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Japan Provision of Subordinated Loans

Shiro Kawana

Yale Program on Financial Stability Case Study
June 26, 2018; Revised: November 12, 2021

Abstract

During the international financial turmoil associated with the Global Financial Crisis, Japan’s financial institutions remained relatively sound because their exposure to overseas structured credit products was limited. Restructuring in the aftermath of Japan’s own banking crisis in the late 1990s also contributed to making Japanese banks resilient to external shocks. Nonetheless, Japanese banks’ profitability was at risk. Due to the large amount of stockholdings, major banks had large market risks which might significantly worsen their capital ratios. The increasing volatility of stock prices could make banks conscious of capital constraints in the future and could trigger an adverse feedback loop between the financial system and the economy. Against the downside risks, on March 17, 2009, the Bank of Japan (BOJ) announced a new framework to provide subordinated loans to major banks that were subject to international capital standards as a safeguard. The framework was formally established at a regular meeting of the Policy Board of the BOJ on April 10, 2009. Four auctions were held under the framework, but only one bank made a bid. Reflecting the improvement of market conditions, the framework ended by the end of March 2010 as planned at the launch. The scheme was completed when the bank fully repaid its ¥20 billion ($209 million) loan on the earliest day allowed under the contract.

Keywords: Bank of Japan, recapitalization, subordinated loan, stock price

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1 This case study is part of the Yale Program on Financial Stability (YPFS) selection of New Bagehot Project modules considering the responses to the global financial crisis that pertain to broad-based capital injection programs. Cases are available from the Journal of Financial Crises at https://elischolar.library.yale.edu/journal-of-financial-crises/.

2 Research Intern, YPFS, Yale School of Management.
At a Glance

During the international financial turmoil associated with the Global Financial Crisis, Japan’s financial institutions remained relatively sound because their exposure to overseas structured credit products was limited. Restructuring since Japan’s own banking crisis in the late 1990s also contributed to making Japanese banks resilient to external shocks. Nonetheless, Japanese banks’ profitability was at risk. Due to the large amount of stock holdings, major banks had large market risks which might significantly worsen their capital ratios. The increasing volatility of stock prices had the potential to make banks increasingly conscious of capital constraints in the future and could trigger an adverse feedback loop between the financial system and the economy (Bank of Japan 2009b).

Against the downside risks, on March 17, 2009, the Bank of Japan (BOJ) announced a new framework to provide subordinated loans to major banks that were subject to international capital standards as a safeguard. The framework was formally established at a regular meeting of the Policy Board of the BOJ on April 10, 2009. Four auctions were held under the framework, but only one bank made a bid. Reflecting the improvement of market conditions, the framework ended by the end of March 2010, as planned at the beginning. The scheme was completed when the bank fully repaid its ¥20 billion ($209 million) loan on the earliest day allowed under the contract.

Summary Evaluation

There has been little evaluation of the provision of subordinated loans. It is difficult to assess the effectiveness of the program because the program was established as a backstop to prevent banks from becoming conscious of capital constraints in the future. The reactions of market participants at the announcement of the framework were mixed. Some analysts said that the program would help banks looking to issue subordinated debt and boost their Tier-II capital. On the other hand, another analyst argued that it was “more symbolic than anything” because core, Tier-I capital was what the market watched closely.
and because Japanese major banks were already able to raise subordinated debt in the market.

