

Essential Countermeasures for Bank Runs: Lesson from Case Studies in Japan

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Abstract

Since the middle of 2007, many bank runs have been reported overseas. Such bank runs will happen in Japan in the near future. Bank runs have actually happened several times in the past, and represent large risks and threats for financial institutions. In this paper, first we introduce case studies of bank runs in Japanese financial institutions that happened in the past. Next, we briefly summarize and discuss the generating mechanism of bank runs and then discuss the countermeasures and policies that financial institutions took from cases of bank run. To avoid bank runs in the future, the authors insist on the importance of adequate (ex-ante and ex-post) financing judgment, strict compliance, and adequate management such as BCM (business continuity management).

Key Words: *Bank Run, Risk Management, BCP*

JEL Classification: N25, G21, G32

1. INTRODUCTION

There is a sub-prime loan problem as the topic that made a flutter after 2007. This influenced not only US economy, but also the world one, and invited financial turmoil to the market. For instance, it is new in the memory that depositors gathered in front of the Bank of Northern Rock in London to withdraw their deposits, and they caused the bank run. Thus, when the problem occurs by one degree while a globalization of the finance and economy, and a rapid advanced information society progress, we will be exposed to financial turmoil. On the other hand, if the financial institution cannot respond

appropriately, it will be driven in to failure in the worst case¹.

Such bank runs have happened all over the world. There are a lot of bank runs that cause the credit crunch of each financial institution. On the bank run that has taken place on each financial institution in Japan, a number of cases are attributable to management misconduct or credit insecurity arising from poor business performance. Some, however, occur due to rumours, hearsay, or damage by natural disasters. There are many case studies in the literature that examine bank runs on financial institutions. Some Japanese representative cases from these are taken up and discussed in this paper.

The object of this paper is to introduce and systematically categorize cases of bank runs on financial institutions in Japan and countermeasures taken by those financial institutions. Additionally, we presented here important factors for financial institutions from a risk management viewpoint. In this paper, a bank run is defined as “the phenomenon whereby credit insecurity, due to some specific reason, among customers of financial institutions induces the customers to rush to those institutions to cancel deposit contracts and withdraw cash.”

This paper is organized as follows. In section 2, representative cases of historical bank runs in Japan are examined and reviewed. In Section 3, the cases of bank runs are classified and arranged by causative factors. In Section 4, ex-ante and ex-post countermeasures against bank runs are arranged from the viewpoint of risk management, and suggestions for appropriate risk management are given. In the final section, important factors in countermeasures taken by financial institutions to prevent bank runs are presented alongside future works.

2. CASE STUDIES OF BANK RUN IN JAPAN

There are many factors that can trigger bank runs. In this paper, cases of bank runs in Japan are introduced in chronological order and the mechanism by which they occurred is discussed.

2.1. Main cases of bank runs in Japan

2.1.1. Tokyo Watanabe Bank

Tokyo Watanabe Bank was one of the many banks to become bankrupt during the Showa financial crisis, and offers one case that illustrates how a bank run can be triggered. Refer to Ando

¹ In this paper, the term “financial institutions” has a broad meaning that encompasses banks, trust banks, shinkin banks, credit cooperatives, other depository financial institutions, securities companies, and insurers. For readers, the authors explain the difference of shinkin bank and credit cooperative here. The shinkin bank is a financial institution that is established based on the shinkin bank act, and makes the manager and worker of the small and medium-sized enterprise a member. If it is 20 % or less of total lending, it is possible to lend it excluding the member though lending is a member as a rule. The credit cooperative is a financial institution of the cooperative organization that the manager of small and medium-sized enterprise and the worker in the limited district establish. It is possible if it is within 20 percent of the total deposit or the total lending even if it is possible except the member.

(1963), Arisawa (1980) and Goto (1990) on the detailed subject of Tokyo Watanabe Bank.

