Republic of Indonesia

Basic Study on Financial Inclusion in Indonesia

Final Report

August 2013

Japan International Cooperation Agency (JICA)

The Japan Economic Research Institute

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Abbreviation

Japan

ACRIS	Agricultural Credit Risk Information Service
CRD	Credit Risk Database
JA	Japan Agricultural Cooperatives
JFC	Japan Financial Corporation

Indonesia

BII	Bank Internasional Indonesia
BNI	Bank Negara Indonesia
BPR	Bank Perkreditan Rakyat (people's credit banks)
BRI	Bank Rakyat Indonesia
BTN	Bank Tabungan Negara
DIS	Debtor Information System
KKPE	Kredit Ketahanan Pangan dan Energi (Credit for Food Security and Energy)
KPEN-RP	Kredit Pengembangan Energi Nabati dan Revitalisasi Perkebunan (Credit for Bio-Energy Development and Estate Crop Revitalization)
KUPS	Kredit Usaha Pembibitan Sapi (Credit for Cattle Breeding Farm)
KUR	Kredit Usaha Rakyat (People's Business Credit)
NES	Nucleus Estate and Smallholder

Others

IDR	Indonesia Rupiah
USD	U.S. dollar
JPY	Japanese Yen
DI	Diffusion Index
GDP	Gross Domestic Product
NPL	Non-performing loan
MSME	Micro, Small and Medium Enterprise
SME	Small and Medium Enterprise
CGC	Credit Guarantee Corporation

Abstract

Micro, small and medium enterprises (MSMEs) have been playing an important role in the Indonesian economy, but the financing for MSMEs is considered to be quantitatively inadequate. In response to this situation, the Indonesian government has formulated a variety of laws and regulations in an effort to improve the access to funds of MSMEs, and started KUR (Kredit Usaha Rakyat) or the special credit guarantee system. Although the KUR has contributed to the access to finance of MSMEs, the loans to the productive sector, which is supposed to be the priority area of KUR, are still minimal.

The purposes of this study are to compare the financial mechanisms for MSMEs and small-scale agriculture businesses in Japan and Indonesia, in order to make policy recommendations for the enhancement of the access to finance of MSMEs and expansion of KUR for the productive sector in Indonesia.

This study firstly analyzes the fundamental causes of these issues, and then comprehensively considers risk factors such as moral hazard, bank incentives, policy costs, effects and benefits, in order to identify an appropriate financing mechanism. The appropriate financing mechanism should match the actual capacity of the productive sector in Indonesia and should not excessively increase the financing to MSMEs with lower capacity.

Financial systems for SMEs in Japan have been centered on bank loans. This system has been formulated through its historical background. When the Japanese economy achieved rapid economic growth in 1960s, cooperative structured financial institutions such as credit unions and mutual loans and savings banks (currently second-tier regional banks) and governmental financial institutions (Japan Finance Corporation: JFC) played the important roles in SME financing.

The unique sub-systems of the Japanese finance policy framework include policy-based finance, loan appraisal targeting on industrial development, "MARUKEI Loan" or managerial improvement loans, relationship lending, credit guarantee and re-guarantee system, and credit information agencies. All financial sub-systems are based on credit analysis capacity of financial institutions.

Japan has been spending a large government budget for facilitate SME finance to achieve socioeconomic benefits, and also to overcome the "asymmetry information" problem, which increase the transaction costs of SME finance. In order to address this issue, the government or society needs to pay policy costs.

On the other hand, the Japanese government and financial sector have treated finance for agriculture, forestry and fisheries separately from the finance for SMEs due to its special characteristics. Through long-term loans and interest subsidies, the government has spent large

budgets to this sector.

Since the Asian currency crisis, Indonesia has successfully stabilized its banking sector and the financial policies through this period seem to have affected the characteristics of MSME financing in Indonesia. Following the Asian currency crisis, the revised banking act (1998) and the central bank act (1999) were enacted to strengthen banking supervision and regulation. Following the establishment of the Indonesia Bank Restructuring Agency (IBRA), alignment and integration of the banking sector has made progress. The number of banks had decreased from 240 before the Asian currency crisis to 136 in 2004.

The total assets of in the banking sector became four times bigger for the last ten years, increasing from IDR 1.1 quadrillion in 2001 to IDR 4.2 quadrillion in 2013. During this period, credit to individual consumers and MSMEs has also increased.

Because small-scale financial institutions that specialized in MSME and agriculture financing at rural area are still underdeveloped, major state-owned banks and commercial banks have been the main providers of MSME financing. Thus, the MSME financing in Indonesia is highly subject to the business strategies of such major banks.

Consequently, the lending-ratio regulation for MSMEs, which had been abolished in 2001 (20% of total bank lending to be provided to MSMEs), was once again brought into effect by the Bank Indonesia in No. 14 of the 2012 Act. Banks are now legally obligated to make their lending ratios to MSMEs more than 20% by 2018.

The level of financial inclusion in Indonesia is not necessarily sufficient, as the ratio of domestic credits to GDP is not very high. This is mainly because small manufacturers do not have bank transactions and most MSMEs are accessing to informal finance.

KUR, which was started in November 2007, has contributed to improvement the financial access of MSMEs. Since 2007, more than 7.7 million MSMEs borrowed IDR 97.7 trillion in total as of the end of 2012. However, financial access of MSMEs in the productive sector has not significantly improved by the introduction of KUR. This is mainly because more than 50% of KUR loan went to trading and hotel and restaurant sectors.

One of the most important basic financial infrastructures for the MSME financing in Indonesia is Debtor Information System (DIS) operated by the Central Bank. The function of DIS is still limited, because it stores credit information, but not financial information or default information to construct credit scoring models. Underdeveloped basic financial infrastructure can be an obstacle for the promotion of MSME financing. The fact that many MSMEs do not prepare financial statements and do not report their income to tax offices is making it difficult for MSMEs to access to formal finance. They might not have access to finance because their ownerships of real estate are not properly registered.

In Indonesia, there are not any financial institutions specialized in agriculture, forestry and fishery sector. Commercial banks are generally reluctant to make loans to these sectors because they recognize that credit risks of these sectors are bigger than other sectors. Although the Ministry of Agriculture has provided interest subsidies for the agriculture sector, not many farmers cannot have access to bank loans because such loans cannot be backed by KUR guarantee and farmers need assets for collateral.

In making policy recommendations, the study emphasizes the following viewpoints;

- For the development of appropriate MSME policies, the government needs to obtain information on MSMEs, including their business operations and funding needs, in a timely and integrated manner.
- When considering MSME finance, economic and financial policies with goals of economic growth and employment promotion, should be clearly separated from social policies targeting on poverty reduction.

From social viewpoint, supporting micro enterprises is important. On the other hand, from the economic viewpoints, fostering small and medium-sized enterprises (particularly manufacturing companies), which will be the driving force of future economic growth of Indonesia, is more important.

This study makes policy recommendations including short-term recommendations and mid-to long-term recommendations from the perspectives of (i) policies and regulations, (ii) financial mechanisms and financial products, (iii) credit guarantee system and (iv) basic financial infrastructure. However, It should be noted that there are no quick policy solutions for the development of SME finance. It is essential to make comprehensive and consistent policies from the mid-to long-term perspective. It would be more important to accelerate the collaboration among the relevant ministries and dialogues among the government, banks and credit guarantee corporations.

	Short-term	Mid-to long-term
1.Policy including regulations pertaining to finance	✓ Constructing a system to monitor the current state of SME financing	✓ Inducement of appropriate mergers and acquisitions by financial institutions
2.Financial mechanisms & financial products	✓ Development of loan programs for farmers and interest subsidy programs for priority sectors ✓ Capacity building of BPDs and BPRs	✓ Introduction of long term loan program for the priority sectors with low interest rate (through two step loan programs assisted by development partners) ✓ Set up a agriculture policy bank
3.Credit guarantee	<KUR> ✓ Expansion of executing banks	<KUR> ✓ Financial education for

system	(banks focusing on MSMEs and agriculture finance) ✓ Increase of the upper limit amount in the linkage program ✓ Introduction of KUR Agriculture ✓ Introduction of countermeasures against moral hazard <Credit Guarantee System> ✓ Establishment of Local CGCs and the APEX organizations for Local CGCs ✓ Establishment of credit insurance company for local CGCs ✓ Revision of the risk weight on loan with regional credit guarantee ✓ Introduction of credit guarantee with interest subsidy program for priority policy area ✓ Introduction of countermeasures against moral hazard <CGC> ✓ Capacity development for CGCs <Toward the design of KUR after 2014> ✓ Full and detailed evaluation of the performance ✓ Detailed design of the next KUR ✓ Setting new KPI (Key Performance Indicators) ✓ Promotion of equity contribution by stakeholders including banks benefiting from credit guarantee system	borrowers <Credit Guarantee System> ✓ Promotion of equity contribution by stakeholders including banks benefiting from credit guarantee system ✓ Establishment of special debt collection company
4.Basic financial infrastructure	✓ Enhancement of DIS (Debtor Information System)	✓ Enhancement of DIS ✓ Promotion of competition by establishing private credit information services ✓ Preparation of the credit appraisal references for loan decision-making

Summary

1. Introduction

- ✓ Micro, small and medium enterprises (MSMEs) have been playing an important role in the Indonesian economy, but the financing for MSMEs is considered to be quantitatively inadequate. In response to this situation, the Indonesian government has formulated a variety of laws and regulations in an effort to improve the access to funds for MSMEs, and started KUR (Kredit Usaha Rakyat) or the special credit guarantee system. Although the KUR has contributed to the access to finance of MSMEs, the loans to the productive sector, which is supposed to be the priority area of KUR, are still minimal.
- ✓ The purposes of this study are to compare the financial mechanisms for MSMEs and small-scale agriculture businesses in Japan and Indonesia, in order to make policy recommendations for the enhancement of the access to finance of MSMEs and expansion of KUR for the productive sector in Indonesia.
- ✓ In order to achieve these purposes, this study focuses on bank loan operations which play the central role in financing MSMEs in Indonesia and Japan (financing mechanisms and financial products) and the financial infrastructure (policies, rules and regulations, the credit guarantee system, and the basic financial infrastructure). This study compiles the experiences in SME finance in Japan to identify the implications for Indonesia, analyzes the issues in MSME finance in Indonesia, and makes policy recommendations.