At the first auction on May 29, only Sumitomo Trust & Banking Co., the eighth largest bank in Japan at the end of March 2009, made a successful bid for a ¥20 billion perpetual subordinated loan at the minimum spread (210bp). There was no bid for 10-year subordinated loans at the auction, and no banks took part in the remaining three auctions.
<table>
<thead>
<tr>
<th>Japan Context 2008–2009</th>
</tr>
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<tbody>
<tr>
<td><strong>GDP</strong> (SAAR, Nominal GDP in LCU converted to USD)</td>
</tr>
<tr>
<td>$5.32 trillion in 2008</td>
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<tr>
<td>$5.53 trillion in 2009</td>
</tr>
<tr>
<td><strong>GDP per capita</strong> (SAAR, Nominal GDP in LCU converted to USD)</td>
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<tr>
<td>$39,339 in 2008</td>
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<tr>
<td>$40,855 in 2009</td>
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<tr>
<td><strong>Sovereign credit rating (five-year senior debt)</strong></td>
</tr>
<tr>
<td>Data for Q4 2008:</td>
</tr>
<tr>
<td>Fitch: AA</td>
</tr>
<tr>
<td>Moody’s: Aa3</td>
</tr>
<tr>
<td>S&amp;P: AA</td>
</tr>
<tr>
<td>Data for Q4 2009:</td>
</tr>
<tr>
<td>Fitch: AA</td>
</tr>
<tr>
<td>Moody’s: Aa2</td>
</tr>
<tr>
<td>S&amp;P: AA</td>
</tr>
<tr>
<td><strong>Size of banking system</strong></td>
</tr>
<tr>
<td>$8.41 trillion in 2008</td>
</tr>
<tr>
<td>$9.57 trillion in 2009</td>
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<tr>
<td><strong>Size of banking system as a percentage of GDP</strong></td>
</tr>
<tr>
<td>156.01% in 2008</td>
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<tr>
<td>173.23% in 2009</td>
</tr>
<tr>
<td><strong>Size of banking system as a percentage of financial system</strong></td>
</tr>
<tr>
<td>52.07% in 2008</td>
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<tr>
<td>54.39% in 2009</td>
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<tr>
<td><strong>Five-bank concentration of banking system</strong></td>
</tr>
<tr>
<td>58.64% in 2008</td>
</tr>
<tr>
<td>58.71% in 2009</td>
</tr>
<tr>
<td><strong>Foreign involvement in banking system</strong></td>
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<tr>
<td>Data not available for 2008</td>
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<tr>
<td>Data not available for 2009</td>
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<tr>
<td><strong>Government ownership of banking system</strong></td>
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<tr>
<td>Data not available for 2008</td>
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<tr>
<td>Data not available for 2009</td>
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<tr>
<td><strong>Existence of deposit insurance</strong></td>
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<tr>
<td>Yes in 2008</td>
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<tr>
<td>Yes in 2009</td>
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</tbody>
</table>

I. Overview

Background

Although Japan's financial system remained relatively stable, on the whole, during the Global Financial Crisis, the strains in global financial markets and worsening economic conditions at home and abroad negatively affected the financial intermediation function and robustness of the system in Japan. Reflecting the declining function of commercial paper and corporate bond markets, financial conditions for firms' funding in capital market deteriorated beginning in the autumn of 2008. Japan's financial institutions, which had shown robustness to a certain degree amid the turbulence of the global financial system, retained financial intermediation function and supported firms through the increase of lending as shown in Figure 1 below. As Japanese banks had been fortifying their financial bases since Japan's own banking crisis in the 1990s and had limited exposure to overseas structured credit products, their business was relatively sound compared to foreign counterparts. However, market risk associated with stockholdings increased, especially for major banks, and credit risk that had previously been in decline also turned upward as shown in Figures 1 and 2 below. A substantial amount of both realized and unrealized losses on stockholdings had been reported amid a leveling off in the outstanding value of banks' stockholdings. Given the increased volatility of stock prices, the management of market risk associated with stockholdings remained an important challenge for banks. The Financial System Report (FSR) in March 2009 pointed out that even under the assumption of future economic downturns with different degrees of severity, the banking sector's expected losses were not so large that banks' Tier-I capital ratios would substantially deteriorate. However, the FSR warned that if banks became more conscious of capital constraints in the future, the decline of stock prices could have a negative impact on financial intermediation from a macro perspective (Bank of Japan 2009a).

Recognizing the risks of a potential adverse feedback loop between the financial system and the economy, the Bank of Japan (BOJ) announced a new framework to provide subordinated loans to banks after the regular meeting of the Policy Board on March 17, 2009. This measure aimed to ensure the smooth functioning of financial intermediation and the stability of Japan's financial system “by enabling Japan's banks to maintain sufficient capital bases even in severe financial and economic environments” (Bank of Japan 2009b).
Figure 1: Bank Loans Outstanding by Type of Borrower (Left) and Bank Stockholdings (Right)

Source: Bank of Japan 2009a, 15, 22.