During a meeting of the House of Representative Budget Committee to discuss two “earthquake bill” laws (*Shinsai Tegata Seiri Ho*) in March 1927, a verbal slip by the Minister of Finance, Naoharu Kataoka caused a run on Tokyo Watanabe Bank that drove it to bankruptcy. At that time, Tokyo Watanabe Bank was at a loss because of financing but management was continued. An underlying cause of the financial crisis was the moratorium on payments imposed by the government following the Kanto great earthquake. After the moratorium was lifted, it was necessary to begin planning ways to provide essential aid to commercial and industrial firms and banks that had been damaged. Through the “earthquake bill loss compensation” act (*Shinsai Tegata Waribiki Hosyo Rei*), ones recognized as earthquake bills could be discounted at banks, then re-discounted by the Bank of Japan. Most firms were rescued through earthquake bill loss compensation act; however, misuse of the earthquake bill system by financially struggling firms with frozen assets largely delayed recovering the bills. Then, the recovering had not advanced at all in those bills. Because of the arrangement of the earthquake bill, the government brought in a countermeasure. In the procedure, it revealed that banks possessed a large amount of the earthquake bill. Therefore, bank run started dully in the corresponding bank. The Minister of Finance’s remark became bank run beginning under such a situation, and it connected with the financial panic. Between only March and April, 1927, thirty two banks were forced to suspend operations. When depositors received rumour that a part of deposits in these banks had been written off due to bankruptcy, the bank run began².

2.1.2. Toyokawa Shinkin Bank

Toyokawa Shinkin Bank was one of the cases that rumour triggered bank run.

According to Hayashi (2007), the story is the following. The Shinkin Bank was actually under sound management. However, jokes about the Shinkin bank that high school girls made generated a reputation as being ill-managed in the process. Then, the rumour caused bank run. Later, Aichi prefectural police investigated how the rumour propagated and caused the bank run. According to the reports, a false rumour spread from the conversation at first one after another, and bank run at the shinkin bank was generated five days later. This resulted in total losses of around 2 billion yen for the bank. At the Kozakai branch office of Toyokawa Shinkin Bank alone, 490 million yen was withdrawn in 1650 transactions. The head of Tokai Bureau of Finance and Nagoya General Manager at the Bank of Japan jointly guaranteed sound management, therefore bank run was settled. This case illustrates how a bank run can be caused when a false rumour originating in a conversation between high school girls spreads to depositors.

2.1.3. Toyo Shinkin Bank

Toyo Shinkin Bank is one of the cases that the misconduct led to its bankruptcy. Refer to

² As a result, deposits moved from the small and medium sized banks to the five major banks; Mitsui, Mitsubishi, Sumitomo, Yasuda, Daiichi.

Hashimoto (2001), and Deposit Insurance Corporation of Japan (2007).

In August 1991, the Imazato branch manager of Toyo Shinkin Bank and the proprietor of a traditional Japanese restaurant, “Egawa”, conspired to issue fake deposit certificates. They used them as collateral to obtain fraudulent loans of approx 350 billion yen from the non-bank banking sector. They were later arrested for conspiracy to forge a private document.

The proprietor of restaurant had taken advantage of a boom in money management to amass a fortune; however, the stock prices dropped with the burst of the economic bubble in Japan. Under the situation, she prompted to fill the gaps made in her fortune by soliciting a branch manager of the shinkin bank to assist her with forgery. The 350 billion yen of counterfeit time-deposit certificates that appeared on the market nearly equalled the total funds held at the shinkin bank. When depositors found out about the incident, bank runs began on various branches. After then, Toyo Shinkin Bank was broken up and restructured as a result of this incident, with the Sanwa bank inheriting management rights to five branches of Toyo Shinkin Bank. The remaining twenty-five branches of the shinkin bank were handed over, along with their employees, to other shinkin banks in Osaka prefecture. During the processing of the bankruptcy, only protection in the range of deposit insurance cost was admitted. The Industrial Bank of Japan and Fuji Bank helped to settle the disorder somewhat by abandoning some of their claimable assets³.

2.1.4. Tokyo Kyowa Credit Cooperative and Anzen Credit Cooperative

Tokyo Kyowa Credit Cooperative and Anzen Credit Cooperative are the cases that the excessively financing led to its bankruptcy. Refer to Nihon Keizai Shimbun (2000), and Kitazawa (2001).