2. Analyses of Financial Systems for Small and Medium Enterprises in Japan

2.1 History and Model for Small and Medium Enterprises Finance in Japan

- ✓ The original structure of Japanese-style financial systems for SMEs is considered to be established by the end of 1950's in Japan. In the 1940's, the financial system for SMEs was centered on bank loans. Then, the government established laws and regulations to institutionalize the policy-based banks, credit guarantee system and regional and cooperative financial institutions which became the major players in SME financing. This is because the government tried to efficiently allocate funds for the equipment and capital investments of industrial sector during the reconstruction period after the World War II.

  During 1960's when Japan achieved rapid economic growth, the government of Japan artificially set the interest rate at very low level. The period of rapid economic growth ended at the beginning of the 1970s and the nominal economic growth rates slowed down.

  However, because the artificial low interest policy was maintained, the bank loans continued increasing. As a result, financial institutions became oversized (so-called "over banking" situation). During the period between second half of the 1980s and the first half of the 1990s (known as the "bubble period"), large sized companies became less dependent on bank loans, while financial institutions, in particular the commercial banks, increased loans to SMEs to support their excessive investment and speculative behaviors. During this period, SMEs became more dependent on bank loans.

- ✓ Aoki and Patrick in *The Japanese Main Bank System* (1996) describes Japan's financial situation before mid-1980s as "segmentation of the loans market". According to them, the loans market of Japan was broadly segmented based on three factors (i) bank regulations (e.g. regulations on bank branches), (ii) geographical factors, and (iii) cost factors of banks. Financial institutions which provide finance to SMEs, including credit unions, mutual loans and savings banks or the governmental financial institutions have accumulated the technical experiences of the finances to SMEs of their own segment and are alleviating the "asymmetry information".

  On the other hand, commercial banks used loans to SMEs as adjustment room for securing a stable funds supply to large companies, and the financial institutions specializing in SMEs worked as the buffer for SME finance.

  In this Japanese-style SME loan segmentation model, the financial institutions specializing in SMEs, such as mutual loans and savings banks and credit unions, developed their own loan mechanism and accumulated technical know-how.
- ✓ The origin of mutual loans and savings bank is mutual aid people's finance. Such mutual finance was corporatized and then subsequently converted into ordinary banks. Credit unions are non-profit corporations with a basic philosophy of providing mutual aid to their members, primarily SMEs and individuals.

  Apart from the mutual loans and savings bank and the credit unions, non-banks also provide financing to SMEs but do not handle deposits. Because loan interests of non-banks are generally higher, SMEs which use non-bank loans are estimated not to have sufficient cash flows. Leasing companies also provide financial services to SMEs.
- ✓ In the regional finance of Japan, regional banks play a core role. According to *Post-War History of the Regional Banks [1] Growth Path* (1994) by the Regional Financial History Research Institute, the regional banks were originally either (i) ordinary banks which transformed from private banks and finance companies according to bank ordinance (1893), (ii) ordinary banks which were established after the issue of the ordinance, or (iii) ordinary banks transferred from national banks upon the expiration of the license.

  Regional banks of today are the leading banks among them, which absorbed other ordinary banks in the same regions. Under the principal of one bank per prefecture, regional banks also absorbed savings banks and trust banks in the same regions, and became regional commercial banks providing all aspects of financial services in the region.

  During 1960's, when economic growth rate was high, regional banks played central roles in providing finances to SMEs in the regions, including finances for capital investments. During this period, they broadened their businesses to others regions, and in major cities. This contributed to modernization of business management of regional banks, and the degree of attachment of the regional banks to their region was weakened. As a result, the share of financial institutions specializing in SMEs, such as mutual loans and savings banks and credit unions, expanded their shares in regional market.
- ✓ Governmental financial institutions, namely the People's Finance Corporation and the

Japan Finance Corporation for Small and Medium Enterprise were established in 1949 and 1953 respectively, during the economic turmoil after World War II.

During this period, the banking sector was saddled with enormous non-performing loans which were caused by the suspensions of the wartime reparations and the lack of supply of the long-term funds. SMEs were suffering from the outdated industrial structure and the gap with modernized large companies. Then, the Credit Guarantee Corporations was established in 1953 for encouraging financing for SMEs. Then, Small Business Credit Insurance Corporation was also established in 1958 to support credit guarantee corporations.

The policy-based financing for SMEs in Japan is characterized by the co-existence of the governmental financial institutions and the credit guarantee system.

The characteristic features of the former Japan Finance Corporation for Small and Medium Enterprise are "supplementary finance," "direct loans," the "pump-priming effect," and "loan appraisal for industrial development and industry creation".

The former People's Finance Corporation was tasked with supplying long-term funds at a low interest rate to micro and small enterprises. Therefore, People's Finance Corporation mainly provided small sized financing, and it emphasized efficiency in the loan screening process. One of its financing tools is Managerial Improvement Loan (MARUKEI Loan) for small businesses. Former People's Finance Corporation collaborated with the chambers of commerce and industry that possess enterprise information, simplified screening processes, and reduced screening costs, and also provided business management supports.

52 Credit Guarantee Corporations (CGCs) exist nationwide to offer credit guarantees to assist SMEs with a lack of collateral. The feature of the guarantee system in Japan is re-guarantee / insurance system. The former Small Business Insurance Corporation re-guaranteed 70% - 90% of the guarantees provided by CGCs to absorb the risks of the overall credit guarantee system.

✓ In *Trust Confidence Credit - The Core of Finance (2002),* Saito categorizes bank loan credit analysis in Japan into four periods: (i) the period of credit analysis supremacy (from the second half of the 1940s to the 1950s), (ii) the beginning of the decline of credit analysis functions (1960s), (iii) the decline in the status of the credit analysis departments in bank organizations (1979 to the first half of the 1980s), and (iv) the decline of credit analysis functions in the bubble period (from the second half of the 1980s).

In the bubble period, financial institutions believed that the financial authorities would not let banks go bankrupt, and resulted in an attitude of giving easy loans and moral hazard. Financial institutions generally provided loans to anyone who had collateral, regardless of the purpose of use of the funds. It cannot be denied that this approach caused a decline of the credit analysis functions of commercial banks and regional banks.

✓ In Japan, there have been a number of studies that attempted to verify the reasonableness of the financial system centered on bank loans. Economic White Paper (1963) studied the relationship between the business (sales) growth rate and the financing. The study sounded a warning that the increase of bank loans would not necessary lead to business growth. The study also suggested that the main factors for business growth are business management ability to utilize funds and also the business environment including the growth potential of the market.

- ✓ Financing is also essential for agriculture, forestry and fisheries sectors, especially for those who are expanding their business. Furthermore, in recent years risks such as natural disasters and infectious diseases in livestock have been growing, so the role of finance as a safety net for maintaining stable agriculture, forestry and fisheries business management has become more important.

  In finance for agriculture, forestry and fisheries, there is a relatively large amount of uncertainty and risks involved in the future business environment. Because of the limited information of borrowers' financial statements, it is not easy to carry out appropriate credit analysis and follow-up after the financing.

  Therefore, there is little financing by private financial institutions, while agricultural cooperatives (JAs) and Japan Finance Corporation (JFC), as a policy-based financial institution, have played major roles in this sector, and JAs and JFC account for almost all financing of agriculture. JA Bank with more than 700 branch network nationwide acts as the outlet for these loans. Government supported finances, including interest subsidies, account for a large proportion of the loans in the agricultural sector.

2.2 Financial System for Micro, Small and Medium Enterprises

- ✓ There are various types of financial institutions which provide financing to SMEs in Japan, including commercial banks, regional banks, and second-tier regional banks, governmental financial institutions such as the Japan Finance Corporation (JFC) and Shoko Chukin Bank and credit unions which are non-profit based regional financial institutions.

  The Micro Business and Individual Unit of JFC, and the credit unions (*Shinkin* Banks) are the major providers of funds to the micro enterprises and individual business owners, while the Small and Medium Enterprise (SME) Unit of JFC and the Shoko Chukin Bank are the major providers of funds to small and medium-sized enterprises.

- ✓ The Japanese model for the credit supplementing system is comprised of two tiers of credit guarantee: i) the credit guarantee system run by the Credit Guarantee Corporations and ii) the credit re-guarantee (insurance) system under which the JFC provides re-guarantees to Credit Guarantee Corporations. This system has supplemented the credit risk and physical collateral of SMEs, and has contributed to the smooth financing and also to the development of the SMEs.

  However, due to the deterioration in the economy for the last 20 years, the subrogated amount of the Credit Guarantee Corporations has significantly increased and the JFC faced large deficits from the re-guarantee, which are then covered by the government budget.

  One of the main reasons for this is the moral hazard of the financial institutions and borrower enterprises. Then the government introduced several measures to prevent moral hazards in April 2006. One of such measures is the revision in the guarantee fees. Unified rate of guarantee fee was abolished and the fee rates are now determined according to the credit risks of borrowers. Furthermore, from October 2007, the government moved from 100% guarantee to partial guarantee (80%).

However, in 2008, the government started "emergency guarantee program", which temporarily provide 100% guarantee to SMEs to tackle the economic deterioration. Therefore, the quantitative effects of the partial guarantee are difficult to identify. The government is still seeking for the best approach to credit supplementing systems.

- ✓ The Credit Risk Database (CRD) was established in 2001 as an agency for accumulating the business management data (financial and non-financial data and default information) of SMEs. It aims to facilitate finance for SMEs through enhancing the measurement of the credit risks of SMEs.

  The guarantee agencies and financial institutions, members of the CRD, enter the data of the borrowers, and the members can receive a range of services from the CRD. Members include Credit Guarantee Corporations, governmental and private financial institutions, and six government agencies. As of April 2012 the CRD had 185 members. CRD has 1,127,000 sets of corporate debtor data (including 86,000 sets of default data), and 357,000 sets of individual business owner data (including 30,000 sets of default data).

  The credit guarantee corporations categorize debtors according to the credit risks evaluated from CRD data, and set the guarantee fees for each category. Currently, there are nine debtor categories, and guarantee fee rate set for the lowest credit category is 2.20%.

  There are other credit risk databases for SMEs but CRD, which are the Credit Risk Information Total System (CRITS), the Small and Medium Enterprises Credit Risk Database (SDB), and the Japan Risk Databank (RDB).

2.3 Financial System for Agriculture, Forestry and Fineries

- ✓ The major financial institutions that provide finances for agriculture are JA Bank and JFC. As of the end of March 2012 the JA Bank had a loans balance of JPY 2.176 trillion to agriculture and related industries, and the amount has been hovering around JPY 2 trillion recently. At the end of March 2012, the JA Bank had a loans balance to the forestry and related industries of JPY 17.9 billion, and JPY 555.3 billion to fisheries and related industries.