Figure 2: Risks and Tier-I Capital (Left) and Dispersion of Tier-I Capital Ratios Where Both Economic Downturn and Stagnating Stock Price Occur (Right)

Source: Bank of Japan 2009a, 29, 34.
Program Description

On April 10, 2009, the BOJ decided to set “Principal Terms and Conditions for Provision of Subordinated Loans” at a regular meeting of the Policy Board and released the outline of the framework on the same day. The program was created as a temporary measure and planned to close new loan disbursement by the end of March 2010 (Bank of Japan 2009c).

Under the new framework, the BOJ offered 10-year subordinated loans and perpetual subordinated loans, which could be counted as Tier-II capital under Basel II, to the banks that were subject to international capital standards up to ¥350 billion for each bank and ¥1 trillion in total (Bank of Japan 2009c; Whipp and Dickie 2009). The loan did not require collateral. Recipients of each loan had the right to redeem the loan beginning three years later after disbursement. To incentivize financial institutions to repay the borrowed funds as soon as possible, the interest rate would increase by 1.5% after five years of loan disbursement (Bank of Japan 2009c).

The size of each loan and interest rates for the first five years on the 10-year and perpetual loans were determined at auctions using a premium over the six-month yen LIBOR (Bank of Japan 2009c).

A multiple-price competitive auction was conducted for each loan in which banks bid “yield spreads,” which were calculated by subtracting the “minimum spreads” determined by the Bank of Japan from the spread which banks desired to add on the base rate (six-month yen LIBOR) (Bank of Japan 2009c).

The minimum spread was set by the BOJ at each auction for 10-year loans and perpetual loans, in light of market conditions, so as not to interfere with capital raising by financial institutions through markets. The minimum spread for each auction was released about ten days before each auction (Bank of Japan 2009c).

The auction schedule was published on May 8; the auctions were held on May 29, August 27, November 26, and February 24, 2010 (Bank of Japan, n.d.). The total amount of loans and the average spread in each auction were released after each auction. The names of recipients of the loans were not published after each auction but were released around the end of May 2010 (Bank of Japan 2009c).

The new scheme was designed to complement the two other channels for financial institutions to raise capital: (1) capital raising by financial institutions themselves in the market, and (2) capital raising based on the Act on Special Measures for Strengthening Financial Functions, which was amended on December 16, 2008, and provided public

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3 In April 2009, the monthly average exchange rate was $1 = ¥99 (International Monetary Fund Exchange Rates Database).

4 The Act on Special Measures for Strengthening Financial Functions, which enabled the Japanese government to inject capital into financial institutions, was first introduced in 2004 but expired in March 2008. In December 2008, the law was amended to extend the scheme to the end of March 2012 and to lower the bar for banks to apply for the scheme.
funds as Tier-I capital (Shirakawa 2009). The provision of subordinated loans aimed to provide another channel for major banks, which were directly affected by the potential decline of stock prices, to raise Tier-II capital (Shirakawa 2009; Whipp and Dickie 2009). For banks that were not eligible for the provision of subordinated loans, including regional banks and cooperative banks, capital injection of public funds based on the Act on Special Measures for Strengthening Financial Functions was the measure intended to help them to strengthen their balance sheets (Deposit Insurance Corporation of Japan 2009).

At a press conference on March 18, where the BOJ released the idea of providing subordinated loans, BOJ Governor Masaaki Shirakawa said that the new scheme was created as a safeguard and market funding was preferred (Reuters Staff 2009). He indicated that the value of the scheme could not be assessed simply by the amount of loans under the scheme as the scheme was designed as a safeguard (Whipp and Dickie 2009).

