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Act on Strengthening Financial Functions

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Act on Strengthening Financial Functions¹

Vaasavi Unnava², Junko Nakano

March 17, 2020

Abstract

Following the Japanese Financial Crisis in 1997, the non-performing loan problem persisted in the regional banking system, with regional banks accounting for half of all non-performing loans by 2004. Following the capital injections of 1998 and 1999, the government created capital injection legislation to address the non-performing loan problem. Through this legislation, entitled the Act on Strengthening Financial Functions, made available ¥2 trillion (\$18 billion), later expanded to ¥12 trillion (\$113 billion) to recapitalize regional banking institutions. To date, 30 financial institutions have applied and received ¥674 billion (\$7.3 billion) in capital injection through preferred shares, subordinated loans and debt, preferred investments, and trust beneficiary rights. Approximately ¥200 billion in capital injection has been recovered to date.

Keywords: capital injection, Japan, Asian Financial Crisis, Resolution and Collection Corporation, Financial Functions Enhancement Examination Committee

¹ The Act on Strengthening Financial Functions is also known as the Financial Functions Strengthening Act, or the Financial Strengthening Act, and is written as “金融機能の強化のための特別措置に関する法律” in Japanese.

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Act on Strengthening Financial Functions

At a Glance

In August 2004, the Japanese government began addressing the problem of non-performing loans in the regional banking system. To create a capital injection legislation to support regional banks that could undergo difficulty, the government passed the Act on Strengthening Financial Functions on June 14th, 2004.

The Act allocated ¥2 trillion—later amended to ¥12 trillion—of capital to be injected into any bank and some non-bank financial institutions that applied and met requirements for regional revitalization. The Financial Functions Enhancement Examination Committee (FFEEC) would meet to review each application, presented through management plans. These management plans, which featured language on specific plans to contribute to regional economies, factored into approval of banks' applications for capital. After approval, the specific instruments approved—preferred shares, subordinated loans and debt, trust beneficiary rights, or preferred investments—would be purchased by the Resolution and Collection Corporation (RCC), a subsidiary of the Deposit Insurance Corporation of Japan (DICJ). The DICJ funded the RCC's purchasing through a series of government-backed agency bond issuances, with leeway to borrow from the Bank of Japan or other financial institutions as needed. There was no explicitly defined repurchase schedule for any of the participating financial institutions; though it was written in the ASFF that receiving institutions should repurchase within 15 years, this wasn't enforced in practice.

Between August 2004 and March 2020, 30 banks applied for capital injections; no applications were rejected. Overall, of the ¥12 trillion allocated, only ¥674 billion has been utilized by banks and

Summary of Key Terms	
Purpose:	restore both domestic and foreign confidence in Japan's financial system by disposing of non-performing loans on the balance sheets of financial institutions.
Announcement Date	January 2004
Operational Date	August 1, 2004
Injection Start Date	September, 2006
End of Application Window	March 31, 2022
Program Size	¥12 Trillion (\$113 billion) ³
Peak Utilization	¥674 billion (\$7.3 billion) ⁴
Eligibility	Any financial institution; some nonbank financial institutions
Participants	30 financial institutions
Administrator	Resolution and Collection Corporation of Japan
Legal Authority	Passed through the Japanese Diet, executed by the Prime Minister's Office and DICJ

³ Converted based on September 23, 2008 dollar-yen exchange rate based on injection ceiling raise due to Lehman Brothers bankruptcy.

⁴ Converted based on dollar-yen exchange rate relevant over each date of injection.

other financial institutions. Applicant banks and credit unions received varying capital underwriting terms dependent on differing management plans submitted. To date, five financial institutions have repurchased shares, subordinated debt, or trust beneficiary rights in full.

Following the original legislation in 2004, the government made a series of amendments to the legislation to utilize the capital injection framework for various purposes. In 2008, following the collapse of Lehman Brothers, the Japanese government amended the framework to specifically require revitalization of regions through SME financing. Following the Great East Japan Earthquake in 2011, the legislation was again amended to focus on the economic revitalization of regions directly affected by the natural disaster. Finally, in 2016, the government amended legislation to focus on promoting financial stability in during Brexit.

Summary Evaluation

There is still much capital outstanding from the series of capital injections. The legislation has been utilized the most during the global financial crisis and in the aftermath of the Great East Japan earthquake. The Fukushima region has seen an economic recovery, but it is unclear to what extent the regional banking sector played a role. Similarly, while banks have utilized the legislation after the amendment concerning Brexit was passed, it is unclear the repercussions Brexit will have on financial stability and regional banking needs until it is enforced. While this is the most persistent capital injection framework in post-war Japan, it is also the least utilized.

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I. Overview

Background

In 2002, the disposal of bad loans became a priority for the Japanese government under Prime Minister Junichiro Koizumi (Matsubayashi 2015, 2). Former chair of the Financial Reconstruction Committee Hakuo Yanagisawa had chaired the Financial Services Agency (FSA) until that point but was dismissed due to little change in the nonperforming loan problem. Yanagisawa was replaced by Heizo Takenaka, who enforced what came to be known as the Takenaka Plan (Matsubayashi 2015, 2). While the Takenaka Plan didn't differ largely from the previous plan in details, it was characterized by stricter enforcement (Hoshi and Ito 2004, 230). Under Takenaka, many big banks improved their capital ratios (Hoshi and Kashyap, 2010 403).

However, while major banks improved capital ratios, regional banks lagged in the disposal of nonperforming loans (IMF Chapter II-47, 2004). Regional banks were exempt from government policies to reduce non-performing loans by half nationwide (Bloomberg ?, Sep 28 2004). As of March 2003, Barclays estimated regional banks accounting for 54 percent of system-wide nonperforming loans, amounting to 23.8 trillion yen. By January 2004, the Japanese government determined regional banks a priority for financial stability (Bloomberg, ?, Jan 12 2004).

In January 2004, in response to the burgeoning nonperforming loan issue at regional banks, the Prime Minister's Cabinet submitted the Act on Strengthening Financial Functions to the Japanese Diet, earmarking 2 trillion yen for public capital injections into regional banks. FSA Chair Heizo Tanaka commented that regional banks would be inspected as strictly as national banks under previous public capital injections (Bloomberg ?, Jan 12 2004). By May, some believed the proposal would be shelved in favor of focusing on the nation's pension system, where persistent poor market performance over the previous 14 years, paired with low interest rates, required corporate pension schemes to continuously pay the government any compensation for losses, eroding their own funding base (Bloomberg ?, May 18 2004; IMF Chapter II-45, 2004). On June 14, 2004, the Japanese Diet finally passed the bill, two days before the end of the 159th Diet Session (Bloomberg, ?, June 15 2004, Japanese Diet).

In September 2008, the collapse of Lehman Brothers created impetus to pass legislation to promote the Japanese economy, with then-Prime Minister Aso announcing the Comprehensive Immediate Policy Package to Ease Public Anxiety (Prime Minister Speech 2008/09/29). The package focused on improving SME financing, with a series of policy measures intended to improve economic well-being with several fiscal targets (Some Government Source). Under these measures, the Diet passed the first amendment to ASFF.