  JFC offers long-term financing to agriculture, forestry and fishery sector with low interest rate. It also provides business management supports and business matching supports (supports for initiatives to expand the sales routes and business of agriculture, forestry and fisheries businesses and food processing and distributors) through its business advisors. It also provides a variety of information related to the agriculture, forestry and fisheries industries.
- ✓ In the agricultural sector, there is a separate credit guarantee / insurance system under Agriculture Credit Guarantee Fund Associations, which is established by Japan

Agricultural Cooperatives (JA) and prefecture governments. The guarantees are re-guaranteed by the Agriculture, Forestry and Fisheries Credit Foundations in order to enhance the guarantee capacity of Agriculture Credit Guarantee Fund Associations, and also to promote their guarantee activities.

When farmers are unable to repay their debts, the Agriculture Credit Guarantee Fund Associations make repayments to lenders (subrogation), and the Agriculture, Forestry and Fisheries Credit Foundations pays 70% of the subrogated amount to that Agriculture Credit Guarantee Fund Associations (up to 80% in the case of fisheries credit insurance operations). The re-guaranteed balance of agriculture credit guarantee at the end of FY 2011 was approximately JPY 3.4 trillion. The majority of the JA Bank's loan balance to agriculture and related industries was guaranteed.

Agriculture, Forestry and Fisheries Credit Foundations is not making loss from the re-guarantee to agricultural sector except in 2008, but is making loss from forestry and fisheries credit insurance. The government allocates state budget to cover this loss.

- ✓ One of the main financial infrastructure for agriculture, forestry and fisheries is ACRIS (the Agricultural Credit Risk Information Service), which is a scoring model introduced by JFC in November 2008 specialized in agricultural sector. According to JFC, the number of the member users of ACRIS is 106 as of the end of November 2010. The scoring model of ACRIS was constructed using approximately 20,000 sets of financial data, non-financial data, and default data of farmers. ACRIS members can obtain the comprehensive evaluation sheet which shows the comparative positions of the borrower in the sector and the region. ACRIS also shows financial indicators of the borrower and the trends of sector average.

2.4 Implications from the Experience of Japan

- ✓ Original form of the current financial systems for SMEs and the agriculture industry in Japan had been constructed by the end of 1950's, and the most important characteristic of the Japanese system is that the policy-based financing has been playing significant role in complementing the private financial sector. Roles of policy-based finance for SMEs and the agriculture industry have been changing depending on the industrial and financial policies of the government and the economic conditions. However, in order to maintain the policy-based finance system, the Japanese government has been spending the substantial amount of budgets. The Japanese government also took initiative in the development of credit information system which is essential infrastructure for SME finance.
- ✓ In general, SME financing faces the fundamental problem of "information asymmetry". In order to overcome the high transaction costs to overcome the problems, there are three theoretical approaches including (i) the government or the whole society bears the costs of information asymmetry, (ii) costs of information asymmetry are reduced from efficient loan appraisal processes, and (iii) costs of information asymmetry are passed to borrowers. In the Japanese financial systems for SMEs and the agricultural industry, (i) has been put in practice through policy-based financing and credit guarantee system. (ii)

has been implemented through enhancing the expertise of financial institutions. Recently financial institutions are achieving the efficiency in loan appraisal utilizing IT based credit information system. The most important factor to solve the problem of information asymmetry is credit analysis capability of financial institutions, and this can be fostered by accumulating experiences and know-how in the SME and agricultural financings.

- ✓ SME financing and agricultural financing in Japan are characterized by important roles of policy-based financial institutions focusing on each sector and complementing the private sector. Policy-based financial institutions have provided long-term low interest funds and contributed to enhancement of technology and production capacity of SMEs and farmers. Policy-based financial institutions also functioned as safety net during the market crisis. Furthermore, know-how accumulated by policy-based banks are to be shared with private banks, and this leads to "pump-priming effect" and reduction of "information asymmetry" issues. The Japanese government has utilized financing of policy-based banks as an important tool to achieve its policy goals. However, the government has borne large budgetary burden to maintain functions of policy-based financial institutions at the same time. Policy-based banks are sometimes criticized for causing "crowding out" effect on private banks' businesses and leading market distortion, especially when their roles and functions become quite large.
- ✓ Credit guarantee system in Japan is characterized by two-layer framework with local credit guarantee corporations at the prefecture level and a credit insurance company at the national level. This system has worked effectively to improve financial access to local SMEs and the agricultural industry. Equity contributions by local financial institutions to local credit guarantee corporations has contributed to the reduction of "moral hazard" issues to some extent. However, the Japanese government has spent large amount of budget to maintain this credit enhancement system, and the cumulative budgetary amount being spent for the national credit insurance business since 1998 are calculated to reach almost JPY 8 trillion. This indicates that "moral hazard" of banks has not been resolved at all.
- ✓ In Japan, agriculture finance has been designed to be in line with the national agricultural policy. In 1960s, the government designed "agricultural modernization loans" to provide long term loans to promote upgrading farm productions through the introductions of agricultural machineries and expansions of farm lands. This was based on the government policy to fill the income gap between the industrial sector and the agricultural sector. In 1992, the government issued "The basic direction of new policies for food, agriculture and rural areas", one of whose aims is the promotion of large sized farmers. Based on this, certified farmers, who are expected to be the major players in future agricultural productions in regions, are given access to loans with more favorable conditions and tax incentives. These financial schemes have contributed to the achievements of policy targets to some extent. However, it is pointed out that the policy costs for such financial schemes are rather big.
- ✓ One of the possible solutions to address the information asymmetry issue in SME finance

is to reduce the transaction costs by efficient credit appraisals at financial institutions. The development of credit information system, such as Credit Risk Database (CRD), can be a possible measure to achieve efficient credit appraisals. CRD is a credit information system developed under the initiatives of Ministry of Economy, Trade and Industry, which is aiming at promoting SME financing but not at supervising financial institutions. Therefore, financial institutions are not concerned about the possible tighter interventions or monitoring of the banking supervising bodies after submitting various data that are necessary to develop credit information system.

3. Financial Systems for Small and Medium Enterprises in Indonesia and Various Issues

3.1 Roles of Micro, Small and Medium Enterprises in the Indonesian Economy

✓ There are 53.8 million MSMEs in Indonesia (as of 2010), accounting for 99.9% of the total number of businesses, 97.2% of the total number of employees, and 57.1% of GDP. Almost half of the MSMEs are in the agricultural sector, and the MSMEs in the manufacturing sector account for a mere 6.4% of the businesses and 11.21% of the employees. Therefore, the development of the agricultural sector and small and medium-sized manufacturing business is the priority policy issue, and thus it is necessary to consider how to provide financial supports to them, together with technical and business supports.

3.2 Financial Policies and Model relating to Financial Systems for MSMEs in Indonesia

✓ In general, MSME financing is significantly influenced by the banking supervision and regulations.

Since the Asian currency crisis, Indonesia has stabilized its banking sector and it is assumed that the financial policies have formulated MSME financing in Indonesia. The total assets of the banking sector have increased by four times for the last decade, from about IDR 1.1 quadrillion in 2001 to IDR 4.2 quadrillion in 2013. Loan balance to individual consumers and MSMEs has also increased. During this period, there was an alignment and integration in the banking sector too.

✓ In Indonesia, small-scale financial institutions that specialize in local MSME financing and agricultural credit are still underdeveloped, and major government-owned and commercial bank are the main providers of MSME financing.

Therefore, it is possible for major banks to use lending to MSMEs as a tool to secure a stable supply of funding for large companies. Therefore, MSME financing can be easily affected by the lending strategies of the major banks.

Consequently, the lending-ratio regulation for MSMEs, which had been abolished in 2001 (20% of total bank lending to be to MSMEs), was once again brought into effect by the Bank Indonesia in 2012. Banks are now legally obligated to allocate their lending to MSMEs more than 20% of total lending by 2018.

✓ The revised bank act of 1998 aimed at strengthening supervision of and regulations for banks. This was followed by several measures such as unification of banking supervisions at the Bank Indonesia, a deposit insurance system, strict legal-loans limit, and punishments for illegal acts.

Despite these regulations, the loan balance of the banking sector as a whole has rapidly increased. However, no particular deterioration in the quality of assets has been observed.

3.3 Financial System for Micro, Small and Medium Enterprises

- ✓ Financial inclusion in Indonesia needs further improvement, taking into account lower ratio of domestic credit to private sector to GDP, lower percentage of firms with bank account and firms with bank loan, and higher percentage of usage of informal finance.
- ✓ Bank Indonesia or the central bank has been making efforts to improve financial inclusion in Indonesia. In addition to forming 6 policy pillars in the National Strategy of Financial Inclusion, the Bank Indonesia promotes policies from demand side that aims to enhance feasibility and capability of MSMEs, and from supply side that aims to encourage and provide incentives for banking to distribute credit to MSMEs. The Bank Indonesia has also issued new regulation on commercial banks to allocate more than 20% of loans to MSMEs and new guideline for the trial of branchless banking system.
- ✓ Indonesian banks have been broadening their domestic branch network to enlarge their customer base including MSMEs. MSME loans outstanding by commercial banks have been increasing from IDR 361 trillion in January 2011 to IDR 529 trillion in March 2013. "Trade, hotel and restaurant" sector comprises more than 50% of the total MSME loans outstanding, and the proportion of the productive sector including agriculture and manufacturing is small. It should be also noted that share of the MSME loans to the total loans outstanding has been decreased from 30% to 20% during the same period.
- ✓ State-owned banks have the largest presence among Indonesian commercial banks in the field of MSME finance, and among them, BRI (Bank Rakyat Indonesia) has been the dominant player. BRI is now the second largest bank in the country, and with its broad network and strong relations with local communities all over the country, BRI has been accumulating experiences and know-how in MSME finance.
- ✓ 26 Regional Development Banks (BPDs) and people's credit banks (BPRs) have also played important roles in providing finance to MSMEs in their region. Currently, there are more than 1,800 BPRs in the country. However, their NPL ratios and their interest rates are generally higher than the average of commercial banks.
- ✓ The KUR (Kredit Usaha Rakyat) is the government's special guarantee program which has started in November 2007 for the purpose of improving financial access of MSMEs. The accumulated number of borrowers is 7.7 million and the accumulated amount of KUR loans has reached to IDR 97.7 trillion at the end of 2012. Therefore, it is possible to say that KUR has contributed to the improvement in financial inclusion to some extent. However, the utilization ratio of KUR is not necessarily high, compared to that of the credit guarantee system in Japan.
- ✓ Eligible banks for the KUR program are limited to state-owned commercial banks and regional development banks, and private commercial banks are not included in the program. BRI has been the largest user of the KUR, occupying around 60% of the total amount and 90% of the total borrowers. NPL ratio of KUR loan has increased recently, and this indicates underlying moral hazard issues by borrowers and banks.