The two cooperatives had long been lent to the EIEI International (EIEI) group. During the bubble economy, the president at EIEI had built a corporate group with assets of one trillion yen as a result of the development of massive recreational facilities. Support up to this point had come from the former Long-Term Credit Bank of Japan (LTCB); however, after the bubble burst, the support was cut. After then, EIEI looked to its parent cooperatives to plug the funding gaps. The president of EIEI, also the administrative director of Tokyo Kyowa Credit Cooperative, invested huge amounts of funding into a corporation that he himself ran, and financed golf course development and other ventures. The EIEI group required Tokyo Kyowa Credit Cooperative and Anzen Credit Cooperative to excessively finance. As the result, approximately 50% of the total amount lent by the two cooperatives was to the EIEI group, and recovery of this funding was feared. After the fact was revealed, Tokyo Office of Finance promptly set about providing guidance for management reform in September 1994. In addition, Approximately 160 billion yen of funding was required to process

³ With the 1996 revision to the Deposit Insurance Act, financial assistance exceeding the deposit insurance cost became possible up to March 31, 2001. After then, Deposit insurance cost was implemented in FY2005, however capital of 10 million yen plus interest per person was guaranteed.

these bankruptcies. After the bankruptcy, he received a jail sentence for breach of trust. Furthermore, in the processing of the bankruptcy of the two cooperatives, Tokyo Kyodo Bank was established to take on board the cooperatives' normal credit, while non-recoverable bad debt was bought up by Cooperative Credit Purchasing Co.

2.1.5. Kizu Credit Cooperative

Kizu Credit Cooperative is one of the cases that can be attributed to rapid deterioration of the business by the real-estate-specific financing strategy of the management. Refer to Nihon Keizai Shimbun (1996, 2000), Kitazawa (2001), Hattori (2003).

Kizu Credit Cooperative began in 1953 as a financial institution for the wholesalers in Kizu market, Osaka. By repeating to merge with other credit cooperatives, the scale of loans and bills discounted of Kizu Credit Cooperative had grown to be one trillion yen by 1995. The cooperative employed the aggressive management in the bubble period. However, after the bubble period, Osaka Prefecture Office of Finance revealed that bad loans are 83% of its total loans and then commanded Kizu Credit Cooperative to suspend all business except payment of deposits in August 1995. When news of the suspension of business order broke, depositors rushed to the cooperative. These scenes were very often shown on the television news and induced anxiety about withdrawal of their deposits. In addition, Kizu Credit Cooperative was also known for bringing in referral deposits from major banks to rapidly increase its assets. After receiving guidance from financial authorities regarding excessive referral deposits, the major banks quickly pulled out their deposits. Finally, Kizu Credit Cooperative fell into bankruptcy. Following the cooperative's bankruptcy, Osaka Prefecture Office of Finance also revealed the situation of the excessive loans to non-members and excessive deposits from non-members.

2.1.6. Sanyo Securities

Sanyo Securities is the first listed security company to go bankrupt and the first in history to default on the short-term credit market. In the details of bankruptcy of Sanyo Securities, refer to Nihon Keizai Shimbun (1998) and Takahashi (1999).

Despite Sanyo Securities was the 7th largest second-tier securities company in Japan, rumours began to spread about a management crisis, and its stock price began to plummet around 1997. Customers continued to withdraw their assets in custody, and fund-raising operations met with difficulty. Credit insecurity, both inside and outside the company, began to spiral out of control. Consequently, a request was made under the Corporate Rehabilitation Law on November, 1997. However, Sanyo Securities went bankrupt and the first in history to default on the short-term credit market. In this case, the main reason is that the expansionist strategy of the second-generation president backfired on the company.

When dealing with the failure of Sanyo Securities, the former Ministry of Finance recommended suspension of all business except restitution of customers' assets to prevent confusion among

investors. After then, the Deposit Bond Guarantee Fund (*Kitaku Shoken Hosho Kikin*) that had been established as safety net for securities companies supported more than the limit to protect customers' assets.

2.1.7. Hokkaido Takushoku Bank

Hokkaido Takushoku Bank is a case that a nation-wide bank in Japan went to bankrupt at the first time. Refer to Kitazawa (2001) and the Hokkaido Shimbun Press (2008).