A few years after the advent of the global financial crisis, in March 2011, the magnitude 9 Great East Japan Earthquake caused a national crisis in Japan, with a death toll approximated at 16,000 (Japan Times, 2018/03/11). Immediately following, the Prime Minister's office added line items to the supplementary budget for disaster relief efforts

([Fiscal Policy Speech, 02/17/2011](#)). Four months later, the Diet passed an amendment to the existing recapitalization legislation with special clauses for regional institutions supporting the revitalization of areas affected by the earthquake ([ASFF Amendment Text](#)).

In 2016, Japan held presidency of the G7 countries ([Prime Minister's Press Conference 2016/09/26](#)). During this presidency, the U.K. public voted to leave the EU ([NYT 06/23/2016](#)). To show leadership, the Japanese government led the G7 in preparing for potential financial stability implications resulting from Brexit ([Prime Minister's Press Conference 2016/09/26](#)). The government proposed the final amendment to the act to prepare for the risks of Brexit by continuing to support the growth of SMEs, which passed through the diet on December 2, 2016 ([Prime Minister's Press Conference 2016/09/26, Amendment #3 Text](#)).

Program Description

The original Act on Strengthening Financial Functions was intended to increase the capital of financial institutions to maintain credit order and development of the national economy ([Law Text, Purpose](#)). Over time, the government utilized the same injection framework for different purposes. After the first amendment, the Act encouraged lending to small and medium enterprises (SMEs); later, the Act aimed to support regions specifically affected by the Great East Japan Earthquake ([DICJ Annual Report 2018, 121](#)). The Act originally allocated a budget of ¥2 trillion, but then raised it to ¥12 trillion in the first amendment ([Reuters, 20 Oct 2006, Cabinet Ordinance, Translated: Article 33](#)). The government proposed the final amendment to the act to prepare for the risks of Brexit by continuing to support the growth of SMEs ([Prime Minister's Press Conference 2016/09/26](#)). The program became operational on August 1, 2004 ([Cabinet Ordinance Supplementary Provisions 1](#)).

The Financial Services Agency (FSA), under the Ministry of Finance, was tasked to form the Financial Function Enhancement Examination Committee (FFEEC)⁵ to assess applications and oversee the implementation of the plans for the recapitalization ([Law Text, Article 48](#)). The committee consisted of members appointed by the Prime Minister, all serving part time, with members serving three year terms ([Law Text, Article 49, 51](#)). The FSA shared FFEEC meeting minutes publicly three years after the committee met ([FFEEC #1, 5](#)). The committee has met 24 times over the span of the ongoing recapitalization ([FSA FFEEC Website](#)).

The program was funded by a combination of DICJ bond issuances, as well as borrowings from the Bank of Japan (BoJ) and financial institutions ([DICJ AR 2018, 78](#)). The Resolution and Collection Corporation (RCC)⁶, a subsidiary of the DICJ, was responsible for managing

⁵ This committee has also been referred to as the “Banking Function Reinforcement Study Council” and the “Examination Committee for Strengthening Financial Functions.”

⁶ For more information regarding the RCC and its operations, please refer to the “Resolution and Collection Corporation” caservention, authored by Mallory Dreyer (2019).

the capital and making purchases determined by the FFEEC (DICJ AR 2018, 37). Banks were expected to reacquire their shares within 15 years of purchase by the RCC (Cabinet Ordinance 7-B(II)). The government required these shares to not be subordinate to other shares, except in cases of dividend distribution (Cabinet Ordinance 25-(I)B(B)).

Registered banks, as well as the Long-Term Credit Bank, shinkin banks, credit cooperatives, labor unions, SME cooperatives, and the Federation of Shinkin Banks, were all eligible for public injection. In addition, certain non-bank institutions—Norinchukin Bank, the Federation of Agricultural Cooperatives, Fisheries Cooperatives, the Federation of Fisheries Processing Cooperatives—were eligible. Finally, Bank Holding Companies were also eligible. There were no institutions explicitly excluded from the act (Law Text, Article 2). Unlike predecessor capital injection legislation, there was no explicit capital requirement to either request capital or to mandatorily participate. Rather than meeting a specific capital threshold for intervention, banks considered economically important to regions in which they operated could apply through writing a management enhancement plan (Cabinet Ordinance 14-(I)).

Under the program, participating financial institutions could apply for four different types of capital: preferred stock, subordinated bonds, subordinated loans, and preferred investments (Management plan application). Cooperative central financial institutions applied for trust beneficiary rights (Cabinet Ordinance 25). Trust beneficiary rights allowed the government to purchase preferred rights on a trust, which consisted of preferred investments in the cooperative institutions (DICJ Press Release).

Institutions applying submitted these plans through the relevant minister, to be sent for examination to the FFEEC (Law Text, 4-((i)-(X))). Cooperative financial institutions were given separate ordinances from relevant cabinet ministers on business enhancement plans due their being assumed to already service the community directly (Cabinet Ordinance 5-2).

Usage of the Act for differing purposes resulted in small changes to the injection framework. In first amendment, the program shifted to focus on SME lending in the wake of the Lehman Brothers failure, with fears over how global economic events might cause credit withdrawals from SMEs by banks undergoing a credit crunch (Yamori et al 2013, 78). In the new iteration of the program, the facilitation of credit to SMEs became a special focus in management plans submitted (DICJ AR 2018, 121). The amendment extended the period for application from March 31, 2008 to March 31, 2012 (Amendment Text, Article I).

The second amendment of the program was implemented in response to the Great East Japan Earthquake. In this amendment, the Japanese government extended the application period for capital injection, in addition to creating special treatment for those institutions impacted by the Great East Japan Earthquake (DICJ AR 2018, 121). In particular, the amended legislation created an opportunity for cooperative financial institutions to apply for capital injection jointly with the cooperative central financial institution (DICJ AR 2018,

121). The amendment extended the period for application from March 31, 2012 to March 31, 2017 ([Amendment Text, Article I](#)).

The new law under the second amendment required cooperatives to submit management enhancement plans, rather than optional submission before ([Amendment Text, Article 18](#)). Additionally, the law added an additional requirement to satisfy an additional set of measures to support SMEs of areas affected by the Great East Japan Earthquake ([Amendment Text, Article 10-\(II\)](#)). If cooperative central financial institutions were reapplying under the new capital injection, they were required to apply for trust beneficiary rights as well as submit a trust agreement ([Amendment Text, Article 11-\(2\)](#)).

The final amendment of the program extended the application period to end on March 31, 2022 ([Amendment Text, Article 1](#)).

Outcomes

Though the program became operational on August 1, 2004, it remained unutilized until two years later, when Kiyoo Bank and Howa Bank became the first banks to apply for injection in August 2006 (Japan Times, August 23, 2006). The banks received capital in November and December of 2006, respectively ([DICJ Website: Capital Participation](#)). The banks requested ¥39 billion total, with Kiyoo bank requesting ¥30 billion and Howa Bank requesting ¥9 billion. They eventually received ¥40.5 billion, with Kiyoo Bank receiving an additional ¥1.5 billion more than requested ([DICJ Website: Capital Participation](#)).

In the next decade, under the amendment to the ASFF, an additional 11 institutions participated receiving a total of ¥309 billion. After a second extension of the application period, an additional 20 institutions participated in the injection, receiving ¥309.1 billion. In December 2016, the Japanese government made one more extension of the application period through March 31, 2022. Since December 2016, two institutions have applied, receiving ¥16.24 billion yen. The evolution of the law and its utilization can be seen in Figure 1 below ([DICJ Website: Capital Participation](#)).