- ✓ There are four credit guarantee corporations in the KUR system, two state-owned credit guarantee corporations (Jamkrindo and Askrido) and two regional credit guarantee corporations. State-owned credit guarantee corporations have the dominant share of the KUR loans, since regional credit guarantee corporations are still new and small in terms of their human resources and financial base.
- ✓ One of the most important basic financial infrastructure for the MSME finance in Indonesia is DIS (Debtor Information System) operated by the Bank Indonesia. Although DIS stores loan information of borrowers, it does not store financial and non-financial data of borrowers and cannot provide such services as credit scoring to user banks.
- ✓ In Indonesia, most of MSMEs do not prepare for financial statements or tax reports. There are many cases in which MSMEs have not registered their land ownership rights. In order to increase MSME loans from commercial banks, these issues need to be addressed.

3.4 Financial System for Agriculture, Forestry and Fisheries

- ✓ There is no financial institution that specializes in financing the agriculture, forestry and fisheries sector in Indonesia. Generally, agricultural financing especially for micro and small farmers is regarded as very high credit risk area, and commercial banks are not active in providing agricultural finance.
- ✓ However, banks can provide loans to farmers involved in contract farming called NESs (Nucleus Estate and Smallholder), in which smallholders provide farm products to core enterprises under contracts.
- ✓ Ministry of Agriculture provides interest subsidies to priority areas such as food security and livestock breeding. Issues pointed out on the interest subsidy programs include requirements for collaterals. It is also pointed out that farmers cannot access to such interest subsidies because such subsidized loans cannot be backed by KUR guarantees.
- ✓ There are not any financial institutions specialized in agriculture sector. Similarly, there is not a dedicated credit guarantee system for agriculture sector. Therefore, it seems difficult to accumulate knowledge and experiences in agriculture financing.

3.5 Issues in MSME financing in Indonesia

- ✓ One of the most important issues in facilitating MSME financing is “information asymmetry”, which makes the MSME finance more difficult by increasing the transaction costs of MSME financing. Three possible solutions to address this issue are;
  (i) the government or the whole society bears the costs of information asymmetry,
  (ii) costs of information asymmetry are reduced from efficient loan appraisal processes, and
  (iii) costs of information asymmetry are passed to borrowers.
- ✓ In Indonesia, the government has borne the costs to overcome information asymmetry, providing credit guarantees through state-owned credit guarantee corporations and KUR. Although credit guarantee schemes, including KUR, has been successful to some extent, they are not necessarily sustainable because credit guarantee corporation need huge additional capital every year and also because moral hazard issues being reflected by high NPL ratio are getting more serious.

- ✓ Information asymmetry can be theoretically overcome by reducing the credit appraisal costs at financial institutions, such as by i) securing loans by collateral, ii) improving the efficiency of screenings, and iii) specialization. However, there are difficulties in practice to achieve them in Indonesia.
- ✓ Another approach to overcome information asymmetry is passing the transaction costs onto borrowers. In other words, loan interest rates are set higher to cover the transaction costs and higher credit risks. In Indonesia, this approach is legally possible as there are not any laws or regulations which set upper limits on interest rates.

4. Policy Recommendations

4.1 Fundamental Viewpoints for Making Policy Recommendations

- ✓ In making policy recommendations, the study emphasizes the following viewpoints;
  - For the development of appropriate MSME policies, the government needs to obtain information on MSMEs, including their business operations and funding needs, in a timely and integrated manner.
  - When considering MSME finance, economic and financial policies with goals of economic growth and employment promotion, should be clearly separated from social policies targeting on poverty reduction.

  From social viewpoint, supporting micro enterprises is important. On the other hand, from the economic viewpoints, fostering small and medium-sized enterprises (particularly manufacturing companies), which will be the driving force of future economic growth of Indonesia, is more important.

  In more concrete terms, from the perspective of medium-to-long term industrial policy, it would be worth investigating the introduction of medium-to-long term low-interest financing schemes and financial products for priority business categories, including the industrial clusters, and important regions.
- ✓ This study makes policy recommendations including short-term recommendations and mid-to long-term recommendations from the perspectives of (i) policies and regulations, (ii) financial mechanisms and financial products, (iii) credit guarantee system and (iv) basic financial infrastructure.

  However, It should be noted that there are no quick policy solutions for the development of SME finance. It is essential to make comprehensive and consistent policies from the mid-to long-term perspective. It would be more important to accelerate the collaboration among the relevant ministries and dialogues among government, banks and credit guarantee corporations.

4.2 Policy, including Regulation Pertaining to Finance

- ✓ Constructing a system to monitor the current state of MSME financing: In order for the Bank Indonesia to continuously monitor the current conditions relating to MSME financing, the study recommends that a “Financing Annual Report for MSMEs in Indonesia” is regularly published.

  It is assumed that it will be implemented jointly by the Coordinating Ministry for

Economic Affair, Ministry of SME and Cooperatives and the Bank Indonesia.

- ✓ Inducement of appropriate mergers and acquisitions by financial institutions: One of reasons of the high transaction costs of MSME financing has been the inefficient operations at small-scale banks.

  In order to promote the accumulation of expertise (specialization) in MSME financing and increase operational efficiency, it is recommended to facilitate the integration of the financial institutions that carry out MSME financing. It will increase the operational efficiency and the development of branch network in regions. If the banks are attempting to expand the operational regions to utilize their expertise in MSME lending, operational efficiently in MSME finance will increase.

  It is important for the Bank Indonesia and OJK (Financial Services Authority) to facilitate appropriate M&As of small financial institutions.

4.3 Financing Mechanisms and Financial Products

- ✓ The Indonesian government sets 35 sectors as the priority industrial cluster development in its national industry policy targeted in 2020. Ministry of Industry has subsidy program for capital investments conducted by the small and medium industry, but utilization of such subsidy is still limited. For the future industrial development in Indonesia, enhancing supporting industries will be very important. Therefore, for the priority industry, introduction of interest subsidies combined with credit guarantee program should be considered as stronger policy incentives. In the longer term, launching stable long-term low-interest financing program should be considered, possibly by receiving funds from international financial institutions.
- ✓ Combination of interest subsidy and credit guarantee program for agriculture sector should be also considered for the priority policy areas. For enhancement of the agriculture finance, setting up a policy-based bank specializing in the agriculture sector, and supply chain lending should be also considered.
- ✓ Regional development banks (BPDs) are expected to play larger role in regional economic development. Further capacity building for BPDs especially in the field of MSME finance would be needed.
- ✓ Enhancement of capacity of BPRs is also recommended. Thus the monitoring by OJK on BPRs should be strengthened. Raising the maximum limits of KUR linkage program to BPRs could be considered, only when BPRs have good financial performance.

4.4 Credit Guarantee System

- ✓ Loans backed by the KUR guarantee have increased rapidly since the Indonesia government launched it in 2007. However, some operational issues in KUR have been recently pointed out, such as the increase in NPLs. To address such issues, the Indonesia government has set mainly two targets on KUR.

  Target 1: Further expansion of KUR (Target volume in 2013: IDR 36 trillion)

  Target 2: Control of NPL (Target NPL ratio: below 5%)
- ✓ Considering these targets, this study proposes (1) Enhancement of credit guarantee system in Indonesia, and (2) Enhancement of KUR.

- ✓ The proposals by this study for the enhancement of credit guarantee system in Indonesia are as follows;

  1) Establishment of local CGCs in each province and the apex organization for local CGCs for the purpose of improvement of financial access in rural areas,

  2) Introduction of credit guarantee with interest subsidy program for priority policy areas for the purpose of promotion of priority areas,

  3) Equity contribution to CGCs by stakeholders, especially banks which benefit from credit guarantee system, aiming at minimizing moral hazard issues and enhancing the capital adequacy of CGCs,

  4) Capacity development of CGCs,

  5) Establishment of a specialized debt collection company for effective debt collection,

  6) Introduction of countermeasures against moral hazard.
- ✓ The study also proposes the enhancement of KUR, from the viewpoints of quantity and quality.
- ✓ This study proposes the enhancement of KUR in quantity as follows:

  1) Expansion of loan volume by increasing KUR member banks, including private banks which focus on MSMEs and agricultural financing,

  2) Lifting the upper limits on the KUR linkage program through BPRs which play important roles in financing MSMEs in rural areas,

  3) Introduction of a dedicated KUR scheme for agriculture sector.
- ✓ In order to control NPLs of KUR, the study proposes;

  1) Introduction of countermeasures against moral hazard such as decrease of guarantee coverage against banks whose NPL ratio exceed a certain level,

  2) Promotion of financial education to borrowers for the purpose of enhancing repayment motivations.
- ✓ As the current KUR is supposed to be terminated in 2014, this study also proposes a basic concept and design of the KUR system after 2014, as follows;

  1) Carry out the full and detailed evaluation of the performance of the current KUR

  2) Produce detailed design of next KUR including targeted industries and priority areas based on the government policies.

  3) Determine new KPIs (key performance indicators).

  Also, equity contribution to CGCs by stakeholders, especially banks which benefit from credit guarantee system, should be considered to minimize moral hazard issues and to enhance the capital adequacy of CGCs.

4.5 Basic Financial Infrastructure

- ✓ DIS (Debtor Information System), the database operated by the Bank Indonesia, stores loan information of borrowers, but does not store financial and non-financial data of borrowers. Therefore, DIS cannot construct scoring model which can be used for credit appraisal of borrowers or credit risk management at banks. Enhancement of DIS would contribute to the facilitation of MSME finance.
- ✓ Private credit information system should be also permitted and promoted.

- ✓ In the future, it would be possible to develop a reference book for loan appraisal, when a credit information system stores sufficient information. It will be beneficial for the facilitation of MSME finance.

1. Introduction

1.1 Background and Purposes of the Study

Micro, small and medium enterprises (MSMEs) have been playing an important role in the Indonesian economy, account for over 99% of all enterprises and 57% of GDP. However, the financing for MSMEs is considered to be quantitatively inadequate. The evidence for this is that approximately 60% of MSMEs are unable to obtain bank loans and rely mostly on their own funds, and that MSMEs account for only about 20% of the total outstanding of bank loans.