Hokkaido Takushoku Bank established in 1900 under the Hokkaido Takushoku Bank Law, then became an ordinary bank in 1950. Hokkaido Takushoku Bank was a noted bank with significant power over the Hokkaido economy in Japan. Having failed to expand substantially during the bubble era, the bank rapidly began to finance real estate and invest in newly established companies. But, these strategies lead Hokkaido Takushoku Bank to go bankrupt. In the process, the bank was influenced by centralization of power within a limited number of staff, reckless behaviours on the part of affiliated non-bank financial institutions, and problem incidents in real estate. With the decline of the key industries of Hokkaido, the bank attempted to promote start-up companies and advance to the Tokyo area. But, the bank came to pile up the bad debt. In 1994, the bank was designated a "regulated bank" (*Kessan Shonin Ginko*) by the former Ministry of Finance and continued net losses afterwards. With information circulating that the bank was substantially bankrupt, deposits were cancelled. Then, the business of bank was unable to continue by itself. Though the amalgamation with the Hokkaido Bank was examined, an agreement was not obtained. During this time, deposits continued to vanish, and fund raising became increasingly problematic. On November, 1997, it became impossible to obtain funds from the call market, and Hokkaido Takushoku Bank could no longer make up the reserve fund deficit at the Bank of Japan. As a result, plans for independent reconstruction had to be abandoned. At that time, the Bank of Japan provided special funding which was used to make ready cash at all the bank's branches to prevent bank run. This bankruptcy gave the serious effect in the Hokkaido economy. After, bank's assets were handed over to North Pacific Bank and Chuo Trust and Banking (now Chuo Mitsui Trust and Banking).

2.1.8. Yamaichi Securities

Yamaichi Securities was one of four major Japanese securities companies in 1990's, and its bankruptcy was paid to attention. Refer to Kitazawa (2001) and Kawahara (2002).

Yamaichi Securities was established in 1887 as Koike Kunizo Shoten before changing its name to Yamaichi Securities in 1943. The firm, faced with a grave situation in 1965 with the heavy fall in stock prices, was rescued by a special injection of funds from the Bank of Japan. However, when the Ministry of Finance prohibited handling of corporate investment funds in 1990s, Yamaichi Securities mistook the correspondence. Around this time, the loss compensation problem to big customers was reported by newspapers and senior figures in major securities companies except Yamaichi Securities resigned. Yamaichi Securities made a declaration to the effect that they did not compensate for any

losses, however it was later revealed that they had been hiding bad loans in off-balance window-dressing called “*tobashi*” schemes⁴. In the bubble period, processing of bad debt accumulated by affiliated non-banks and worsening performance continued in the securities sector. The firm continued to postpone its undisclosed debts and provide illegal dividends for many years. This created mistrust among banks. Coupled with the serious problems in the firm’s management caused decline in the stock price, this degraded rating of Yamaichi Securities and eventually caused the firm to be locked out of the market. Despite the fact that customers’ assets were protected with special funding from the Bank of Japan, customers queued outside head office and branches of Yamaichi Securities from the early morning of the following day to cancel their contracts.

2.1.9. Long-Term Credit Bank of Japan

This case is failure of the Long-Term Credit Bank of Japan established as a national policy bank. Refer to Yanai (1999), Takeuchi (2008) and Kitazawa (2001).

The Long-Term Credit Bank of Japan was established in 1952 under the Long-Term Credit Bank Act. Along with the changes in the financial environment, the bank increased financing of housing, real estate, leisure, leases, and venture businesses rapidly. As a result, the financing strategy of the bank made the cause of failure in 1990s. The bank also continued to finance real estate through partner firms, which caused it to accumulate bad debt. Seeking to survive, the bank attempted to tie-up with Swiss Bank, however, did not reach mutual agreement with it. At that time, an injection of taxpayers' money to the Long-Term Credit Bank of Japan invited mistrust from the market and the stock price fell accordingly. This situation had a serious negative impact on fundraising efforts at the bank. With bank bond contracts being cancelled, the bank took several precise countermeasures in order to avoid bank run. However, as insecurity article for the management of the bank was published in the monthly magazines, its stock price began to fall. When group corporation LTCB Warburg Securities sold a large volume of its stocks, the stock price of the bank was pushed down even further. In the midst of these situations, plans were formulated to merge with Sumitomo Trust and Banking Company, but negotiations failed. When the bank became unable to repay deposits on October, 1998, it entered special public management under 36th Provision of the Financial Reconstruction Law. In September 1999, the bank was succeeded to an American financial group led by Ripplewood Holdings. The bank changed its name to Shinsei Bank in 2000.

