage arrangements with licensed domestic CCPs. In November 2012, when the 2010 Amendment went into effect, only one CCP, the Japan Securities Clearing Corporation (JSCC), was in operation as a licensed CCP, and no other CCPs, foreign or domestic, had been licensed or approved. JSCC started providing clearing services for CDS iTraxx Japan transactions in July 2011, and interest rate swap transactions in October 2012.

The 2010 Amendment allowed broad exemptions to the mandatory clearing requirement, thus further limiting the scope of the OTC derivatives regulation in Japan to a narrow set of counterparties and transactions at least in the initial phase. The contracts that already existed as of November 1, 2012 were exempt from the clearing requirement. Moreover, transactions where *any* of the parties are neither a FIBO nor an RFI were exempt. This implied that unless all parties of the contract were FIBOs or RFIs, the contract did not have to be cleared through CCPs. Transactions booked in trust accounts and intra-group transactions were also exempt from the requirement. Finally, transactions in which either of the parties (or any of their group companies), *with reasonable grounds*, is not a clearing member of a CCP were exempt. This last exemption was especially troubling because it left ambiguity as to who can be considered, *with reasonable grounds*, not a clearing member of a CCP.

4.2 Reporting

Information relating to every type of OTC derivative transaction regulated under the FIEA must be reported to the government. These product types include:

- forward transactions and index forward, where the settlement date comes three or more business days after the trade date;
- option transactions and index option transactions, where the exercise date comes three or more business days after the trade date;
- swap (e.g. interest swap and currency swap) transactions; and
- credit derivatives transactions, where the trigger event is in relation to credit condition changes to a reference entity (e.g. CDS).

Notable exceptions here are weather- and earthquake-related derivatives transactions.

Who is required to store and report the information depends on whether the transactions are cleared through a CCP or not. If transactions are cleared through a CCP, the CCP is obligated to keep the trade information and report it to the JFSA. This includes both transactions that are required to be cleared through a CCP and those that are voluntarily cleared through the CCP. If transactions are not cleared through a CCP, any party to the transactions that is a Type 1 FIBO or RFI must either store and report the trade information to the government itself or provide information to a designated TR. Reporting Type 1 FIBOs or RFIs, if reporting themselves, must keep the trade information for five years, and submit information about trades executed during a given week within the first three business days of the following week. If instead the trade information is provided to a local TR, the TR must report the information to the Japanese Government. If the trade information is provided to a foreign TR, reporting to JFSA is not currently required. In the future, the JFSA plans to establish a system to exchange

information internationally with the supervisory agencies of other countries and expects to collect the trade data by Type 1 FIBOs and RFIs that are provided to foreign TRs via such arrangements.

In March 2013, the JFSA approved Depository Trust & Clearing Corporation (DTCC) Data Repository Japan (DDRJ) to be the first TR to operate in the Japanese market. DDRJ is a subsidiary of DTCC (Bannister, 2013). The data storage and reporting obligation under the 2010 Amendment was enforced starting on April 1, 2013.

Similar to the clearing requirement, some transactions are exempt from the recording requirement. First, the contracts that already existed as of November 1, 2012 were exempt. The transactions with governments, central banks or other international authorities specified by the JFSA are also exempt. Certain intra-group transactions (between parents and subsidiaries or between subsidiaries of common parent companies) do not have to be recorded either.

4.3 The 2012 amendment

Another bill was passed on September 12, 2012 to address the first point raised by the G20 Pittsburg agreement. This introduced provisions regarding the mandatory use of electronic trading platforms (ETPs). It was scheduled to take effect within three years, i.e. by 2015. Details and scope of the ETP use requirement are yet to be finalized and implemented as of this writing, but we can observe some discussions on this issue in the FSA's OTC Derivatives Regulation Review Panel report released in December 2011 ([The Financial Services Agency of Japan, 2011](#)).

In JFSA's implementation proposal as of this writing (August 2014), large FIBOs and RFIs (with derivative contracts exceeding ¥6 trillion or US\$59 billion) will be required to use ETPs by September 2015 when they enter into yen-denominated plain vanilla interest swap contracts. This threshold is expected to cover 10-20 of the largest dealers. Then, the JFSA will consider expanding this requirement to CDS transactions on the iTraxx Japan index after monitoring the market liquidity of these transactions.