In response to this situation, the Indonesian government has formulated a variety of laws and regulations in an effort to improve the access to funds of MSMEs, such as Law Number 9 of 1995 on Small Enterprises, Government Regulation Number 32 of 1998 on Small Enterprises, Law Number 20 of 2008 on Micro, Small and Medium Enterprises. In this regard, the special credit guarantee system (KUR, Kredit Usaha Rakyat) institutionalized in November 2007 has contributed to the access to finance of MSMEs. However, looking at the current KUR outstanding loans by sectors (as of the end of March 2012), 56% of the total is directed towards the wholesale and retail sectors, while the loans directed to the agriculture, forestry and fisheries sectors, which are supposed to be the priority of the KUR system, is only 18%. As the loans to the manufacturing sector, another priority sector, constitute only 3%, it is apparent that loans to the productive sector are minimal.

The purposes of this study are to compare the financial mechanisms for MSMEs and small-scale agriculture in Japan and Indonesia, in order to make policy recommendations for the enhancement of the access to finance of MSMEs and expansion of KUR for the productive sector in Indonesia.

1.2 Study Directions

In order to achieve the purposes of this study, we focused on bank loan operations which play the central role in financing SMEs in Indonesia and Japan (financing mechanisms and financial products) and the financial infrastructure (policies, rules and regulations, the credit guarantee system, and the basic financial infrastructure). We primarily carried out bibliographic surveys to identify the issues in Indonesia to compile lessons from the experience in Japan, made survey on MSME financing system in Indonesia, and made policy recommendations.

1.3 Study Activities

The activity flow in the first year and second year is as follows.

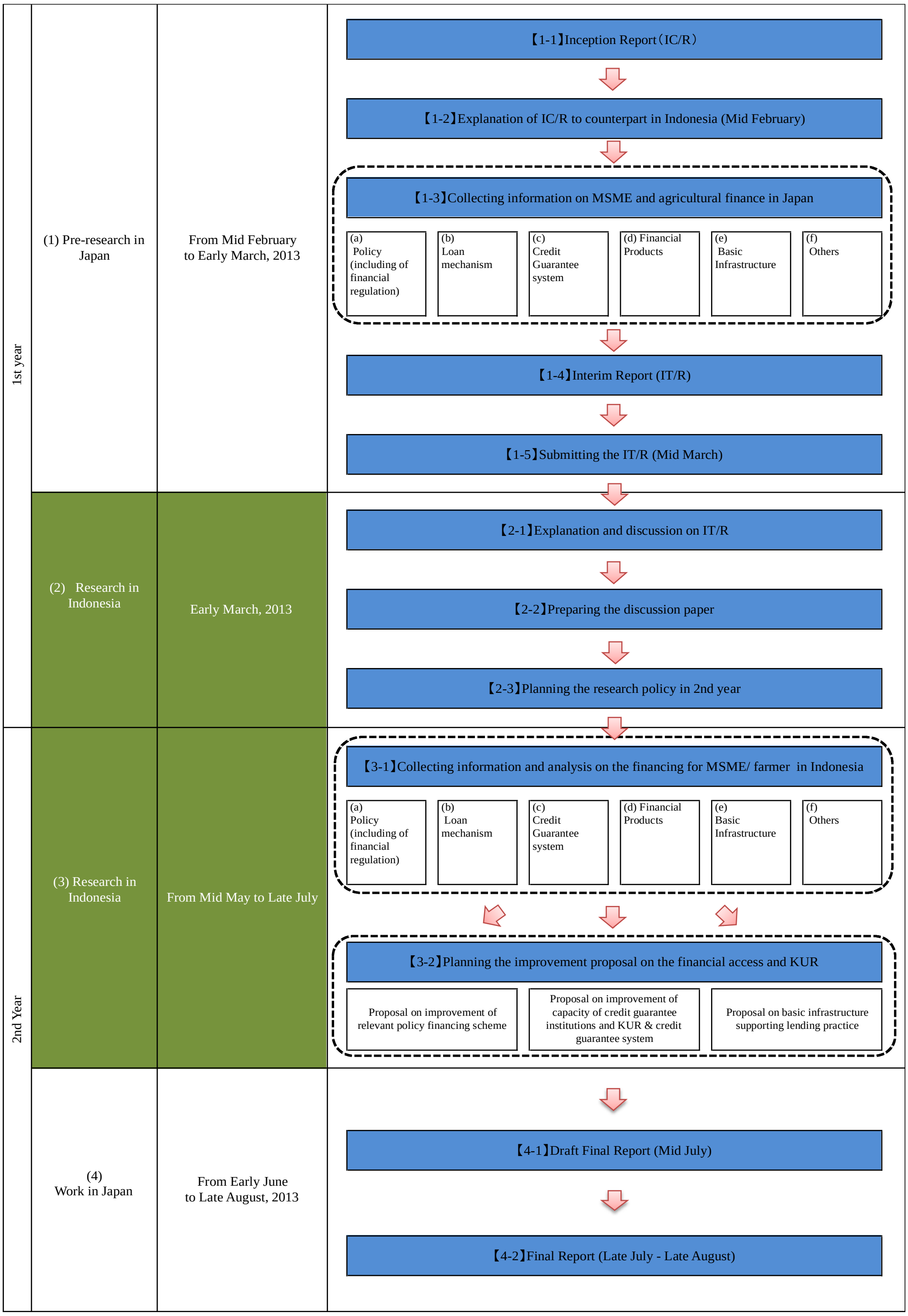

Figure 1: Activity Flow

2. Analyses of Financial Systems for Small and Medium Enterprises in Japan

One of the major characteristics of the Japanese financial system is that financial institutions have been specializing in specific areas, including micro-enterprises finance, SME finance, or agriculture finance, and they have accumulated technical experiences and know-how in these areas.

This chapter overviews financial systems for SMEs in Japan that were formed historically according to the policies, rules and regulations. This chapter also summarizes the financial models for the SMEs in Japan, looking into the financing mechanisms, the credit guarantee system, the financial products, and the basic financial infrastructure.

2.1 Finance Policy and Financial Systems for Small and Medium Enterprises in Japan

(1) The historical structure of Japanese financial systems for small and medium enterprises

"Financial system" is a general term that refers to the institutional frameworks, laws, regulations and practices of financial transactions[1]. Financial systems largely depend on the economic structure, technology level, and the historical background of a country. The characteristics of the current Japanese financial system, which was mostly established by the 1950s[2], are explained in this section.

Firstly, the financial system in Japan has been centered on bank loans. This is based on the historical background as follows;

(i) Banking sector was rapidly restructured during the depression period in 1920s by the Banking Act (1927),

(ii) Military government (wartime administration) carried out the fund control on banks (from 1937 to 1945), and

(iii) Economic reforms after the end of World War II, and restructuring of the conglomerates were implemented (1945 to 1955).

After the end of World War II (1945), banks accelerated their mergers and consolidations, following the minimum capital requirements of the Banking Act.

During this period, as part of the economic reform and the restructuring of conglomerates, the

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1 Horie, Yasuhiro (2001), Economic Analysis of Bank Loans

2 Horiuchi, Akiyoshi (1999), Foundations of the Financial Structure in Japan: Prospects, June 1999 edition of the Financial Review.

banking sector was separated from the security sector, following the regulation similar to the Glass–Steagall Act in the United States. Due to this separation, the security sector lacked human resources, and lost the technical experiences and know-how that had been shared with banks. This had hindered the development of the capital markets in Japan since then.

Secondly, credit supplementary system, established under the initiative of the government, has been playing important roles in SME financing in Japan.

After the end of World War II, one of the most important economic and political issues was how to allocate necessary funds for reconstruction of the destroyed industries and infrastructures. Therefore, financial institutions needed to play important roles in providing long term financing. Financial institutions also needed to provide financing to support SMEs, which were having challenges in upgrading outdated industrial structure and low salary levels[3].

However, financial institutions in Japan during this period were saddled with enormous non-performing loans because the government stopped paying the debts that arose during the wartime. Therefore, the government took various legal measures, to achieve the goal of "enhancement of financing and equity capital", including the establishment of policy-based finance institutions and credit guarantee corporations as "supplementary finance", and institutionalizations of regional and cooperative finance institutions. The laws and regulations on the formation of policy-based finance and regional and cooperative finance, which were mostly established during this period, are listed in the figure below.

[3] It has been pointed out that at this time the labor market of Japan had a two-tier structure divided into modern large companies and pre-modern small enterprises, micro enterprises, agriculture, etc., and there was a debate about the extent to which disparities in wages, productivity, etc. between small and medium enterprises and large companies arising from this structure were a problem for society overall.

- Industry Associations Central Bank Act 1923 (fully revised to the Norinchukin Bank Act 2001)
- Shoko Chukin Bank Act 1936
- People's Finance Corporation Act 1949
- Act on Financial Businesses by Cooperative 1949
- Shinkin Bank Act 1951
- Mutual Loans and Savings Bank Act 1951
- Agriculture, Forestry and Fisheries Finance Corporation Act 1952
- Small Business Finance Corporation Act 1953
- Credit Guarantee Corporation Act 1953
- Small and Medium-sized Enterprise Credit Insurance Act 1958
- Small and Medium-sized Enterprise Investment Business Corporation Act 1963
- Environmental Sanitation Business Finance Corporation Act 1967
- Act on Preferred Equity Investment by Cooperative Structured Financial Institution 1993
- Shoko Chukin Bank Limited Act 2008

(Source) Prepared by the study team

Figure 2: Laws and Regulations on the Formation of Policy Finance and Regional and Cooperative Finance in Japan

Thirdly, financial institutions specialized in SME financing were institutionalized, following the strong emphasis on the SMEs development by the government.

Financial institutions specialized in SME financing include credit unions, mutual loans and savings banks and governmental financial institutions. Governmental policy-based financial institutions in SME finance are (i) People's Finance Corporation, (ii) the Japan Finance Corporation for Small and Medium Enterprise, and (iii) the Shoko Chukin Bank.

The backgrounds to the establishment of the governmental policy-based banks are as follows;

i) Private financial institutions were not active in providing finance to SMEs due to the large transactions costs, and lack of creditworthiness of SMEs, and
ii) Private financial institutions were willing to allocate more funds to large sized enterprises, and did not give priority in allocating funds to SMEs.[4]

These issues can be generally pointed out as the "failure of the market".

Since the end of the war in 1945, the proportion of the SMEs in the economy significantly increased, but most of them had difficulties in access to finance. In additions to the background mentioned above, SMEs could not use the suppliers' credits either, as wholesalers generally had financial problems after the tight controls over them during the war.