2.1.10 Bank of Saga

Bank of Saga in Saga prefecture, Japan, is an unusual case to cause the bank run by the chain mail. Refer to Hayashi (2007).

In the bank run of the Bank of Saga, the thing that a woman in her twenties threw groundless

⁴ *Tobashi* is the practice of repeatedly handing over bonds and stocks that have fallen in value to partner companies and customers with the condition that they are taken back the following day. If the value of the stocks and bonds fall dramatically, the off balance losses become vast.

e-mail is the beginning. Her e-mail stated that the Bank of Saga would become bankrupt on the 26th, December, 2003. When the original e-mail was passed on to many other recipients, panic ensued among depositors and the bank run began. As the e-mail had stated the bank would become bankrupt on the 26th, a line of around 200 people formed outside the ATMs of the bank by the evening of the 25th. Other depositors who had seen the long line of depositors caused the chain reaction that joined the line. On the day of the bank run, withdrawals were 19 billion yen greater than on the same day of the previous year. The number of actual transactions was 32000 greater. The woman who threw the e-mail of the false rumour was sent the police report on the suspicion of the confidence damage⁵.

2.2. Other cases

2.2.1. Natural disasters

There have been cases of earthquakes causing damage to financial institutions in Japan, with subsequent effects on payment of deposits and payment systems. The struck cases in the Great Kanto Earthquake and the Great Hanshin Earthquake were described here. Refer to Arisawa (1980), Endo (1996) and Shiota (1998).

The Great Kanto Earthquake of September 1st, 1923 destroyed a great many bank branches, and many banks became unable to maintain their operations. The banks that managed to resume operations most rapidly in the Tokyo area did so on September 8th, while the remainder did so from around the 15th to the 20th. During this time, bank customers gathered around their banks, and a certain type of bank run began. Since there was no information system network at that time, customers of bank could only make deposits or withdrawals at one specific branch. Because the loss of the deposit is feared, the customers were eager to see operations resume.

In the Great Hanshin Earthquake on January 17th, 1995, some credit cooperatives that were damaged became temporarily unable to connect to the network of banking industry. Some of the major banks had to halt operations at some branch offices due to destruction of the office itself or fires, but the computer centre had not been affected. So, it was possible for customers to use ATMs at other branches or at other banks. As a result, there were no major problems for customers seeking to settle their accounts. The presence of an ATM network arguably prevented financial panic in sharp contrast to the situation with the Great Kanto Earthquake. In addition, the Chuetsu and other earthquakes were to follow in later years, with major impacts on regional society.

2.2.2. Bank runs due to system failure

System failure is essentially different from bank run, however there are cases of confusion inside banks due to system failure. As long-term failure could potentially cause customers to move their business to another bank, rapid restoration of the system is desirable. Here we will introduce two cases of system failure caused recently. Refer to Nikkei Computer (2002) and Japan Society for Management Information (2005).

⁵ Access URL: <http://medialx.sblo.jp/article/274476.html>

A system failure on January 15th, 2002, the opening day of the newly merged UFJ bank, caused processing of approximately 1750 thousand debit transactions to be delayed. Moreover, around 180 thousand double debits took place. It has been pointed out that the bank's decision to move the initial integration plan forward by three months led to system failure and human error. In contrast to previous cases of integration, the epoch-making attempt was planned in which a new integrated system was to be used from the inaugural day of the merger. The integration work was carried out systematically and rigorously right up to the point before implementation, and then a tiny system error and moment of carelessness brought system failure. Resolving the system problems took approximately one month.

On April 1st, 2002, during the integration of the Mizuho Financial Group's computer system, a system failure brought conflicts to customer transactions. A number of ATMs ceased working, some ATMs refused withdrawals yet debited accounts, scheduled direct debits for public utility bills were left unprocessed (max 250 thousand cases). In addition, public utility bills were double debited (60 thousand cases), money transfers were delayed, double transfers and other such mistaken transfers were performed, and delays were seen in notification of credit. Because the system failure had reached widely, it had a large influence on the society. In the light of seriousness of the incident, the Financial Services Agency issued a business improvement commission under Provision 26 of the Banking Act that instructed Mizuho Group to take improvement and response measures and identify those responsible for the failure.