During the G20 St. Petersburg summit in September 2013, the BCBS and the International Organization of Securities Commissions (IOSCO) released the final framework for margin requirements for non-centrally cleared derivatives ([Bank for International Settlements, 2013](#)). Under this globally agreed standard, all financial firms and systemically important non-financial entities that engage in non-centrally cleared derivatives will have to exchange initial and variation margins commensurate with the counterparty risks arising from such transactions starting in December 2015. The new framework has been designed to reduce systemic risks related to OTC derivatives markets, as well as to provide firms with appropriate incentives for central clearing. Though details are yet to be finalized, this new standard will further push financial institutions towards more voluntary clearing through CCPs. Implementing this new standard on margin requirements will also necessitate further regulatory deliberations and decisions on issues such as margin segregation and re-hypothecation rules.

Financial regulators in Japan and other advanced economies have been gradually building a new regulatory framework for derivative transactions in each country, but an important issue of international coordination remains. For example, considerable complications may arise when the Japanese derivative regulation is applied to cross-border derivatives transactions involving Japanese counterparties. For example, if a FIBO or RFI (a domestic regulated entity) acts as an agent or an intermediary for an

overseas branch of the same institution in a transaction of a kind that is subject to central clearing requirements, it may trigger the central clearing obligation for the FIBO/RFI. Such a transaction may be simultaneously subject to a clearing obligation under a foreign law, thus resulting in overlaps. There is no clear rule under the current Japanese law that indicates how to deal with overlapping regulations. Resolving these implementation issues require international cooperation between supervisory agencies so as to avoid both opportunities for “regulatory arbitrage” and extraterritorial overreach[8].

On that note, the European Securities and Markets Authority (ESMA)’s proposed recognition of Japanese derivatives regulation in September 2013 seems to be a significant step forward. In particular, ESMA has proposed to recognize as equivalent the rules drawn up by the USA and Japan, including rules pertaining to the use of clearing houses and TRs (Stafford, 2013). The ESMA recommendation must first be approved by the European Commission before it comes into effect.

Other major implementation issues include potential expansion of the scope of the clearing rules on both counterparties and transaction types. For example, the JFSA is considering expansion of the central clearing requirements to dollar- or euro-denominated plain-vanilla interest rate swaps, yen-denominated interest swaps on the Japanese yen Tokyo Interbank Offered Rate (TIBOR) interest rate, single-name CDS transactions referring to a Japanese entity and single-name CDS transactions referring to a European or North American entity, or CDS transactions referring to an indexes consisting of European or North American entities. The JFSA also considers expanding the mandatory use of CCPs to transactions between a FIBO/RFI and a foreign dealer acting outside Japan (i.e. cross-border transactions with a foreign dealer) or a non-financial entity.

5. Recovery and resolution planning

One problem that the Japanese financial regulators faced when the banking crisis was becoming more serious in 1999 was the lack of a framework to deal with insolvent banks, especially those which can have systemic implications. Thus, when two large, internationally connected banks (Long-term Credit Bank of Japan [LTCB] and Nippon Credit Bank [NCB]) appeared to be insolvent in the mid-1999, the government worked to create a mechanism to contain the problem without hurting the financial system as a whole, both domestic and global. As Chapter 8 of Hoshi and Kashyap (2001) documents, the government (after prolonged negotiation and compromise with the opposition party) passed two laws in the fall of 1999:

- (1) The Act on Emergency Measures for the Revitalization of Financial Functions.
- (2) The Act on Emergency Measures for Early Strengthening of Financial Functions.

The first law, known as the Financial Revitalization Act provided a framework to restructure insolvent banks, and the second law, known as the Early Strengthening Act, provided a framework to inject public capitals into solvent but troubled systemically important banks. Japan used the Financial Revitalization Act to nationalize and restructure LTCB and NCB in late 1998, and the Early Strengthening Act to inject public funds into other large banks in March 1999.

As the names suggest, these two laws were emergency measures that were to expire in five years. Thus, the Deposit Insurance Corporation (DIC) Act was revised in 2001 to make these frameworks permanent. Chapters 5 and 6 of the revised DIC Act specified the procedures for insolvent banks that are non-systematic. When a bank is deemed insolvent, the DIC takes over the management of the bank as the financial administrator and transfers the business operations to an assuming financial institution (Chapter 5). This is essentially the same as the process of resolution by purchase and assumption (P&A) by Federal Deposit Insurance Corporation (FDIC). If no assuming financial institution comes forward immediately, the business operations are transferred to a bridge bank operated by DICJ (Chapter 6).