Figure 1. Evolution of the Act on Strengthening Financial Functions.

Month/Year (Enacted)	Act/Amendments, Major characteristics ⁷	Usage ⁸		Total
		# of institutions	Amount (billion JPY)	
June 2004 (Enforced on August 1, 2004)	Act on Special Measures for Strengthening Financial Functions <ul style="list-style-type: none"> Capital injection through the subscription of shares by the financial institutions, etc 	2	40.5	Total injected amount: 674.84
Dec 2008 (Enforced on December 17, 2008)	Amended Act given the Lehman Brothers bankruptcy in September 15, 2008 <ul style="list-style-type: none"> Extension of application period to March 31, 2012 	11	309	Disposed by repurchase: 200.5 Remaining Balance in DICJ: 474.34

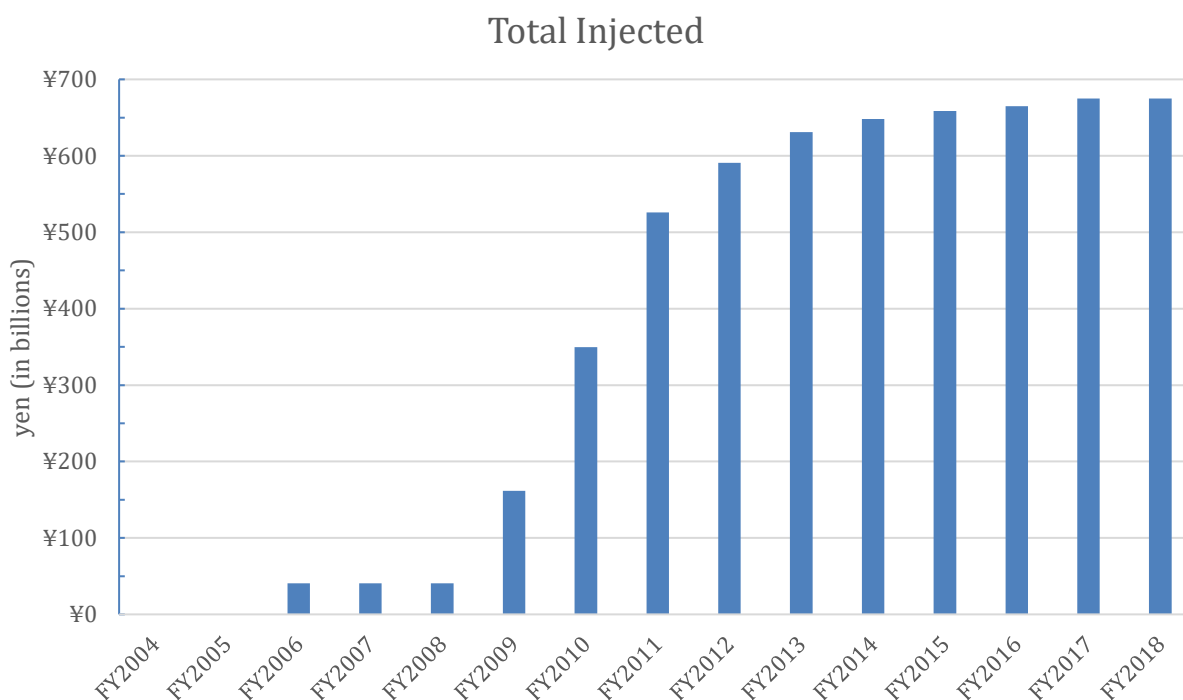
⁷ DICJ 2018 AR, 121

⁸ Details from DICJ's website "Capital Participation pursuant to the Financial Functions Strengthening Act (as of the end of September 2018)" <https://www.dic.go.jp/english/e_katsudo/page_000302.html> (accessed on 12th August, 2019)

	<ul style="list-style-type: none"> Facilitation of credit granting to small and medium-sized entrepreneurs, and injection to cooperative central institutions, etc. 			
June 2011 (Enforced on July 27, 2011)	Amended act with special earthquake-related provisions <ul style="list-style-type: none"> Extension of application period to March 31, 2017 Addition of special treatment under the impact of the Great East Japan Earthquake (capital injection to cooperative financial institutions jointly with the cooperative central financial institution) 	18	309.1	
Dec 2016 (Enforced on December 2, 2016)	Amended Act <ul style="list-style-type: none"> Extension of application period to march 31, 2022 	2	16.24	

Thirty institutions participated in the capital injection, with some institutions participating multiple times ([DICJ Website: Capital Participation](#)). Overall, the RCC injected ¥674.84 billion to 30 institutions over the 16 years of the ongoing capital injection program, as seen in Figure 2 below ([DICJ Website: Capital Participation](#)).

Figure 2. Participation in capital injection program.



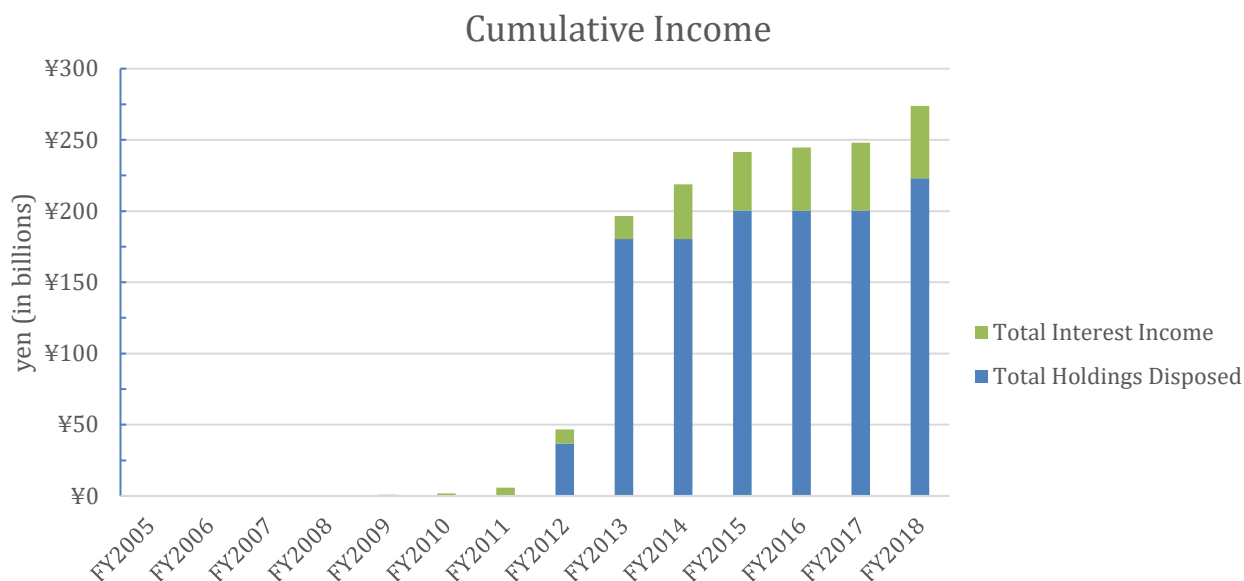
Note: the Japanese fiscal year begins April 1 of each calendar year and ends on March 31 of the following year.