According to the study of Ministry of Finance in June 1948, the outstanding bank loan to SMEs was 22% of the total banks, while that of the major banks was only 15%. The average loan period was two to three months.

[4] Ministry of Finance, Annual Financial Report of the Banking Bureau, 1953 Edition

Besides these, SMEs generally had problems in finance, due to several reasons such as increase in material prices, increase in tax rates for the fiscal expansion of the government, and delays in subcontract payments. According to the Small and Medium Enterprise Agency (1948), over 70% of SMEs were having difficulties in funding.

During the rapid economic growth period in 1950s and 1960s, the government artificially set the deposit rate low, according to *"The Financial System of Post-1945 Japan: Its Formation, Development, and Deterioration"* by Kazuhito Ikeo (2001).

According also to Ikeo (2001), the deposit rates were regulated by the Temporary Interest Rate Adjustment Act of 1948 and the guidelines of the Bank of Japan (BOJ), but the loan interest rates were not regulated by them. In order to maximize profits, banks then tried to expand their loans balances and also their branch networks, in order to increase credit balances.

Later on, the expansions of the branch network were regulated by the government, but Ikeo (2001) also points out that the regulations on the branch network expansions of small and medium sized banks were not very strict, compared to large banks.

Even after the end of rapid economic growth period, the deposit rate was artificially kept low, and thus financial institutions kept on expanding their credits. This resulted in the oversized banks and excessive credits.

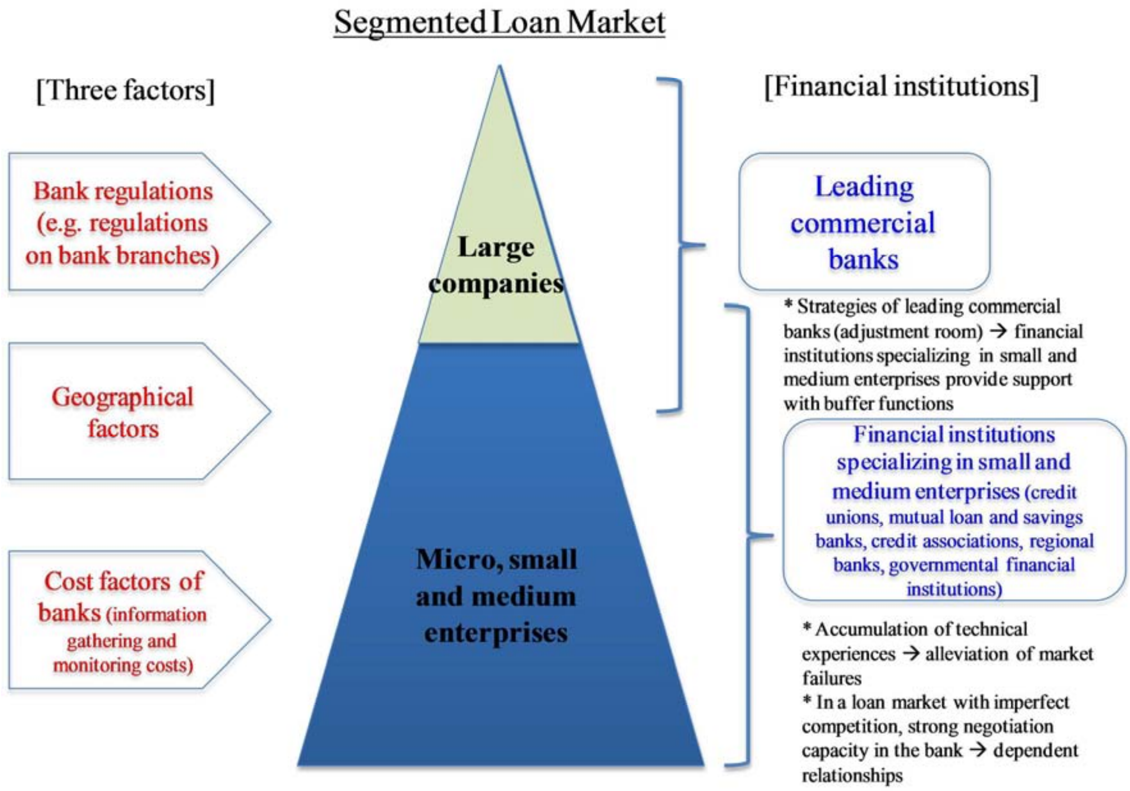
During the "bubble" period from the second half of the 1980s to the first half of the 1990s when the large companies became less dependent on the banks, the financial institutions, in particular the commercial banks, increased their loans to SMEs. During this period many financial institutions supplied funds to support excessive investment and speculative behaviors based on unrealistic expectations of the economic growth. As a result, SMEs became highly dependent to bank loans.

(2) Financial models for small and medium enterprises in Japan

The Japanese Main Bank System (1996) by Masahiko Aoki and Hugh Patrick explains that Japan's financial situation until about the mid-1980s was characterized as "segmentation of the loan market." Basically, the loan market of Japan was broadly segmented based on three factors (i) bank regulations (e.g. regulations on bank branches), (ii) geographical factors, and (iii) cost factors of banks. Financial institutions which provide finance to SMEs, including credit unions, mutual loans and savings banks or governmental financial institutions, had accumulated the technical experiences of the finances to SMEs of their own segment. By doing so, they had been alleviating the "asymmetry of information" or the "failures of the market" of SME financing. As a result, financial institutions with expertise in SME finance gained a stronger negotiation power over the SMEs.

On the other hand, the behaviors of major commercial banks affected SME finance. When major commercial banks increased loans to large companies, they used the loans to SMEs as adjustment room for securing funds. Financial institutions specialized in SMEs then provided funds to SMEs, and worked as the buffer of the SME financing.

It is also pointed out that the financial institutions specialized in SME finance have successfully accumulated experiences and know-how of SME finance.



(Source) Prepared by the study team from *The Japanese Main Bank System* (1996) by Masahiko Aoki and Hugh Patrick (p.313-327)

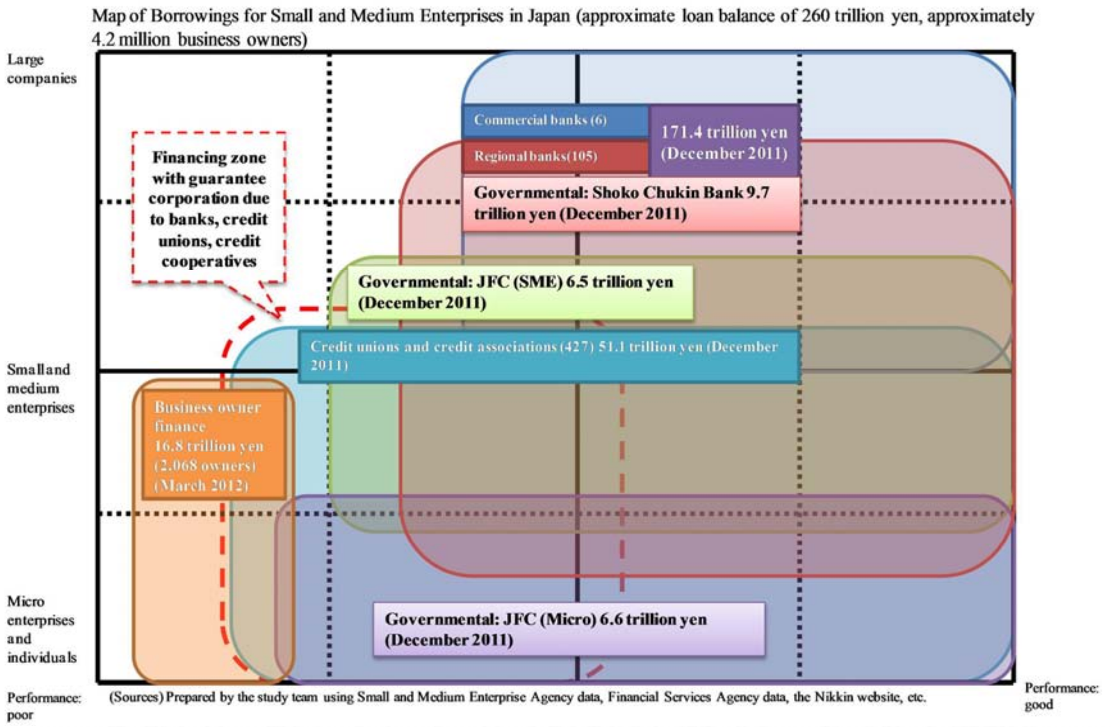
Figure 3: Loan Market Segmentation Model in Japan (Until the Middle of the 1980s)

According to *Table of the Loan Balance for Business Funds for Small and Medium Enterprises* (as of December 2001) by the Small and Medium Enterprise Agency, the total loans to SMEs were JPY 288 trillion and the share of the loan market by the types of financial institutions were as follows;

- Commercial banks: 32.5%
- Regional banks: 25.3%
- Mutual loans and savings banks: 9.4%
- Trust banks: 0.7%
- Credit unions: 15.7%

- Shoko Chukin Bank: 3.7%
- Japan Finance Corporation for Small and Medium Enterprise: 3.1%
- People’s Finance Corporation 3.1%.

Figure 4 illustrates the recent overview of loans to SMEs in Japan. There are about 4.2 million SMEs in Japan and the total loans outstanding to SMEs is about JPY 260 trillion.



(Sources) Prepared by the study team using Small and Medium Enterprise Agency data, Financial Services Agency data, the Nikkin website, etc.

(Notes) The loan balances of the banks, credit unions, credit associations, the Shoko Chukin Bank and JFC are the figures as of the end of December 2011 (White Paper on Small and Medium Enterprises in Japan: Small and Medium Enterprise Agency)
The loan balance for business owner finance and the number of business owners are the figures as of the end of March 2012 (Statistics on the Money Lending Industry: Financial Services Agency)
The number of financial institutions outside business owner finance is the figure as of the end of January 2013 (Nikkin website)

Figure 4: Overview of Loans to Small and Medium Enterprises in Japan

(3) Formation process of financial institutions specialized in SMEs

This section explains the formation processes of financial institutions specialized in SMEs and their characteristics. Financial institutions specialized in SMEs include (i) mutual loans and savings banks and (ii) credit unions.

Mutual loans and savings banks are financial institutions that have their roots in people’s mutual finance. The people’s mutual finances were institutionalized under Mutual Loans and Savings Bank Act in 1951, to ordinary banks.

Credit unions are non-profit based financial institutions with a basic philosophy of providing mutual aid to their members, primarily SMEs and individuals. They are financial institutions, transformed from credit cooperatives, under the Shinkin Bank Act in 1950.