Chapter 7 specifies how to handle a systemic bank that is in trouble. If the bank is solvent, DICJ injects capital and forces the bank to restructure (Chapter 7 Section 102-1). If the bank is insolvent, DICJ nationalizes the bank and restructure the claims (Chapter 7 Section 102-3). Recapitalization under Section 102-1 was applied to Resona Bank in 2003, and restructuring under Section 102-3 was applied to Ashikaga Bank in 2003.

Thus, Japan had a reasonable resolution mechanism for banks, including systemic ones before the global financial crisis. Similar to the USA, however, Japan still lacked regulatory tools to deal with systemic non-bank financial institutions that may be insolvent. The revision of the DIC Act in 2013 addressed this shortfall by adding Chapter 7-2 to expand the resolution system to cover non-bank financial institutions, including financial holding companies, insurance companies and securities companies.

In the Chapter 7-2 procedure, the process starts with a recommendation from the Financial Crisis Response Council to the Prime Minister to designate that a systemically important financial institution goes through the orderly resolution process. If the financial institution is deemed solvent, it is put under special oversight by the DICJ and receives liquidity assistance (Type I measures). If the financial institution is insolvent, DICJ takes it over, transfers the claims that are essential for financial stability to a bridge bank and provides financial assistance (Type II measures). The DIC Act Chapter 7-2 process has not been tested by an actual case, but Japan now has a framework to deal with a failing systemically important financial institution, at least in theory.

The DIC Act Chapter 7-2 process has not been tested by an actual case, but the Chapter 6 procedure was applied to resolve a mid-size bank successfully in Japan after the global financial crisis. The Incubator Bank of Japan was established in 2003 to specialize in SME (small and medium enterprise) lending. The bank attracted depositors by offering high-interest rates and grew to have ¥647 billion of total assets by March 2010. JFSA's inspection in the mid-2010 revealed the bank had a large amount of non-performing loans unreported to the regulator. Massive withdrawals by the depositors followed, and the bank notified the JFSA Commissioner that it "had insufficient assets to fully discharge its claims" on Friday, September 10, 2010. The FSA applied the Chapter 6 procedure to the bank and ordered the DICJ to act as the financial administrator (DICJ, 2013). It became the first case of bank resolution in Japan under the limited coverage, in which the insured deposits of only up to ¥10 million per depositor in principal and interest payable (as of the day of failure) were protected^[9]. Over the weekend, the Incubator Bank of Japan concluded the basic agreement with the Second Bridge Bank of Japan, the bank filed with the Tokyo District Court for the commencement of civil rehabilitation proceedings, and policy board meeting of the DICJ was held and decided to provide loans for repayment of deposit and other liabilities. The

DICJ then identified insured and uninsured portions of deposits by aggregating deposits by name[10]. On Monday, September 13, 16 branches of the Incubator Bank of Japan reopened for business. The DICJ provided loans to the bank for the repayment of deposits and other liabilities. The first repayment on uninsured portion of deposits started on December 13, 2010, three months after the failure[11]. On December 26, 2011, all outstanding shares in the Incubator Bank held by the Second Bridge Bank were transferred to AEON Bank (DICJ, 2013).

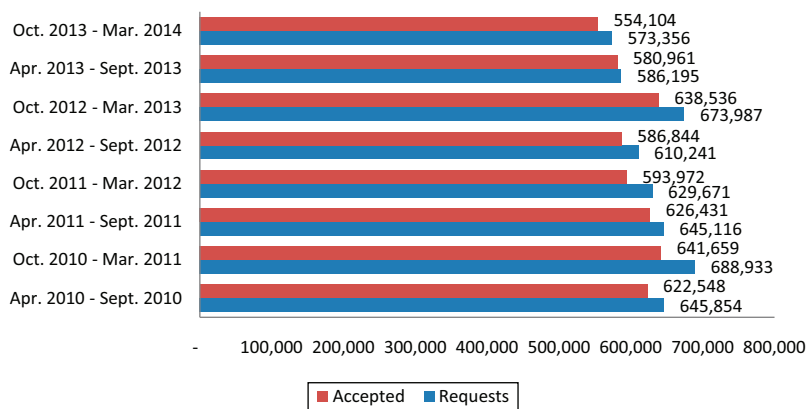
There are two notable features in the resolution of the Incubator Bank of Japan. First, the limited coverage scheme forced uninsured depositors and other liability holders to share the cost for the first time in the post-war Japan. This bail-in of large creditors is considered to have mitigated the collective action problem. Second, the DICJ closed a bank by applying the limited coverage scheme. Skillful implementation of bank resolution under the limited coverage scheme by the Japanese authority may make the commitment on no bail-out more credible by reducing the administrative cost of bank resolution[12].