Of the 30 banks that participated in the capital injection program, six have repaid or repurchased shares either partially or in full. Both Howa Bank and Kiyo Bank repurchased their preferred shares within 10 years of the capital injection. Under the extension made during the Lehman Brothers bankruptcy, two of the remaining 28 banks, North Pacific

Bank and Kirayaka Bank, repurchased their preferred shares. Only one bank in the subsequent extensions, 77 Bank, has repaid the amount injected partially or in full.

In addition to income from repurchasing, the government receives dividend and interest income on its holdings in the Financial Functions Strengthening Account held by the DICJ, as shown in Figure 3 below.

Figure 3. Cumulative income in dividends and repurchasing.



Note: the Japanese fiscal year begins April 1 of each calendar year and ends on March 31 of the following year.

Key Design Decisions

- 1. The Japanese government originally passed Act on Strengthening Financial Functions alone. Later amendments to the act were parts of various policy packages.**

The original Act on Strengthening Financial Functions was passed alone, without any companion legislation. It does not appear to be part of a package.

After the Lehman collapse in 2008, then-Prime Minister Aso announced the Comprehensive Immediate Policy Package to Ease Public Anxiety ([Prime Minister Speech 2008/09/29](#)). Part of this package involved utilizing the existing recapitalization program to scheme target the growth of SMEs ([Some Government Source](#); [FSA Speech 2012](#)). Amongst these initiatives was the Act on Temporary Measures to Facilitate Financing for SMEs, which imposed obligations on financial institutions to make efforts to respond to requests as best they can when SMEs and mortgage borrowers apply for a relaxation of borrowing conditions like extensions of deadlines ([Yamori et al 2013](#), 82). Additionally, they released revisions to capital adequacy regulations ([Yamori et al 2013](#), 81). The FSA also amended

the definition of non-performing loans, increasing instances where banks could choose not to classify specific condition-changed loans as non-performing (Yamori et al 2013, 80).

Simultaneously, measures to improve borrowing conditions of all firms were introduced in March 2009. These measures included off-site interviews to determine banks' funding practices towards firms for banks receiving complaints to determine liquidity needs. Additionally, the FSA changed risk-weighting for emergency guaranteed loans in capital ratios (Yamori et al 2013, 81-82).

In March 2011, the magnitude 9 Great East Japan Earthquake caused a national crisis in Japan, with a death toll approximated at 16,000 (Japan Times, 2018/03/11). Immediately following, the Prime Minister's office added line items to the supplementary budget for disaster relief efforts. Amongst these efforts were public financing programs and local tax grants (Fiscal Policy Speech, 02/17/2011). In tandem with these fiscal changes, the Diet passed an amendment to the existing recapitalization legislation with special clauses for regional institutions supporting the revitalization of areas affected by the earthquake (ASFF Amendment Text).

The government proposed the final amendment to the act to prepare for the risks of Brexit by continuing to support the growth of SMEs (Prime Minister's Press Conference 2016/09/26). In conjunction with modifications to the existing capital injections legislation, as part of the broader effort to address financial stability concerns emerging from Brexit, the Prime Minister announced measures to encourage increased productivity and the development of sales routes for SMEs. Additionally, the Prime Minister worked to amend the (Prime Minister's Press Conference 2016/09/26).

2. The Act on Strengthening Financial Functions was the last of a series of capital injections introduced during the Japanese financial crisis.

The Act on Strengthening Financial Functions appears to have been introduced independently from other financial crisis interventions. The legislation was part of a series of capital injections between 1998-2008, preceded by two capital injections in March 1998 and March 1999 (Hoshi and Kashyap, 2010, 409). By 2002, the disposal of bad loans became a priority for the Japanese government under Prime Minister Junichiro Koizumi (Matsubayashi 2015, 2). However, while major banks improved capital ratios, regional banks lagged in the disposal of nonperforming loans (IMF Chapter II-47, 2004). As of March 2003, Barclays estimated regional banks accounting for 54 percent of system-wide nonperforming loans, amounting to 23.8 trillion yen. In January 2004, the Japanese government determined regional banks a priority for financial stability in response to the Asian financial crisis (Bloomberg, ?, Jan 12 2004).

Following the original legislation in 2004, the government made a series of amendments to the legislation to utilize the capital injection framework for various purposes. In 2008, following the collapse of Lehman Brothers, the Japanese government amended the framework to specifically require revitalization of regions through SME financing. Following the Great East Japan Earthquake in 2011, the legislation was again amended to focus on the economic revitalization of regions directly affected by the natural disaster.

Finally, in 2016, the government amended legislation to focus on promoting financial stability in during Brexit.

3. The Act on Strengthening Financial Functions passed formally through the Japanese Diet.

In January 2004, in response to the burgeoning nonperforming loan issue at regional banks, the Prime Minister's Cabinet submitted the Act on Strengthening Financial Functions to the Japanese Diet, earmarking 2 trillion yen for public capital injections into regional banks. By May, some believed the proposal would be shelved in favor of focusing on the nation's pension system, where persistent poor market performance over the previous 14 years paired with low interest rates required corporate pension schemes to continuously pay the government any compensation for losses, eroding their own funding base (Bloomberg ?, May 18 2004; [IMF Chapter II-45, 2004](#)). On June 14, 2004, the Japanese Diet finally passed the bill, two days before the end of the 159th Diet Session (Bloomberg, ?, June 15 2004, [Japanese Diet](#)).

Each subsequent amendment passed through the Diet successfully (Japan Times 2008/12/13, [Amendment #2 Text](#), [Amendment #3 Text](#)).

After the Lehman collapse in 2008, then-Prime Minister Aso announced the Comprehensive Immediate Policy Package to Ease Public Anxiety ([Prime Minister Speech 2008/09/29](#)). Part of this package involved utilizing the existing recapitalization program to scheme target the growth of SMEs, which passed through the Diet formally in December 2008 ([Some Government Source](#); [FSA Speech 2012](#), Japan Times 2008/12/13).

In March 2011, the magnitude 9 Great East Japan Earthquake caused a national crisis in Japan, with a death toll approximated at 16,000 ([Japan Times, 2018/03/11](#)). Four months later, the Diet passed an amendment to the existing recapitalization legislation specifically supporting the revitalization of areas affected by the earthquake ([ASFF Amendment Text](#)).

The government proposed the final amendment to the act to prepare for the risks of Brexit by continuing to support the growth of SMEs, which passed through the diet on December 2, 2016 ([Prime Minister's Press Conference 2016/09/26](#), [Amendment #3 Text](#)).

4. The Prime Minister's office publicly announced each recapitalization bill and its subsequent amendments; the Diet debated each publicly before passing them.

In January 2004 the Prime Minister's Cabinet submitted the Act on Strengthening Financial Functions to the Japanese Diet. FSA Chair Heizo Tanaka commented that regional banks would be inspected as strictly as national banks under previous public capital injections (Bloomberg ?, Jan 12 2004). On June 14, 2004, the Japanese Diet finally passed the bill, two days before the end of the 159th Diet Session (Bloomberg, ?, June 15 2004, [Japanese Diet](#)).

The first amendment to the bill was announced by the Prime Minister in September 2008 ([Prime Minister Press Conference 2008/09/24](#)). There was some debate as to whether to pass the bill, as the opposition party fought against the ruling coalition to increase examination of two banks accused of poor lending practices. However, the ruling coalition

outvoted the opposition, passing the bill on December 12, 2008 (Japan Times 2008/12/13).