3. CLASSIFYING THE CAUSES OF BANK RUNS

It is possible to broadly classify bank runs into two groups. The one is a case where management is responsible such as poor business performance, misconduct and system failure. The other is a case where management is not responsible such as earthquakes and other natural disasters and groundless rumours. Table 1 shows classification of cases in the previous section.

In the financial panics of the Showa and Heisei ages, the bankruptcies of numerous financial institutions were essentially attributable to poor business performance. The majority of the financial institutions that became bankrupt after the collapse of the Heisei bubble did so as a result of accumulation of bad debt and poor business performance, subsequent failure to raise funds. As a result, they did eventual voluntary closure or were committed from the authorities to cease business activities. In all such cases, depositors swarmed to their banks either just before or just after the bankruptcy announcement, and bank runs ensued. Bank runs take place not only on depositary financial institutions, but also on securities companies and life insurance companies.

Furthermore, in the case of Toyo Shinkin Bank, after misconduct had had a continued and significant impact on the firm, depositors rushed to the bank to withdraw their deposits and a bank run ensued. Runs on Yamaichi Securities and Tokyo Kyowa Credit Cooperative were due to

combinations of poor business performance and management misconduct. In cases of system failure, breakdown of ATMs caused customers to flood into banks. In addition, when system failures are not handled appropriately, banks may end up losing customers and facing cancelled transactions. Hence, system failure has its own classification in Table 1.

In contrast, there are unrelated risks to management responsibilities. The risks such as natural disaster cause bank run. For example, the earthquakes suspend operations at many branches of financial institutions. If this kind of situation continues over a long period of time, whether or not a bank run occurs would depend on a question of how the situation is handled. Bank runs have at times been caused by verbal slips and false rumours.

Table 1 Classification of bank runs

Classification by cause	Cause	Case	Remarks
Management responsible	Poor business performance	Tokyo Watanabe Bank, Tokyo Kyowa Credit Cooperative, Anzen Credit Cooperative, Kizu Credit Cooperative, Sanyo Securities, Hokkaido Takushoku Bank, Yamaichi Securities, Long-Term Credit Bank of Japan	Bankruptcy after accumulation of bad debt The negligent management
	Misconduct	Toyo Shinkin Bank, Tokyo Kyowa Credit Cooperative, Yamaichi Securities	Poor business performance accompanied management Misconduct
	System failure	UFJ Bank, Mizuho Bank	Panic in banks due to system failure
Non-management responsible	Natural disaster damage	Banks damaged in Great Kanto Earthquake, Great Hanshin Earthquake and Chuetsu Earthquake	
	Verbal slip / rumour	Tokyo Watanabe Bank, Toyokawa Shinkin Bank, Bank of Saga	

4. DISCUSSION FROM A RISK MANAGEMENT VIEWPOINT

4.1. Preventative and remedial countermeasures for bank runs

Table 2 is an overview of preventative and remedial countermeasures for bank runs from a risk management perspective.

Table 2 Preventative and remedial countermeasures from a risk management perspective

Classification	Preventative countermeasure (standard business practice)	Remedial countermeasure	Relevant particulars
Poor business performance	Accurate credit judgement Maintenance of credit/market risk management system Use of financial inspection manual	Countermeasures for wholesome management -Accurate credit management -Strict self-assessment -Maintenance of capital-to-asset ratio -Disclosure and rapid repayment of bad debt -Fundraising for business continuity	Request for movement of a safety net for emergencies Investigation of management responsibility after bankruptcy Smooth risk communication
Misconduct	Internal controls Compliance	Internal and external inspections Disclosure of information	Legal prosecution to person in charge
System failure	Accurate system management Dealing with failures and BCP	Use of system auditing Implementation of BCP Accurate risk communication	Investigation of cause of failure
Natural disaster (earthquake damage)	Determination of BCP Maintenance of disaster relief supplies	Formation of disaster management headquarters Implementation of BCP Accurate risk communication	Special financing Maintenance of payment system
Verbal slip / rumour	Maintenance of operational risk system including education and training Making BCP Use of financial inspection manuals	Formation of disaster management headquarters Implementation of BCP Securing finance Dealing with customers Smooth risk communication	Fund infusion and industry support Support through official bulletins

Note: BCP is an abbreviation of Business Continuity Plan.