6. Relaxation of bank supervision

Since the global financial crisis, the Japanese regulators have been tightening and expanding regulation along with their counterparts in other advanced countries. At the same time, however, the Japanese authority has also encouraged banks to lend to troubled SMEs. To support the banks' efforts to help the troubled borrowers, the JFSA relaxed the supervision standard, so that the banks do not have to reveal how much these efforts added to their non-performing loans.

As Harada *et al.* (2011) discuss, the relaxation started with the November 2008 announcement by the JFSA on the "Measures to encourage loan restructuring for SMEs". The announced policy allowed the banks to not disclose restructured loans to SMEs as non-performing if the restructurings were accompanied with recovery plans to make loans performing in five years. In December 2009, the encouragement given to banks to roll over loans to troubled SME borrowers was formalized as the SME Financing Smoothing Act. With this act, the JFSA relaxed the supervisory manual again, so that the banks can exclude the restructured SME loans from non-performing loans if they plan to come up with restructuring plans that are expected to make the loans performing in five years from the time they specify the plan. The law was set to expire at the end of March 2011, but it was extended twice before finally allowed to expire at the end of March 2013.

Although the SME Financing Smoothing Act expired at the end of March 2013, the JFSA has not reversed the rule that allows banks to classify the restructured loans to SMEs as "normal". Moreover, the JFSA has changed the supervisory manual once again, this time to give an extra credit for banks' efforts to help SME borrowers. As a result, troubled SMEs continue to ask for loan restructuring, and banks continue to grant loan restructuring for almost all who ask. Figure 1 shows the number of requests by SMEs to restructure their loans and the number of those that were accepted by banks during each of the six-month periods since the start of the SME Financing Smoothing Act. Both the number of requests and the number of approvals declined by only about 10 per cent after the expiration of the SME Financing Smoothing Act. Moreover, the approval rate in the post-expiration period was 98 per cent, compared to the average of 95 per cent during the period in which the law was in effect. Thus, the (troubled) SME loan restructurings by



Note: This figure shows the number of requests by SMEs to restructure their loans and the number of those that were accepted by banks during each of the six-month periods

Source: Financial Services Agency of Japan (2014b)

Figure 1.
Number of loan
restructurings to
SMEs: April 2010 –
March 2014

Japanese banks have not declined very much, even after the law that formally encouraged them expired.

7. Conclusion

In general, Japan has not been a laggard in the post-crisis global push toward implementing stricter and (one hopes) safer bank capital regulation. In the areas of adopting Basel III, integrating bank stress tests into the monitoring operations by bank regulators and centralizing OTC derivative clearing/reporting functions, Japan has made substantive progress on par with or sometimes ahead of other developed economies.

The question is whether the new regulation has real teeth. The answer critically depends on the willingness of the regulator to use the new regulatory tools to enhance the stability of financial system. Although it is too early to make any conclusive statements about this important question, there is one area of concerns. As discussed in Section 6, the financial authority has encouraged the banks to renew non-performing loans to SMEs as long as they are nominally under restructuring plans, and allowed the banks not to report these as non-performing loans. It remains vital that the new bank regulation not be defanged by such politically expedient policy, and that it press forward for further fleshing-out of reforms yet to be implemented.

Notes

1. BCBS (2009b) was revised and published as BCBS (2010a). BCBS (2009a) and BCBS (2009c) were implemented at the end of December 2011.
2. “Enhancement to the Basel II Framework” defines resecuritization exposure as “a securitization exposure in which the risk associated with an underlying pool of exposures is tranching, and at least one of the underlying exposures is a securitization exposure. In addition, an exposure to one or more resecuritization exposures is a resecuritization exposure” (p. 2).