In March 2011, the Great East Japan Earthquake caused a national crisis in Japan, with a death toll approximated at 16,000 (Japan Times, 2018/03/11). Immediately following, the Prime Minister's office added line items to the supplementary budget for disaster relief efforts (Fiscal Policy Speech, 02/17/2011). On June 29, 2011, the Diet passed the amendment to the existing recapitalization legislation (ASFF Amendment 2 Text).

On September 26, 2016, the Prime Minister's office proposed the final amendment to the act to prepare for the risks of Brexit by continuing to support the growth of SMEs (Prime Minister's Press Conference 2016/09/26). This amendment was passed by the Diet on December 2, 2016 (ASFF Amendment 3 Text).

5. The capital injection was overseen by the FFEEC, under the Financial Services Agency, but the RCC, an asset management company, purchased and managed preferred shares, subordinated loans and debt, preferred investments, and trust beneficial rights.

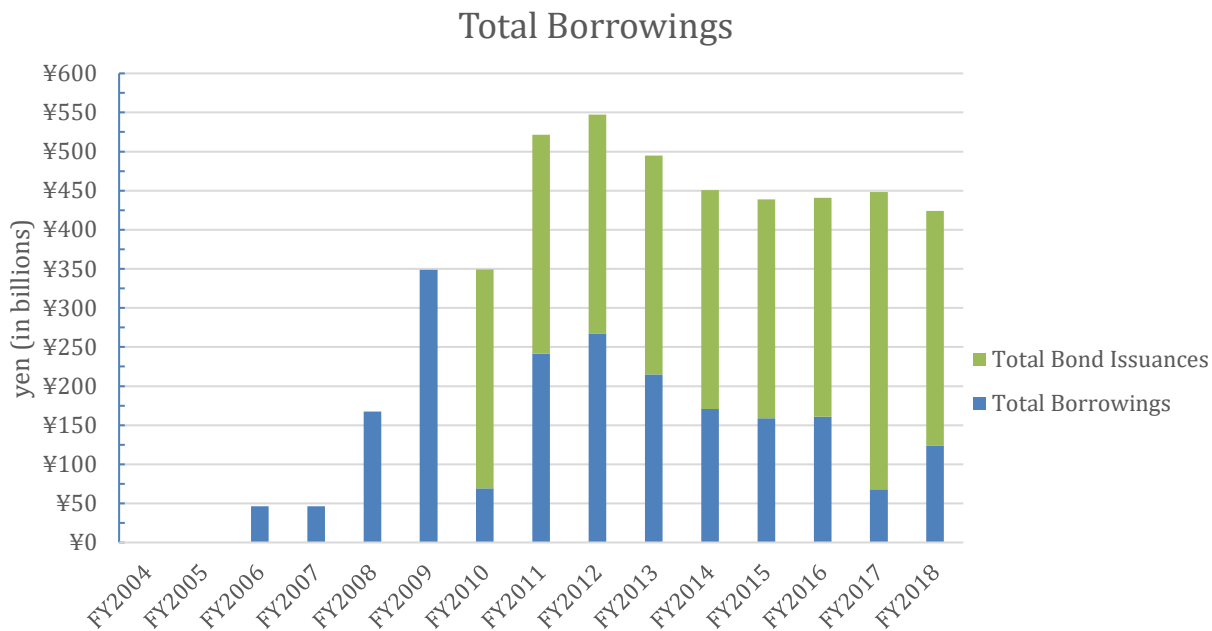
The FSA was tasked to form the Financial Function Enhancement Examination Committee (FFEEC)⁹ to assess applications and oversee the implementation of the plans for the recapitalization (Law Text, Article 48). The committee consisted of members appointed by the Prime Minister, all serving part time, with members serving three year terms (Law Text, Article 49, 51). The FSA shared FFEEC meeting minutes publicly three years after the committee met (FFEEC #1, 5). The committee has met 24 times over the span of the still-ongoing recapitalization (FSA FFEEC Website).

The Resolution and Collection Corporation (RCC) was created as a merger between the Housing Loan Administration Corporation and the Resolution and Collection Bank on April 1, 1999 (DICJ Website), under the Financial Revitalization Act (RCC Brochure, pg 12). The RCC was funded entirely by the DICJ (RCC Brochure, pg 1). The RCC was a subsidiary of the DICJ (DICJ Website on Subsidiaries). The DICJ acts independently of the Bank of Japan or the Treasury, though in close cooperation (FSB 2016, pgs 13, 24). Financial assistance from the DICJ is funded through the issuance of government-backed DICJ bonds (FSB, 2016, pg 8). In rare instances, the DICJ may borrow money directly from the Bank of Japan (FSB 2016, pg 24).

In this recapitalization, the DICJ funded the capital injection with a mixture of DICJ bond issuances, Bank of Japan borrowings, and borrowings from other financial institutions. The DICJ issued a combination of 2- and 4-year bonds for this capital injection (DICJ AR 2018, 81). The extent to which DICJ funded the recapitalization from either source is shown in Figure 5 below.

⁹ This committee has also been referred to as the "Banking Function Reinforcement Study Council" and the "Examination Committee for Strengthening Financial Functions."

Figure 4. Total borrowings by funding source.



Note: the Japanese fiscal year begins April 1 of each calendar year and ends on March 31 of the following year.
 Source: DICJ Annual Reports (FY2004-FY2018)

The Resolution and Collection Corporation (RCC)¹⁰, a subsidiary of the DICJ, was responsible for managing the capital and making purchases determined by the FFECC (DICJ AR 2018, 37). Funded by the DICJ, the RCC purchased either preferred stocks, subordinated bonds and debt, preferred investments, or trust beneficiary rights from the financial institutions that applied for capital injections under the new scheme (DICJ Website; Hoshi and Kashyap, 2010, 409).

6. Originally, there were no constraints on financial institutions for eligibility; later, financial institutions were required to show the benefits of their operations for small and medium enterprises and regions effected by the Great East Japan Earthquake.

Unlike previous recapitalizations, the government provided no requisite capital ratio for banks to receive injection, nor were there requirements on systemic importance (Law Text, Hoshi and Kashyap 2010, 409). Any domestic or foreign bank was eligible for capital injection; however, no foreign banks participated (Law Text, Article 2; DICJ Website: Capital Participation)

¹⁰ For more information regarding the RCC and its operations, please refer to the “Resolution and Collection Corporation” caservention, authored by Mallory Dreyer (2019).

The law did not require the participation of any banks. It did allow the participation of specific nonbanks, listed explicitly: Norinchukin Bank, the Long-Term Credit Bank, The Federation of Agricultural Cooperatives, Fisheries Cooperative Association, and the Federation of Fisheries Processing Cooperatives. The law also allowed the participation of shinkin banks, labor unions, credit cooperatives, and bank holding companies ([Law Text, Article 2](#)).

After the collapse of the Lehman Brothers on September 15, 2008, the Japanese government proposed the Comprehensive Immediate Policy Package to Ease Public Anxiety, with fears over how global economic events might cause credit withdrawals from SMEs by banks undergoing a credit crunch ([Prime Minister Speech 2008/09/29, Yamori et al 2013, 78](#)). Part of this package involved utilizing the existing recapitalization program to scheme target the growth of SMEs ([Some Government Source; FSA Speech 2012](#)). In the new iteration of the program, the facilitation of credit to SMEs became a special focus in management plans submitted ([DICJ AR 2018, 121](#)). The amendment extended the period for application from March 31, 2008 to March 31, 2012([Amendment Text, Article I](#)).