In *“The Development and Background to Mutual Loans and Savings Banks and Credit Unions in Recent Years* (1964)”, Bank of Japan explains the historical background of these financial institutions, as shown in the table below;

Table 1: History of Mutual Loans and Savings Banks and Credit Unions

Period	Overview
First period (October 1958 to September 1960)	* Rapid rise in the level of savings at mutual loans & saving banks and credit unions
	* Preference for savings deposits among financial assets
	* Collection of savings deposits by banks’ visiting
	* Existence of a call market that can absorb high transaction costs of banks
	* Encourage of financial development using administrative guidelines such as permits for bank branches.
Second period (October 1960 to September 1962)	* Yield ratio of increasing enterprises’ deposits at mutual loans & saving banks and credit unions
	* Increase in regular accumulation of time deposits for loan repayment funds, compensating balances
	* Taking the opportunities of the increase in funds demand arising from the rapid increase in investment and the stagnation of the commercial banks due to tightening, to diversify business partners by including medium-sized enterprises and some large companies
Third period (October 1962 to March 1964)	* Slowdown in the growth of the loan amount at mutual loans & saving banks and credit unions
	* Demand for business management rationalization

(Data) Shizuro Mori (1992), Credit Unions
(Source) Bank of Japan (1964), Monthly Report

The objective factors and sub-objectives factors behind the growth of credit unions are explained as follows;

Table 2: Factors behind the Growth of Credit Unions

	Factors	
Objective factors	(1) Existence of loan concentration mechanism	Tightening policies of city banks that form the core of loan concentration, city banks’ omission of SMEs financing
	(2) Changes in SMEs finance	SMEs’ dependency on banks due to the withdrawal of borrowing from wholesalers, strain on SMEs due to the lack of funds at large companies
	(3) Expansion of small	SMEs exists in a division of labor structure in an

	and medium-sized and micro enterprises	economy with an increasingly sophisticated industrial structure, and expands together with economic development
	(4) Impact of SMEs policy and financial policy for SMEs	The credit unions accurately responded to the conditions of the SMEs which were changing due to the establishment of governmental financial institutions and protection and enhancement measures
Subjective factors	(1) Absorption of the savings deposits of micro and small enterprises	Credit unions took full advantage of the strengths of a shared territorial bond, conversion of family budget funds into deposits

(Data) Shizuro Mori (1992), Credit Unions
(Source) Bank of Japan (1964), Monthly Report

According to the National Association of Shinkin Banks (2003), credit unions are cooperative structured financial institutions which have different characteristics from private commercial banks. Credit unions are supported by territorial bonds, human bonds, and social bonds. This characteristics were reinforced by Shinkin Bank Act, Article 1, which clearly stipulates that the credit unions are cooperative structured.

The financial functions of the credit unions are largely the same as those of the ordinary banks. However, they are operated with the primary focus on the mutual benefits of members rather than profits. Credit unions cannot be owned or managed by a single large shareholder, as one member has only one vote (Shinkin Bank Act, Article 12, Paragraph 1), and one member cannot own shares more than upper limits (Article 11, Paragraph 4). Only members of a credit union can access to the loans of the union (Shinkin Bank Act, Article 53).

Credit unions, as local regional financial institutions, have their own “operational area”. Credit unions are not allowed either to establish branches outside their operational area or carry out any financial activities outside their operational area. Only the residents of the operational area are eligibility for membership of the credit union (Shinkin Bank Act, Article 10). “Operational area” is stated in the articles of incorporation of the credit union, which are approved by the prime minister.

The advantages of credit unions lie in small-scale financial services based on networks of human bonds and shared territorial bonds, which can be interpreted as “relationship lending”. The background to this includes (i) credit unions are specialized in specific operational areas and (ii) transaction costs are minimal thanks to the dense human networks in the operational area.

However, credit unions cannot seek for scale merits, because of the regulations on the operational areas. In other words, there exists a tradeoff between the “specialty economy” and the “scale economy”.

In order to overcome the limitations of the credit unions, Shinkin Central Bank, or the central bank for credit unions, has been functioning as the apex body for credit unions. It provides several services to credit unions, including fund management of credit unions, operation of the settlement system. The Shinkin Central Bank operates on-line system for settlement. Credits and debits of the credit unions to other types of financial institutions are compiled by Shinkin Central Bank, and the settlement of them are also made comprehensively by Shinkin Central Bank.

Recently, credit unions are generally struggling with low profitability, and thus they have been exploring the business management strategies of the community banks in the United States. Credit unions are also facing trade-off issue between profitability and the social function to support SMEs in their regions.

Apart from the mutual loans and savings bank and the credit unions, the other financial institutions for SMEs are so called non-banks or multi-finance companies. Although there are not any specific laws defining non-banks, a consultative committee to the director of the Banking Bureau in the Ministry of Finance defined non-banks as “companies running credit operations without taking deposits”.

Non-banks have fewer operational constraints and a greater degree of freedom in their business than banks, but they are subject to the two acts regulating money lending businesses (Act Regulating the Receipt of Contributions, the Receipt of Deposits, and Interest Rates in 1954 and the Act on the Regulation of Money Lending Businesses in 1983). In addition to them, non-banks are subject to Interest Rate Restriction Act in 1954 (revised in 1999).

Money Lending Business White Paper by the Federation of Moneylenders Association of Japan classifies money lenders into 12 categories, including unsecured personal loan providers, secured personal loans providers, housing personal loan providers, business loan providers, bill discounters, credit card companies, credit loan companies, distribution and manufacturing companies, construction and real estate agents, pawnbrokers, lease companies, and daily loan providers. It is estimated that the share of non-banks in SME finance is about 10%.

Procedures for the borrowing from non-banks are generally considered to be simple and convenient compared to those of banks, but the interest rates of them are generally higher. Therefore, SMEs which access to the finances by non-banks are generally considered to be having difficulties in cash flows.

Among non-banks, leasing companies have penetrated deeply into SMEs, as about 80% of SMEs are utilizing leases[5] (financing leases and operating leases), especially for their capital investments.

[5] Shiro Yabushita and Tomo’o Bushimata (2002), Introduction to Finance for Small and Medium Enterprises

It has been pointed out that the advantages of leases include (i) capital investments can carried out without initial large funds, (ii) transaction costs for the ownership of equipments and the calculation of depreciation and taxes are smaller, (iii) impacts by inflation can be avoided, (iv) equipment can be always updated through operating leases, and (v) leasing costs can be deducted from taxable incomes.

(4) The process of the formation of regional banks in regions and the issues faced by the regional banks

Historically, regional banks have been commercial banks that provide all aspects of financial services in their specific regions. Throughout the rapid economic growth in 1950s and 1960s, regional banks had fulfilled the financial needs in the regions, especially the financial needs for capital investments.

According to *Post-War History of the Regional Banks [1] Growth Path* (1994) by the Regional Financial History Research Institute, the background to the creation of the regional banks was based on the bank ordinance in 1893. The origins of the regional bank were (i) private banks and finance companies transformed to ordinary commercial banks, (ii) newly established ordinary commercial banks according to the bank ordinance 1893, and (iii) national banks transformed to ordinary commercial banks after the expiration of the operating period as national banks. The regional banks of today are the leading banks which absorbed other ordinary banks.

The main financial method of regional banks in early 1900s was loans secured by real estates. One of the main reasons for this was that land was generally valuable, as arable lands in Japan only consist of 16% of total national land. Another reason was that borrowers in rural regions generally did not have financial assets, including securities, for collateral. Agricultural lands were preferred by banks as collateral, because they generated incomes in the form of rent from tenants or peasants.

Another characteristic of regional banks in early 1900 was that lending was far exceeding deposits, Loan-to-deposit ratio gradually decreased to reach 100% in 1920s (1897: 137.2%, 1902: 142.1%, 1907: 124.4%, 1912: 116.6%, 1916: 103.3%, 1921: 102.1%, 1926: 98.6%) .

In 1950s and 1960s, regional banks increased deposit amount, although their shares among all banks slightly decreased. Deposit amount of 64 regional banks increased from JPY 2.92 trillion in 1960 to JPY 12 trillion in 1969, increasing by 4.3 times during this ten year period. The growth of deposit amounts was achieved by the economic growth, which was approximately 16% annually during this period. However, the share of deposits held by the regional banks declined from 19.1% in 1960 to 17.4% in 1969, mainly because the financial institutions specialized in SMEs and those specialized in long-term finance increased their deposits more rapidly.

Commercial banks also saw a large decline in their shares of deposits from 36.5% to 29.9% during this period. The decrease in the market share of the regional banks was smaller than that of commercial banks.

Regional banks also saw their decline in the share of the loan market from 19.5% in 1960 to 17.5% in 1969. During this period, the market share of the commercial banks fell from 40.0% to 33.4%.

Regional banks had broadened the geographical scope of their business. At the end of the 1960s, there were only three regional banks operating only in the regions where their head offices are located. It had become standard practice for regional banks to operate in several prefectures. With this broadening of the geographical scope and orientation toward major cities, regional banks have modernized their business. However, because the degree of attachment of the regional banks to their region was weakened, they started losing market shares in the local markets to other financial institutions specialized in SMEs.