Erroneous financing strategies during the bubble periods focused on financing of real estate, housing and leases led to massive amounts of bad debt in the bubble's economy collapse. Optimistic financing judgments caused expansion in credit risk. Examination of these cases suggests that what is required is skill training and education that facilitates careful selection of customers to finance. Furthermore, after financing to customers has begun, it is necessary to manage customers' credit standing and its mortgage. Strict self-assessment of financing is desirable. When various financial institutions were inspected after the bubble era, reports through self-assessment were vastly different from reports through authorities' assessments. These discrepancies had serious consequences for the

financial institutions concerned. The reports of the external examination impacted on the capital-to-asset ratio. At that time, authorities originated an order to rapidly improve or to cease operations for the financial institution. For institutions to be able respond to these recommendations, they need financial strategies that are able to maintain or increase equity capital. Disclosing information on bad loans and rapid redemption are also important points from a management perspective.

Moreover, in cases where financial institutions became bankrupt due to poor business performance, the management responsibility will come into question from both sides of the criminal liability and the civil liability.

There are many lessons to be learnt from cases of bankruptcy in the post-bubble economy. In order to strengthen the safety net, several countermeasures have been considered: the Bank of Japan lends support to financial institutions facing bankruptcy, Deposit Insurance Corporation was maintained and the development of legal systems was also advanced. The Deposit Insurance Corporation acts as a safety net for banks, shinkin banks, credit cooperatives and labour credit associations. Furthermore, up to this point several laws regarding capital injections from public funds were created in line with the financial environment of the time.

Several rules have been laid down for wholesome management of financial institutions, including maintenance of capital-to-asset ratio, strict self-assessment, and their disclosure at early stage. Moreover, a financial inspection manual containing guidance on strengthening internal management has been disclosed.

Arbitrary decisions taken by CEOs (Chief Executive Officer) in a number of financial institutions have given rise to unchecked bad debt and lending irregularities. Therefore, to prevent and remedy misconduct, it is needed to arrange strong internal controls, to strengthen compliance and education. It is important to establish a system of strict auditing involving communication between internal and external auditors.

To prevent mass panic in banks due to system failure, it is required precise management of every aspect about the project of information system. Accordingly, a contingency plan and countermeasures to deal with system failure should be formulated in advance. In addition, system auditing is necessary as the project proceeds. Recently, financial institutions are coming to appreciate the importance of formulating a BCP that allows them to remain operational in times of crisis. Implementation of a BCP when it is necessary can attempt the control of the situation.

When earthquakes or other natural disasters strike, all financial institutions within the region are suffered. Then, a predetermined BCP would afford some protection against the emergency. Therefore, it is vital to put a BCP into operation to ensure rapid recovery. The financial institution plays the important role. Then, each financial institution must cooperate for the maintenance of the payment system.

Finally, countermeasures to counter bank runs caused by verbal slips and rumours must be considered. In the case, customers, staff and the general public fall into the panic because it is a groundless rumour. Therefore, financial institutions must enact rules for dealing with customers and maintaining cash reserves in times of emergency. Accordingly, swift risk communication is essential to make it quietly⁶. Another valid approach is to use official bulletins issued by the authorities. In short, financial institutions should put their BCP into action and work as one concerted unit. Refer to Nagaoka and Takemura (2008) for details about BCPs used in Japanese financial institutions.

4.2. Bank runs and their countermeasures at depositary financial institutions

When a bank run begins, the institution will be affected by liquidity risk. Management of liquidity risk is conducted systematically on a daily basis by the relevant department within the institution; however, in times of emergency, extraordinary and rapid action is required from the viewpoint of the business continuance.

When a bank run begins, customers flood into banks to withdraw deposits and cancel contracts. In the case, withdrawals from savings accounts are made via ATMs. Cancellation of time deposits, however, requires giving notice at teller windows and hence there is a rush to these windows during a bank run. Furthermore, withdrawal of large sums of cash presents serious problems not only because it creates deficits in cash available for payments, but also because it affects the fundraising capacity of the financial institution as a whole.