Following the Great East Japan Earthquake, the Diet passed an amendment to the existing recapitalization legislation with special clauses for regional institutions supporting the revitalization of areas affected by the earthquake ([ASFF Amendment Text](#)). In this amendment, the Japanese government extended the application period for capital injection, in addition to creating special treatment for those institutions impacted by the Great East Japan Earthquake ([DICJ AR 2018, 121](#)).

In particular, the amended legislation created an opportunity for cooperative financial institutions to apply for capital injection jointly with the cooperative central financial institution ([DICJ AR 2018, 121](#)). The law now required cooperatives to submit management enhancement plans, rather than optional submission before ([Amendment Text, Article 18](#)). Additionally, the law added an additional requirement to satisfy an additional set of measures to support SMEs of areas affected by the Great East Japan Earthquake ([Amendment Text, Article 10-\(II\)](#)). If cooperative central financial institutions were reapplying under the new capital injection, they were required to apply for trust beneficiary rights as well as submit a trust agreement ([Amendment Text, Article 11-\(2\)](#)).

In 2016, after a summit of the G7, each country was tasked to prepare for financial stability that could result from Brexit. On September 26, 2016, the Prime Minister's office proposed the final amendment to the act to prepare for the risks of Brexit by continuing to support the growth of SMEs ([Prime Minister's Press Conference 2016/09/26](#)).

7. The underwriting terms of capital injections were proposed by financial institutions through the application's management plan. The Financial Functions Enhancement Examination Committee debated these terms before making a recommendation on equity or debt purchasing.

The capitalization terms were decided on a case-by-case basis ([DICJ Website: Capital Participation](#)). Terms were proposed by applicant institutions via management plans, which were then considered by the FFECC ([Management plan application, Management](#)

Plans 2, 3, 4, 6, 7, 8, 10, 11, 15). The FFEEC consisted of members appointed by the Prime Minister, all serving part time, with members serving three year terms (Law Text, Article 49, 51). The FSA shared FFEEC meeting minutes publicly three years after the committee met, in addition to summarized versions of proposed management plans and (FFEEC #1, 5, FFEEC Minutes Website). The committee has met 24 times to date (FSA FFEEC Website).

It appears that financial institutions proposed granular terms of plans—including repayment dates, dividend rates, and instruments used for injection—to be accepted or rejected by the FFEEC. These terms were presented to members of the FFEEC in committee meetings and then approved. There appear to have been no rejections of financial institution applications at any point, including revisions to management plans after plan periods ended.

Management plans were evaluated along several criteria, listed in Figure 6 below.

Figure 5. Evaluation Criteria for Management Enhancement Plans¹¹.

Category	Evaluation Strategy	Notes
Strategies for Achieving Goals	<ul style="list-style-type: none"> - Streamline operations - Dispose of assets unnecessary for operations or unprofitable - Specialize in profitable areas 	
Establishing a Responsible Management System	<ul style="list-style-type: none"> - Appoint new external members to the board - Strengthen the independence of those members 	
Improving the Legal Compliance System	<ul style="list-style-type: none"> - Create a committee of lawyers, certified public accountants, and other third parties specifically to improve compliance with existing laws - Improve the internal audit system 	
Ensuring Objectivity of Management Evaluations	<ul style="list-style-type: none"> - Establish a third-party committee to evaluate management - Use performance-based compensation 	Note that cooperatives should follow management guidance by the central cooperative institution.
Improving Information Disclosure	<ul style="list-style-type: none"> - Improving disclosure each quarter - Provide clearer and richer information on profits and losses - Increase information on contributions to the regional economy of the financial institution 	
Management Accountability if Goals are not Achieved	<ul style="list-style-type: none"> - Providing a clear statement that management will retire 	

¹¹ Google and author’s translation.

Defining Management and Shareholder Liability

- Noting the representing officer submitting a request for capital will resign immediately if the FFEEC decides to give capital to the financial institution
- Clarifying the financial institution will not request the underwriting of any shares until management has resigned

Facilitating Credit Provision and Revitalization of Regional Economies

- Providing two or more indicators to show the status of contributions to the regional economy
- Calculating actual or expected results during the implementation of the management plan
- Describing the basic approach to smoothing credit provision

(a) One indicator must be the ratio of the number of regional business partners to the total number of business partners that a financial institution has.
 (b) If a financial institution is operating in multiple regions and approaches differ with each region, write each approach.

Share Underwriting

- Stating the amount, content, and timing of the underwriting terms

Source: [Management plan application](#).

The requisite information on underwriting terms were also evaluated, shown below in Figure 2.

Figure 6. Evaluation Strategy for Proposed Share Underwriting.

Category	Evaluation Strategy
Stock	<ul style="list-style-type: none"> - Type, total paid-in capital, number of shares issued, paid-in capital, issuing method, and non-capitalized shares - "the contents listed in each item of article 108, Paragraph 1 of the Companies Act" - the number of voting rights and percentage of voting rights of all shareholders who have voting rights - the right to receive the total allotment of shares and the right to request conversion of those shares
Subordinated Bonds	<ul style="list-style-type: none"> - Total amount of bonds, interest rate, redemption method and time limit, interest payment method and time limit, details of subordinated special agreements, etc.
Preferred Investments	<ul style="list-style-type: none"> - Type, total amount paid, number of units issued, amount paid, method of issuance and non-capitalized amount - "Contents listed in Article 5, Paragraph 1, Items 2-4 of the Act on Priority Investment of Cooperative Financial Institutions"

Subordinated Loans

- Borrowing amount, interest, method and term of repayment of the principal and interest payments, details of the special agreement, etc

Source: [Management plan application](#).

The application also required banks to submit their capitalization status, as well as balance sheet information, for evaluation ([Management plan application](#)).

While the FFEEC did not explicitly require increased SME lending as part of the original application for capital injection, the FFEEC evaluated organizations along this criterion before the amendment to the legislation in 2008 ([FFEEC #2, 5](#)).

Ultimately, the FFEEC utilized a combination of preferred shares, subordinated debt, priority investment, and trust beneficiary rights for capital injection through the multiple injection windows ([DICJ Website: Capital Participation](#)). A detailed table listing of the terms for capital is available in a source here.

Preferred shares had mandatory conversion dates to common shares, while trust rights ranged in period length from 10 years to 25 years, though the terms were extendable ([DICJ Website: Capital Participation](#)). In an assessment of a previous recapitalization, Kanaya and Woo write if the FSA was dissatisfied by progress in restructuring for a specific bank, it could convert the shares to common shares and use its position as largest shareholder to put pressure on management ([Kanaya and Woo, 2000, 32](#)). The RCC noted that it was able to exercise its rights as a shareholder and investor, although available information doesn't clarify to what extent the RCC exercised those rights ([RCC Brochure](#)).

8. The law constrained management appointments as well as required specific board appointments in order to receive capital. It did not constrain shareholder compensation.