3. The detail is released in “Globally Systematically Important Banks: Assessment Methodology and the Additional Loss Absorbency Requirement Rule Text and Cover Note” (November 2011).
4. See [BCBS \(2012\)](#).
5. In SCAP, the adverse scenario assumed 2.8 per cent decline in GDP, an increase in unemployment rate to 10.3, and 29 per cent decline in housing prices. The test revealed that 10 of the 19 financial institutions did not have sufficient capital to withstand the adverse scenarios, and the Federal Reserve required them to raise US\$75 billion in capital.
6. The information here is taken from the final version of the COO released by Financial Services Agency of Japan in July 11, 2012 ([Financial Stability Board, 2012](#)).
7. Clearing mandates are to be phased in multiple stages. As of this writing (August 2014), large financial institutions – mostly banks and securities firms – with outstanding notional amount exceeding ¥1 trillion (about US\$9.8 billion) are required to comply by December 2014. The second phase, planned for December 2015, captures smaller financial institutions with outstanding notional amount of ¥300 billion or more. Insurance companies, pension funds and other buy-side investors have not been included in the two compliance phases announced so far.
8. In July 2012, the Commodity Futures Trading Commission proposed that its transaction-level rules on clearing, execution and reporting should apply to all trades involving a US person, *regardless of the location of the counterparties*. In April 2013, the Japanese finance minister, along with the EC commissioner for internal market and services and seven other finance ministers from UK, France, Germany, Brazil, Russia, South Africa and Switzerland, sent a letter to US Treasury Secretary, Jack Lew. In the letter, the finance ministers warned that “[a]n approach in which jurisdictions require that their own domestic regulatory rules be applied to their firms’ derivatives transactions taking place in broadly equivalent regulatory regimes abroad is not sustainable” and advocated that “mutual recognition, substituted compliance, exemptions, or a combination of these would all be a valid approach, and careful consideration should be given with respect to registration requirements for firms operating across borders” ([Financial Services Agency of Japan, 2013a, 2013b](#)).
9. Although Japan experienced 181 cases of bank failure for 17 years from 1991 to 2008, all liabilities of failed banks were protected under the emergency measures of bank resolution, despite the transition from the full coverage scheme to the limited coverage scheme implemented in April 2005 ([Endo et al., 2013](#)).
10. As a result of name-based aggregation of deposits, ¥11 billion of deposits (2.7 per cent in terms of the number of depositors and 1.9 per cent in terms of principal of deposits) were identified as uninsured portion ([Endo et al., 2013](#)).
11. First repayment rate on uninsured deposits was 39 per cent.
12. The Deposit Insurance Act was also revised in 2013 based on the experiences from the resolution of the Incubator Bank of Japan. See page 47 of [DICJ \(2013\)](#) for the detail of 2013 revision.

References

- Bank for International Settlements (2013), “Margin requirements for non-centrally cleared derivatives – final report issued by the Basel Committee and IOSCO”, available at: www.bis.org/publ/bcbs261.pdf (accessed 8 September 2014).

-
- Bannister, D. (2013), "DTCC set to open Japanese trade repository for OTC derivatives ahead of April deadline", available at: www.bankingtech.com/74212/dtcc-set-to-open-japanese-trade-repository-for-otc-derivatives-ahead-of-april-deadline/ (accessed 5 September 2014).
- Basel Committee on Banking Supervision (2009a), "Enhancements to the Basel II framework", available at: www.bis.org/publ/bcbs157.pdf (accessed 5 September 2014).
- Basel Committee on Banking Supervision (2009b), "Revisions to the Basel II market risk framework (revisions to the Basel II market risk framework)", available at: www.bis.org/publ/bcbs158.pdf (accessed 5 September 2014).
- Basel Committee on Banking Supervision (2009c), "Guidelines for computing capital for incremental risk in the trading book", available at: www.bis.org/publ/bcbs159.pdf (accessed 5 September 2014).
- Basel Committee on Banking Supervision (2010a), "Adjustments to the Basel II market risk framework announced by the Basel Committee", available at: www.bis.org/press/p100618.htm (accessed 5 September 2014).
- Basel Committee on Banking Supervision (2010b), "Basel III: a global regulatory framework for more resilient banks and banking systems", available at: www.bis.org/publ/bcbs189.pdf (accessed 5 September 2014).
- Basel Committee on Banking Supervision (2012), "Basel III regulatory consistency assessment (Level 2) Japan", available at: www.bis.org/bcbs/implementation/l2_jp.pdf (accessed 5 September 2014).
- Deposit Insurance Corporation of Japan (2013), "Annual report 2012/2013: April 2012-March 2013", available at: www.dic.go.jp/shiryo/nenpo/index.html (accessed 5 September 2014).
- Endo, N., Shiga, M., Muramatsu, N., Kanno, M., Yoshioka, A., Chikauchi, K., Imano, M., Masuda, S., Kameda, J. and Sato, T. (2013), "Nihon Shinko Ginko no Hatanshori: Yokinsha Hogo wo Chushin toshite (resolution of incubator Bank of Japan: on the depositor protection)", *Yokin Hoken Kenkyu (Research on Deposit Insurance)*, Vol. 15, pp. 99-131, available at: www.dic.go.jp/katsudo/chosa/yohokenkyu/index.html (accessed 5 September 2014).
- Financial Services Agency of Japan (2011), "OTC derivatives regulation review panel report", available at: www.fsa.go.jp/news/23/syouken/20111226-3.html (accessed 5 September 2014).
- Financial Services Agency of Japan (2013a), "Ministerial-level joint letter addressed to US secretary of the treasury on cross-border OTC derivatives reform", available at: www.fsa.go.jp/en/news/2013/20130419.html (accessed 5 September 2014).
- Financial Services Agency of Japan (2013b), "Outline of Basel III", available at: www.fsa.go.jp/policy/basel_ii/basel3.pdf (accessed 5 September 2014).
- Financial Services Agency of Japan (2014a), "Inspection manual for deposit-taking institutions", available at: www.fsa.go.jp/manual/manualj/yokin.pdf
- Financial Services Agency of Japan (2014b), "Kin'yu Kikan ni okeru Kashitsuke Jōken no Henkō tō no Jōkyō nit suite (on changes in the terms of bank loans)", available at: www.fsa.go.jp/news/25/ginkou/20140627-11.html (accessed 8 September 2014).
- Financial Stability Board (2012), "OTC derivatives market reforms: fourth progress report on implementation", available at: www.financialstabilityboard.org/publications/r_121031a.pdf (accessed 5 September 2014).
- Goldstein, I. and Leitner, Y. (2013), "Stress tests and information disclosure", Mimeo, available at: finance.wharton.upenn.edu/~itayg/Files/disclosure.pdf (accessed 5 September 2014).
- Harada, K., Hoshi, T., Hosono, K., Koibuchi, S. and Sakuragawa, M. (2011), "Japan in the global financial crisis", in Litan, R. (Ed.), *The World in Crisis: Insights from Six Shadow Financial*