When the sums withdrawn begin to reach gigantic proportions, financial institutions enter serious state to raise funds, and slip into financial crisis. At this juncture, if financial institutions are to avoid a worst-case scenario, they must make every effort to ensure funds are available for payments. Especially, accounting section of head quarter in the financial institution will raise funds from the market and, withdraw or raise funds from the Bank of Japan. Then, they should do their best to rapidly process the relevant paperwork and business, and to additionally persuade customers that the situation is under control.

The task force is composed in preparation for the emergency, and it must monitor minute-by-minute developments and provide guidance for appropriate action. Correspondence is in all in-house important. Meanwhile, the public relations department must work to communicate an up-to-date assessment of risk to those concerned, thereby minimizing possible customer panic.

5. CONCLUDING REMARKS

This paper presents a simple introduction and systematic arrangement of various bank runs that have occurred in Japanese financial institutions. At first, these runs and their causes are classified in

⁶ Risk communication means making status reports to the authorities and the Bank of Japan, as well as conducting promotion activities including contacting news media and stakeholders.

this paper. Bank runs are classified broadly into whether or not those where responsibility lies with the management. Next, preventative and remedial countermeasures for bank runs are also suggested.

We summarize the countermeasures of financial institutions for bank runs as follows:

(1) It is important to take up the adequate financing and to manage after the financing is executed.

The majority of bank runs were caused when easy financing built a large sum of bad debt. Hence, on business in daily life, it is especially necessary to execute the financing by a strict, adequate financing judgement.

Therefore, it is vital that the condition of the borrower is monitored following the financing. It is important that the financial institution manage credit standing of finance, the business performance of the borrower and the collateral of the borrower. It is also essential that financial institutions appropriately execute all the tasks they should be doing as a matter of course, such as self-assessment, disclosing information on their financial situation.

The ability to make good financing judgements and manage financing after the fact is a fundamental requirement for staff at the financial institution. For this reason also, it is necessary to develop good financing judgment skills and screening abilities through rigorous and thorough education in each respective financial institution.

(2) It is essential to have strict compliance.

There are countless cases where bank runs caused by misconduct gave crucial impacts to management of those banks. To date, malpractice by staff, unauthorized decision making in top management, and individual management figures taking management into their own hands have all been causes of bankruptcy. To protect against such occurrences, it is important to consolidate internal management systems and utilize external auditors and external board members. When guarding against irregularities at a clerical level, it is essential to construct a strict office management system and strengthen checking systems. Compliance cannot be strengthened overnight; rather, it necessitates continued education and solid management systems.

(3) It is necessary to formulate a BCP and accomplish Business Continuity Management (BCM) appropriately.

When a bank run occurs, whatever the reason, the correspondence of the business continuance from that point is required. To be able to address a bank run, a BCP must be formulated on the basis of putative risks. Concretely, there are measures to address liquidity risks, handle system failure, and deal with earthquakes.

However, it is not sufficient merely to formulate a BCP; education and training for implementation of the plan are also necessary. Ability to appropriately implement a BCP is intimately linked to ability to respond quickly and with precision in times of risk.

Of the three pieces of guidance regarding risk, the financial institution should appropriately try the first two in the routine. The last of the three concerns preparedness for emergency situations, and

in the necessity, it is the management that is moved and executed.

Finally, the authors will briefly discuss the future work. Recently, the number of cyber crimes and slur or attack to specific organizations on the Internet has been rapidly increasing. In this meaning, the Internet has the potential to facilitate major financial crimes or spark a bank run. Accordingly, academic studies and researches that delve into the mentality behind such crimes or behaviours will doubtless be invaluable in future years. Still now, scant data on these behaviours have prevented scientific researches. However, some researchers begin to collect such data via the questionnaire, concretely Web-based survey for analysis: for example, Yada, Washio, Ukai and Nagaoka (2008), Yada, Washio, Ukai and Nagaoka (2009) and Takemura and Kozu (2009) analyze individual deposit-withdrawal behaviors. The authors will investigate not only cases in Japan, but also the cases in all over the world for help of quantitative researches⁷.

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⁷ The Research Institute for Socionetwork Strategies (RISS) at Kansai University disclose a part of micro data collected via the Internet and mail-in questionnaires for the purpose of development on social sciences. They use one of these collected data. If you are interested in the data, you access URL: <http://www.kansai-u.ac.jp/riss/>.

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* References marked [J] are written in Japanese.