In the original, stricter version of management plans, the government required the highest levels of management to resign upon receipt of capital injection. In addition, external board members were required to be appointed if they weren't already part of the board ([Management plan application](#)). Later, the government could request members of the board or management to resign only if the financial institution's capital ratio was below 4% when the institution applied for capital injection ().

The government required preferred shares to not be subordinate to other shares, except in cases of dividend distribution ([Cabinet Ordinance 25-\(I\)B\(B\)](#)).

9. Financial institutions receiving preferred shares were required to repay the sums within 15 years of injection; mandatory repayment dates also existed for institutions receiving subordinated debt and trust beneficiary rights.

Banks were expected to reacquire their shares within 15 years of purchase by the RCC ([Cabinet Ordinance 7-B\(II\)](#)). In practice, the mandatory acquisition date for financial institutions varied, with some institutions facing mandatory acquisition dates within 10 years and some firms facing mandatory acquisition dates 25 years after injection ([DICJ Website: Capital Participation](#)). Additional variance occurred in trust periods, with some

firms receiving 10-year periods and some firms receiving 25-year periods, though all were extendable (DICJ Website: Capital Participation). For those with 10-year periods, the allocation required they receive an additional approval for management plans (DICJ Website: Capital Participation, Note 4). Injection through preferred investments have no explicit exit date, with each preferred investment a preferred perpetual investment (DICJ Website: Capital Participation).

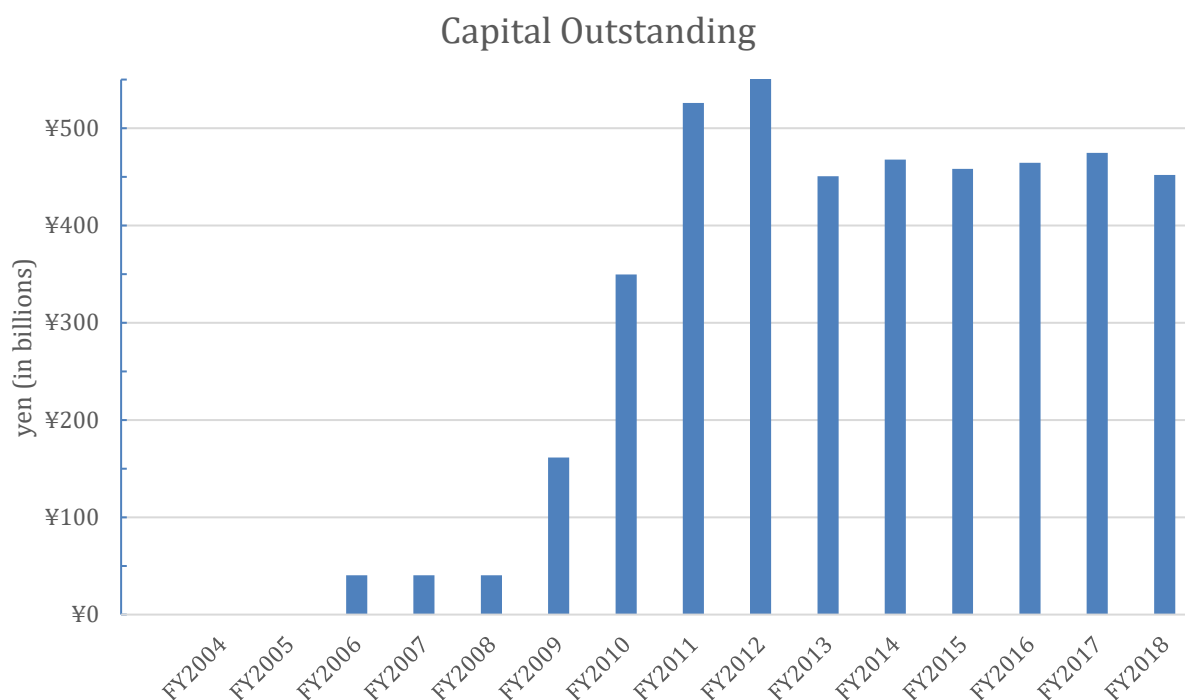
To date, five of the thirty institutions participating in the injection have repurchased shares or repaid their subordinated debt, and one institution as partially repaid the injection (DICJ Website: Capital Participation).

10. Financial institutions receiving preferred shares were required to repay the sums within 15 years of injection; mandatory repayment dates also existed for institutions receiving subordinated debt and trust beneficiary rights.

The government released an Economic Policy Measure Package, named “Seikatsu Taisaku,” on October 30, 2008. As a part of this measure, the government decided to loosen the capital adequacy ratio regulation to tackle the global financial crisis. This measure was scheduled to end by March 31, 2012 (but was extended further). Prior to the relaxation of standards, domestic capital adequacy regulations required financial institutions to deduct 60% of valuation losses of “other available-for-sale securities” from capital. After the change to capital adequacy calculations, banks could choose to not deduct any valuation losses of “other available-for-sale securities” from the capital. As securities prices sharply decreased during the crisis, many banks suffered huge valuation losses of securities in their portfolio. Therefore, without this measure, the regulatory capital ratio of these banks would have fallen substantially (FSA Newsletter Dec 2012, 3-4).

Evaluation

The RCC has not recovered a majority of capital injected through the act. To date, financial institutions have repaid ¥200.5 billion in injected capital, leaving ¥474.34 outstanding of the total ¥674.84 billion injected (DICJ Website: Capital Participation), as seen in Figure 8 below.

Figure 7. Amount Outstanding from Capital Injection.

Note: the Japanese fiscal year begins April 1 of each calendar year and ends on March 31 of the following year.

Both Kiyo Bank and Howa Bank—the two regional banks that participated in the first recapitalization—repurchased the preferred shares from their capital injection ([DICJ Website: Capital Participation](#)). Both banks are still operational today ([Kiyo Bank Website](#), [Howa Bank Website](#)).

In response to the global financial crisis, the first amendment of the program focused specifically on SME lending. Under this amendment, the government injected ¥309 billion yen ([DICJ Website: Capital Participation](#)). Ogawa and Tanaka assess the behaviors of SMEs exposed to demand-side shocks during the global financial crisis, finding that firms with strong main-bank lending relationships experienced cushioning from shocks in comparison to firms that did not receive loans from a primary bank ([Ogawa and Tanaka 2012](#), 16). Additionally, they find that the capital injection under the amendment to the capital injection legislation acted to strengthen the role of financial institutions as a buffer against shocks ([Ogawa and Tanaka 2012](#), 16).

Utilizing a separate methodology on the same dataset, Ono and Uesugi find that the main-bank relationship allowed SMEs to cope with demand shocks during the financial crisis ([Ono and Uesugi 2014](#), 37). However, SMEs without strong main-bank relationships actually faced tightening of lending from “transactional” lenders—lenders that did not participate in firm-bank relationships ([Ono and Uesugi 2014](#), 37).

Nearly half of the capital injection under the ASFF took place under the second amendment, written to help the economic revitalization of regions affected by the Great East Japan

Earthquake ([DICJ Website: Capital Participation](#)). Two years after the earthquake, tourism numbers had reached levels consistent with pre-earthquake numbers ([Ministry of Foreign Affairs](#)). Economic growth in renewable energy, manufacturing, agriculture, and tourism has led to a recovery of the area ([Zhang et al, 2019, 10](#)).