Outcomes

The auctions were held on May 29, 2009; August 27, 2009; November 26, 2009; and February 24, 2010 (Bank of Japan, n.d.). At the first auction on May 29, only Sumitomo Trust & Banking Co., the eighth largest bank in Japan at the end of March 2009, made a successful bid for a ¥20 billion perpetual subordinated loan at the minimum spread (210bp) (Bank of Japan, n.d.; Koenig 2009). There was no bid for 10-year subordinated loans at the auction, and no banks took part in the remaining three auctions (Bank of Japan, n.d.).

Although the BOJ did not publish the name of banks that bid for loans, Nikkei reported on May 29 that six banks did not take part in the auction, and Sumitomo Trust & Banking Co. would receive a loan (Bloomberg 2009).

As planned in the "Principal Terms and Conditions for Provision of Subordinated Loans," the period of new loan disbursement came to an end in March 2010 (Bank of Japan 2009c; n.d.). On June 11, 2012, just three years after the disbursement, Sumitomo Trust & Banking Co. fully redeemed the loan, and the scheme was complete (Bank of Japan 2012; 2013).
II. Key Design Decisions

1. **Part of a Package:** The provision of subordinated loans was intended to complement capital raising in the market and was authorized through the Act on Special Measures for Strengthening Financial Functions.

   The provision of subordinated loans for banks by the BOJ was designed to fill the gap of financing tools for banks. The BOJ expected that the new framework would contribute to strengthening the banks’ capital base in combination with capital raising in the market by the banks themselves and from the Deposit Insurance Corporation of Japan (DICJ) under the Act on Special Measures for Strengthening Financial Functions, which was amended in December 2008 to encourage broader use (Deposit Insurance Corporation of Japan 2009).

   To reduce the risks associated with banks’ stockholdings, the BOJ also decided to resume purchases of stocks held by financial institutions in February 2009 so that they could handle the risk associated with stockholdings (Bank of Japan 2009b). The BOJ continued these purchases until the end of April 2010 (Bank of Japan 2010). The BOJ had first introduced the stock purchasing program in 2002, in response to the Japanese financial crisis, but it expired at the end of 2004 (Reuters Staff 2009).

2. **Legal Authority:** The framework was established as an exception to the Bank of Japan Act by obtaining authorization from the Minister of Finance and Prime Minister.

   Although the BOJ recognized that the provision of subordinated loans to banks by a central bank was an extremely extraordinary measure, no additional legislation was required to establish the new framework (Bank of Japan 2009b). Under Article 33 of the Bank of Japan Act, the BOJ, as the lender of last resort, could provide financial institutions with loans against collateral in the form of negotiable instruments, government securities, and other securities. However, the BOJ could not extend loans without collateral under Article 33 of the Act. Instead, the new framework for the provision of subordinated loans was introduced as “Other Business” that was authorized by the Minister of Finance and the Prime Minister. Article 43 of the Act stipulates that the BOJ may not conduct any business other than that specified by the Act as the business of the Bank; however, the BOJ can conduct other business that is necessary to achieve the Bank’s purpose specified by the Act by obtaining authorization from the Minister of Finance and the Prime Minister. The BOJ requested authorization from the Minister of Finance and Prime Minister to introduce the framework to provide subordinated loans to maintain the stability of the financial system (Bank of Japan 1997). This exception was also applied to the stock purchasing program by the BOJ that started in 2002 and resumed in 2009.

3. **Size:** The overall size of the program was set at ¥1 trillion.

   The total amount of loans available through the program was set at ¥1 trillion (Bank of Japan 2009b).
4. **Individual Participation Limits:** The cap on a single bank's participation was set at ¥350 billion.

In addition to the limit on total amount of loans, there was a limit on the amount of loans per bank at ¥350 billion (Bank of Japan 2009b).

5. **Eligible Institutions:** Eligible institutions were Japanese banks that were subject to international capital standards.

Only the banks that were subject to international capital standards were eligible (Bank of Japan 2009c). As a result, most regional banks and all cooperative banks and credit associations were not eligible for the loans (Whipp and Dickie 2009). The BOJ created the framework to support large banks that were expected to suffer significant losses directly from sharp declines in stock prices, to raise Tier-II capital as a complementary measure for capital raising through the market (Reuters Staff 2009; Shirakawa 2009). Banks that were not eligible for the provision of subordinated loans, including regional banks and cooperative banks, could raise Tier-I capital under the Act on Special Measures for Strengthening Financial Functions, which provided public funds in exchange for priority stocks (Bank of Japan 2009a, 10; Shirakawa 2009).