Regulatory Committees from Around the World, FIC Press, Wharton Financial Institutions Center, Philadelphia, PA, pp. 193-227.

Hoshi, T. and Kashyap, A. (2001), *Corporate Financing and Governance in Japan: The Road to the Future*, MIT Press, Cambridge, MA.

International Monetary Fund (2012), "Japan: financial sector stability assessment update", *IMF Country Report No. 12/210*, available at: www.imf.org/external/pubs/ft/scr/2012/cr12210.pdf (accessed 8 September 2014).

Schuermann, T. (2013), "Stress testing banks", Mimeo, available at: <http://fic.wharton.upenn.edu/fic/papers/12/12-08.pdf> (accessed 8 September 2014).

Stafford, P. (2013), "Europe recognizes US and Japan derivative rules", *Financial Times*, 3 September 3, available at: www.ft.com/cms/s/0/5911a004-14b1-11e3-a2df-00144feabdc0.html#axzz3CkSopPnT (accessed 8 September 2014).

Further reading

Bank of Japan (2013a), "Financial system report", available at: www.boj.or.jp/en/research/brp/fsr/data/fsr130417a.pdf (accessed 5 September 2014).

Bank of Japan (2013b), "Results of the regular derivatives market statistics in Japan (End-June 2013)", available at: www.boj.or.jp/en/statistics/bis/yoshi/index.html/ (accessed 5 September 2014).

Bank of Japan (2014), "Financial system report", available at: www.boj.or.jp/en/research/brp/fsr/fsr140423.htm/ (accessed 5 September 2014).

Basel Committee on Banking Supervision (2010c), "Basel III: international framework for liquidity risk measurement, standards and monitoring", available at: www.bis.org/publ/bcbs188.pdf (accessed 5 September 2014).

Basel Committee on Banking Supervision (2011), "Globally systematically important banks: assessment methodology and the additional loss absorbency requirement rule text and cover note", available at: www.bis.org/publ/bcbs207cn.pdf (accessed 5 September 2014).

Devorak, P. (2013), "Japanese banks urged to lend in fight against deflation", *Wall Street Journal (Japan Real Time)*, 2 May, available at: <http://blogs.wsj.com/japanrealtime/2013/05/02/japanese-banks-urged-to-lend-in-fight-against-deflation/> (accessed 8 September 2014).

Financial Stability Board (2011), "Policy measures to address systematically important financial institutions", available at: www.financialstabilityboard.org/publications/r_111104bb.pdf (accessed 5 September 2014).

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