While the final iteration of the amendment was intended to combat financial stability risks that could emerge from Brexit, banks were recapitalized under this amendment twice before Brexit occurred ([DICJ Website: Capital Participation](#)). It remains unclear the extent to which regional banks will utilize capital injections under this amendment once Brexit is fully implemented.

From the beginning of the Asian Financial Crisis to present, this capital injection framework is the longest-lasting capital injection framework in Japan. Predecessor capital injection frameworks were utilized for one to three years after legislation passed ([DICJ Website: Capital Participation FFSA](#), [DICJ Website: Capital Participation PRA](#)). In comparison, the framework underlying the ASFF has been utilized actively for 12 years, and has been extended to cover 18 years ([Amendment Text, Article 1](#)). However, to date, the government injected only ¥684 billion of the available ¥12 trillion yen for capital injections ([DICJ Website: Capital Participation](#)).

References

Adams, Charles, Robert E. Litan, and Michael Pomerleano, eds. *Managing Financial and Corporate Distress: Lessons from Asia*. Washington, D.C.: Brookings Institution Press, 2000. <http://www.jstor.org/stable/10.7864/j.ctvdf0k8s>.

Enoch, Charles. "Interventions in Banks During Banking Crises: The Experience of Indonesia." In *Bank Restructuring and Resolution*, edited by David S. Hoelscher, 329-347. International Monetary Fund Monetary and Financial Systems Department, 2006.

Enoch, Charles, Barbara Baldwin, Olivier Frécaut, and Arto Kovanen. "Indonesia: Anatomy of a Banking Crisis; Two Years of Living Dangerously, 1997-99." *IMF Working Paper 01/52* (2001). <https://www.imf.org/external/pubs/ft/wp/2001/wp0152.pdf>.

Fane, George, and Ross McLeod. "Banking Collapse and Restructuring in Indonesia, 1997-2001." *Cato Journal*, vol. 22(2) (2002): 277-295. <https://object.cato.org/sites/cato.org/files/serials/files/cato-journal/2002/11/cj22n2-6.pdf>.

Fung, Ben, Jason George, Stefan Hohl, and Guonan Ma. "Public asset management companies in East Asia Occasional Paper No. 3." *Bank for International Settlements Financial Stability Institute*, (2004).

WP: Fung, Ben, Jason George, Stefan Hohl, and Guonan Ma. "Public asset management companies in East Asia Case Studies." *Bank for International Settlements Financial Stability Institute*. <https://www.bis.org/fsi/fsipapers03cs.pdf>.

Guerin, Bill. "Indonesia's Cycle of Subservience to the IMF." *Global Policy Forum*, September 10, 2002, <https://www.globalpolicy.org/component/content/article/209/42999.html>.

IMF 1997: “Letter of Intent of the Government of Indonesia.” Mar’ie Muhammad Minister of Finance and J. Soedradjad Djiwandono Governor, Bank of Indonesia to Mr. Michel Camdessus. October 31, 1997. Jakarta, Indonesia.

<https://www.imf.org/external/np/loi/103197.htm>.

Irigoyen, Claudia. “Banking Reform in Indonesia.” Centre for Public Impact (CPI). June 6, 2017. Accessed April 17, 2019. <https://www.centreforpublicimpact.org/case-study/banking-reform-indonesia>.

Lindgren, Carl-Johan, Tomás J.T. Baliño, Charles Enoch, Anne-Marie Gulde, Marc Quintyn, and Leslie Teo. “Financial Sector Crisis and Restructuring: Lessons from Asia.” *International Monetary Fund Occasional Paper*, no. 188 (1999): 1-103.

<https://www.imf.org/external/pubs/ft/op/opFinsec/op188.pdf>.

Omori, Sawa. “The Politics of Financial Reform in Indonesia: The Asian Financial Crisis and Its Aftermath.” *Asian Survey* 54, no. 5 (2014): 987-1008. doi:10.1525/as.2014.54.5.987.

<https://www.jstor.org/stable/pdf/10.1525/as.2014.54.5.987.pdf>.

Pangestu, Mari. “The Indonesian Bank Crisis and Restructuring: Lessons and Implications for other Developing Countries,” United Nations Conference on Trade and Development, G-24 Discussion Paper Series, Vol. 23 (2003).

<https://ideas.repec.org/p/unc/g24pap/23.html>.

Resosudarmo, Budy P., ed. *The Politics and Economics of Indonesia’s Natural Resources*. ISEAS-Yusof Ishak Institute, 2005.

Root, Gregory, Paul Grela, Mark Jones, and Anad Adiga. “Financial Sector Restructuring in East Asia.” In *Managing Financial and Corporate Distress: Lessons from Asia*, edited by Adams Charles, Litan Robert E., and Pomerleano Michael, 149-222. Washington, D.C.: Brookings Institution Press, 2000. <http://www.jstor.org/stable/10.7864/j.ctvdf0k8s.9>.

Sharma, Shalendra D. “Beyond Crony Capitalism: From Banking Crisis to Financial Crisis in Indonesia.” *Asian Journal of Social Science* 30, no. 2 (2002): 384-419.

<http://www.jstor.org/stable/23654712>.

Sharma, Shalendra D. “The Indonesian Financial Crisis: From Banking Crisis to Financial Sector Reforms, 1997-2000.” *Indonesia*, no. 71 (2001): 79-110. doi:10.2307/3351457.

Key Program Documents

Summary of Program

- [Banking Reform in Indonesia \(Irigoyen 2017\)](#) – Case study by Boston Consulting Group’s Center for Public Impact that examines banking reform in Indonesia. <https://www.centreforpublicimpact.org/case-study/banking-reform-indonesia>.

Legal/Regulatory Guidance

- Financial Sector Policy Committee (FSPC) Decree No KEP 01/K.KKSK/05/2002 – A decree by the Indonesian government’s Financial Sector Policy Committee stipulating that all restructuring agreements under IBRA were to be completed in 6 months as of May 13, 2002, at which point any remaining loans would be transferred to a disposal program.
- Crisis-Driven Changes to the Banking Laws and Regulations (McLeod 1999) – A short paper published in the *Bulletin of Indonesian Economic Studies* that provides an overview of changes to the banking laws and regulations during the time of the crisis. <https://ideas.repec.org/a/taf/bindes/v35y1999i2p147-154.html>.

Press Releases/Announcements

- Letter of Intent of the Government of Indonesia (Muhammad and Dijiwandono 1997) – Letter from the Indonesian Minister of Finance and the Governor of BI outlining policies the Indonesian government intended to implement in order to receive financial assistance from the IMF. <https://www.imf.org/external/np/loi/103197.htm>.

Media Stories

- Indonesia’s Cycle of Subservience to the IMF (Guerin 2002) – Newspaper article initially published in the *Asia Times* detailing the Indonesian government’s relationship with the IMF during the Asian Financial Crisis. <https://www.globalpolicy.org/component/content/article/209/42999.html>.

Reports/Assessments

- Interventions in Banks During Banking Crises: The Experience of Indonesia (Enoch 2006) – An analysis of the effectiveness of Indonesian banking reform during the Asian Financial Crisis by an IMF staffmember. <https://www.imf.org/en/Publications/IMF-Policy-Discussion-Papers/Issues/2016/12/30/Interventions-in-Banks-During-Banking-Crises-The-Experience-of-Indonesia-3523>.