By setting a relatively limited target, the BOJ was able to reduce the risk of default. To receive loans under the framework, banks were required to be deemed creditworthy, but the BOJ did not conduct any additional investigation when it conducted the loan (Bank of Japan 2009c).

6. **The capital was provided via subordinated loans redeemable after three years.**

This program focused on providing a channel to strengthen the balance sheet of major banks through providing Tier-II capital (Bank of Japan 2009d, 64; 2009b). Since the government had already enacted the Act on Special Measures for Strengthening Financial Functions in December 2008, financial institutions had a tool to raise Tier-I capital outside the market. The provision of subordinated loans by the BOJ can be seen as a supplemental measure to provide capital (Shirakawa 2009).

Recipients of each loan had the right to repay the loan beginning three years after disbursement (Bank of Japan 2009c).

7. **Maturities of the loans were either 10-year or perpetual.**

The term of the loan provided under this framework was either 10-year or perpetual in order to meet the requirement for Tier-II capital under Basel II. Auctions were held separately for 10-year and perpetual loans (Bank of Japan 2009c).

8. **The amount and the spread for each loan were determined by auctions.**

The amount of each loan and interest rates for the first five years on the 10-year and perpetual loans were determined at auctions using a premium over the six-month yen
LIBOR. Targeted banks were not required to take part in the auction. The potential drawback of using auction was that banks might avoid participating in the auctions for fear of suffering stigma. The BOJ determined minimum spread at each auction for 10-year loans and perpetual loans respectively, in light of market conditions so as not to interfere with capital raising by financial institutions through markets (Bank of Japan 2009c). Banks were incentivized to raise capital through markets and repay the loan as soon as possible.

9. Capital Characteristics – Pricing: The interest rate would rise after five years to penalize banks that did not exit.

The interest rate would increase by 1.5% after five years of loan disbursement (Bank of Japan 2009c). This increase may have reflected the intention of the BOJ that the provision of subordinated loans under the framework should be used only as a temporary measure.

10. Nondisclosure rules were applied for the auctions.

The BOJ decided that it would not release the names of banks that participated in the auctions until the end of May 2010. Only the total amount of loans and the average spread in each auction were released after each auction (Bank of Japan 2009b). The anonymity could have been intended for banks to avoid the stigma associated with accessing capital from the BOJ. However, the name of the participant was reported on media just after the auction as shown in Figure 5 below.

**Figure 5: Snapshot of Articles Reporting Participation in First Auction**

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“(BN) Six Banks Won’t Take Part in Bank of Japan Auction, Nikkei Says” 2009-05-28
17:12:30.693 GMT Bloomberg By Heather Burke

May 29 (Bloomberg) -- Bank of Tokyo-Mitsubishi UFJ Ltd. and Sumitomo Mitsui Banking Corp. are among six financial institutions not participating in the Bank of Japan’s first auction to offer subordinated loans to help the banks shore up capital, Nikkei English News reported, without saying where it got the information.

“Sumitomo Trust to Get Loan Under Bank of Japan Plan, Nikkei Says” 2009-05-29
17:14:15.608 GMT Bloomberg By Bill Koenig

May 30 (Bloomberg) -- Sumitomo Trust & Banking Co. will receive a 20 billion yen ($209 million) subordinated loan under a framework established by the Bank of Japan, Nikkei English News reported, without saying how it obtained the information. The Bank of Japan in March disclosed plans to auction subordinated loans to banks with international operations as part of a plan to boost their capital, Nikkei said.
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11. The end date of the program was set for March 2010.

The framework was established as a temporary measure which would end at the end of March 2010. Reflecting the recovery of the financial market, the framework was not
extended. The last auction was held in February 2010 and closed new loan disbursement as initially scheduled (Bank of Japan, n.d.; 2009c).

III. Evaluation

There has been little evaluation of the provision of subordinated loans. It is difficult to assess the effectiveness of the program because the program was established as a backstop to prevent banks from becoming conscious of capital constraints in the future. Only one bank received a subordinated loan under the framework, but the limited number of uses does not imply the ineffectiveness of the policy. If the stock price had slumped further, more banks could have relied on the framework to strengthen their capital bases.

The reactions of market participants at the announcement of the framework were mixed. Some analysts said that the program would help banks looking to issue subordinated debt and boost their Tier-II capital (Whipp and Dickie 2009; Reuters Staff 2009). On the other hand, another analyst argued that it was “more symbolic than anything” because core, Tier-I capital was what the market watched closely and because Japanese major banks were able to raise subordinated debt in the market (Reuters Staff 2009).

IV. References


V. Key Program Documents

Summary of Program

Establishment of “Principal Terms and Conditions for Provision of Subordinated Loans” (BOJ 2009c). 
*BOJ document outlining the key terms of the Provision of Subordinated Loan Program.* https://ypfs.som.yale.edu/library/establishment-principal-terms-and-conditions-provision-subordinated-loans.
Implementation Documents

Establishment of “Principal Terms and Conditions for Provision of Subordinated Loans” (Bank of Japan 2009c).
*BOJ document outlining the key terms of the Provision of Subordinated Loan Program.*

Schedule and Results of Auctions for the Provision of Subordinated Loans (Bank of Japan n.d.).
*Schedule of auctions and the results of all auctions.*

Legal/Regulatory Guidance

Bank of Japan Act (Bank of Japan 1997)
*Unofficial translation of the Bank of Japan Act.*

日本銀行業務方法書 (Bank of Japan Statement of Operation Procedures).
*Operational procedures of the BOJ, defining the terms of the Provision of Subordinated Loan Program. Since the program had already expired in 2012, the relevant article was deleted.*

Press Releases/Announcements

Address at a Meeting with Banks’ Top Management on Provision of Subordinated Loans (Shirakawa. 2009).
*Then-Governor Masaaki Shirakawa explaining the background and the BOJ’s view on the decision.*

Establishment of “Principal Terms and Conditions for Provision of Subordinated Loans” (Bank of Japan 2009c).
*BOJ document outlining the key terms of the Provision of Subordinated Loan Program.*

Provision of Subordinated Loans to Banks (Bank of Japan 2009b).
*BOJ press release introducing the Provision of Subordinated Loan Program.*
劣後特約付貸付にかかる貸付先名の公表について (Announcement of the name of the lender for the subordinated loan).
*BOJ press release document announcing the borrower bank of the subordinated loan under the program.*

劣後特約付貸付の任意弁済について (About voluntary repayment of subordinated loan).
*BOJ press release document announcing that all the loan under the program was redeemed.*

The Bank of Japan to Resume Stock Purchases Held by Financial Institutions.
*BOJ press release announcing the resumption of the stock-purchasing program.*

**Media Stories**

BoJ drafts ¥1,000bn of bank loan aid (Whipp and Dickie 2009).
*Article discussing the introduction of the Provision of Subordinated Loans Program.*

UPDATE 2-BOJ offers $10.2 bln subordinated loans to banks (Reuters Staff 009).
*Article discussing the introduction of the Subordinated Loans program.*

Six Banks Won’t Take Part in Bank of Japan Auction, Nikkei Says (Bloomberg 2009).
*Article reporting that six banks would not participate in the first auction of the Provision of Subordinated Loans Program.*

Sumitomo Trust to Get Loan Under Bank of Japan Plan, Nikkei Says (Koenig 2009).
*Article reporting that Sumitomo Trust & Banking Co. would receive a 200 billion yen subordinated loan under the Provision of Subordinated Loans Program.*

**Reports/Assessments**

*The BOJ's analysis on the market development and the robustness of the financial system.*
*The BOJ’s analysis on the market development and the robustness of the financial system.*
https://ypfs.som.yale.edu/library/financial-system-report-0.

*The BOJ’s annual report noting financial statements showing the repayment of the subordinated loan.*
https://ypfs.som.yale.edu/library/annual-review-2013.

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