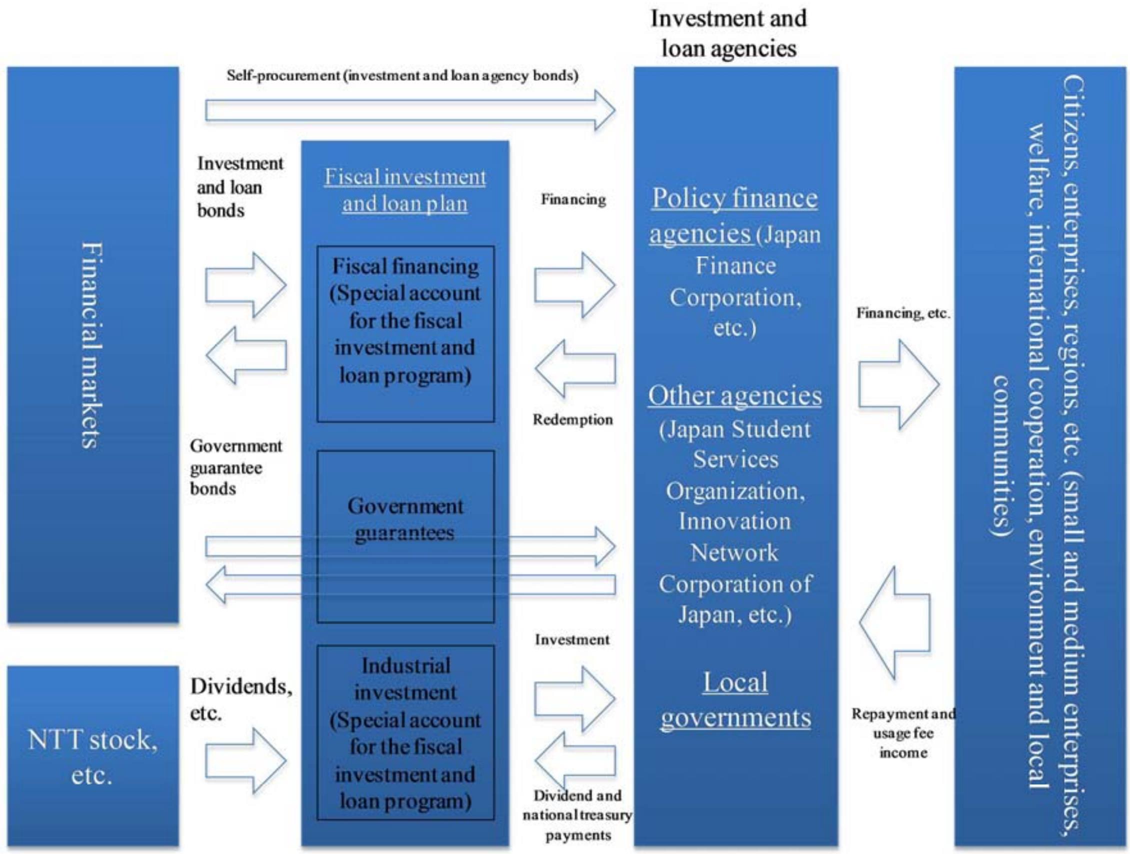
(5) Policy-based finance for SMEs

Governmental policy-based financial institutions, including People's Finance Corporation (1949), and Japan Finance Corporation for Small and Medium Enterprise (1953) were established during the turmoil after World War II. During this period, the banking sector was saddled with enormous non-performing loans, because the government stopped paying the debts that arose during the wartime. They also lacked the supply of the long-term funds necessary for industrial development. SMEs were suffering from the outdated industrial structure and the gap with modernized large companies.

Then, Credit Guarantee Corporations (1953) and Small Business Credit Insurance Corporation (1958) were created respectively to promote SME financing. Since then, policy-based finance and credit guarantee system have been functioning in parallel.

Under the "fiscal investment and loan program", the operational independence of governmental policy-based financial institutions has been guaranteed. Individual loan decisions have been made by objective credit appraisals based on the anticipated repayment capacities and collaterals, and thus corruptions in loan procedures have not been identified in policy-based lending.

Fiscal investment and loan program is defined as "investment and loan activities funded not by taxes but by government bonds, to enable the supply of long-term, fixed, low-interest funds for the implementation of large-scale and very long-term projects that are politically necessary but are difficult for the private sector to handle", according to Ministry of Finance. The overview of this system is presented in the figure below. The budget for the fiscal investment and loan program in FY 2013 is JPY 18.4 trillion. JPY 4.1 trillion is the budget for the Japan Finance Corporation (JFC).



(Remark) In the FY 2013 investment and loan reforms the mandatory deposits in postal savings and the pension reserve will be abolished.
(Source) Prepared by the study team from the web site of the Ministry of Finance

Figure 5: Mechanisms for Fiscal Investment and Loan

One of the major characteristics of the former Japan Finance Corporation for Small and Medium Enterprise (currently, JFC Small and Medium Enterprise (SME) Unit) is supplementary finance. This was established to "supply the long-term funds that are necessary for promoting the businesses run by SMEs and are difficult for general financial institutions to supply" (Small Business Finance Corporation Act, Article 1).

JFC SME Unit has played a role as adjusting rooms for private SME finance, by providing long term financing that private banks cannot actively provide. In addition, when private banks are expanding (decreasing) their loans to SMEs, JFC SME Unit decreases (increases) its loans.

Another characteristic of JFC SME Unit is that it provides "direct loans" to SMEs, which is quite different from the policy-based finance in other countries. For instance, SME Development Bank in France is allowed only to provide "co-financing" in order to avoid harming private banks. Although the loans by JFC SME Unit are not restricted only to co-financing, it does not necessarily harming private bank businesses, as the share of governmental financial institutions in the SME loan market is no more than 10%.

The secondary effect of direct loans of the policy-based finance in Japan, is “pump-priming effects”. In other words, direct loans have induced the financing from private banks because policy-based financial institutions directly obtained the business information and investment plans of the SMEs, implemented strict credit analysis, and at the same time provided business management guidance to the SMEs.

JFC SME Unit has been emphasizing on the viewpoints of industrial development or industry creation upon appraisals. Credit officers carefully examine the future potential of the SMEs, in the spirit of supporting business management and encouraging growth of SMEs, in addition to the risk checks. When examining the future potential of SMEs in its credit appraisals, JFC SME Unit typically analyzes future profitability, future cash flows, and repayment capacities based on the future cash flows.

In order to achieve this, human resource development, especially enhancement of credit appraisal skills of the credit officers is essential. However, credit appraisals of SMEs are not always easy. The financial data of SMEs are not always reliable and the business managements of SMEs tend to depends heavily on the personalities of business managers. Then, unlike the credit appraisals on large companies, credit appraisals on SMEs could not reach to appropriate conclusions, when they are carried out only by quantitative analysis. Unlike micro credit, automatic credit appraisals based on several financial and non-financial information would be inadequate either. For the screening of SMEs it is necessary to balance the human judgments on financial and non-financial information, and statistical techniques. This approach can be achieved by various forms of training and on-the-job trainings (OJTs).

JFC Micro Business and Individual Unit (former People’s Finance Corporation) is tasked with supplying long-term funds at low interest rate to micro and small enterprises. Therefore, it mostly provides small-volume financing, and thus it emphasizes efficiency in credit appraisal process.

One of the specific loan products of JFC Micro Business and Individual Unit is Managerial Improvement Loan (MARUKEI Loan), which is a package of small-volume financing with technical assistance on business management. An applicant needs recommendations from the chambers of commerce and industry that has the information of the applicant. By this arrangement, JFC Micro Business and Individual Unit alleviates the issues in the asymmetry of information, and also achieve the reductions in screening costs,

As part of the government supports to SME finance, credit guarantee corporations (CGCs) have been playing important roles in financing to SMEs which lacks assets for collateral. There are 52 CGCs in total in Japan, which were separately established in all provinces and in several cities. Currently, approximately 10% of the loans outstanding to SMEs are backed by credit guarantees by these CGCs.

One of the characteristics of the credit guarantee system is that guarantee fees, which were set at the uniform rate before April 2006, is now determined based on the risk level of borrowers. Another characteristic of the credit guarantee in Japan is that the re-guarantee (insurance) system, under which 70% to 90% of the risks of CGSs are shared by the insurance company or JFC SME Unit (former Small Business Insurance Corporation). The insurance absorbs the risks of the overall credit guarantee system through its two layer guarantee system.

One of the issues in policy-based finance is its policy costs. According to *Fiscal Investment and Loan Program (FILP) Report* by the Financial Bureau of the Ministry of Finance, the planned amount of fiscal investment and loans in FY 2012 for (i) JFC Micro Business and Individual Unit and (ii) JFC SME Units and (iii) JFC Agriculture, Forestry, Fisheries, and Food Business (AFFF) Unit were JPY 2.3 trillion, JPY 1.8 trillion and JPY 180 billion respectively. The policy costs[6], on the other hand, were JPY 144.6 billion, JPY 105.7 billion, JPY 138.4 billion respectively.

(6) Historical changes in credit appraisals of SME finance by commercial banks and regional banks

Trust, Confidence and Credit - The Core of Finance (2002) by Hisahiko Saito discusses that credit appraisals of SME finance by commercial banks and regional banks in Japan have changed over the years, and categorizes them into four periods: (i) strict loan appraisals (from the late 1940s to the 1950s), (ii) credit appraisal loosening (1960s), (iii) decline in the functions of the credit departments in bank headquarters (1979 to mid 1980s), and (iv) deteriorations in credit appraisals in the bubble period (from mid 1980s).

In mid 1940s, economic revival was a major issue for the post-war Japanese economy. Because, production materials were not sufficiently supplied, the government started “priority production system” in December 1946. This was followed by several countermeasures against hyperinflation, including “Emergency Financial Measures Ordinance” in 1946, “Financial Institution Financing Rules”, and “priority ranking schedule of industries for loans” in March 1947 by the Ministry of Finance.

As a result of such rules and regulations, which tried to control hyperinflation, the loan appraisal of banks became very strict and commercial banks and regional banks made all loan decision at credit divisions at headquarters, while branches did not have any authorities in credit appraisals and processed loan procedures.

[6] The policy costs are calculated as (a) subsidies from the national government + (b) opportunity costs such as investments from the national government - (c) decrease in the retained loss)

During this period, real estate generally did not have any liquidity, and thus they could not cover the loans as collaterals. As there were many bankruptcies during this period, banks focused on recovering and protecting their loan assets, including investigating the endorsement of bills and checks, having interviews on borrowers among the same industries, seeking for credit guarantees by CGCs.

However, when the government fully rolled out the rapid economic growth policy under "Income Doubling Plan" in December 1960, the Japanese economy boosted. As a result, enterprises gained stronger negotiating positions to financial institutions.

On the other hand, commercial banks, which did not have sufficient funds, focused on increasing deposits. Then, they started requesting borrowers to make a limited withdrawal deposit, known as "compensating balances" when they provide loans. Bank officers, who were in charge of both deposit transactions and loans of their customers, became less strict in loan appraisals, in order to achieve their targets in increasing deposit balances.

During the rapid economic growth period during 1960s and 1970s, the commercial banks were concentrated on large companies, and they did not have sufficient experiences in credit appraisals of SMEs and individuals. However, they started increasing loans to SMEs which were contributing to the economic growth during this period, and then they started increasing human resources in credit appraisal divisions at headquarters.

Since 1979, banks started organizational reforms to corresponding to the liberalization, internationalization, and securitization of the financial market. Specifically, they changed their organizational structure, from "functional structure" to "divisional structure". Under the divisional structure, bank organizations were divided into several divisions according to the characteristics of clients, such as large companies and SMEs. A division had departments for business development, loan appraisals, and management. At the same time, branch managers were given more authorities to make loan decisions. As a result, loan appraisals were made quicker.

Sumitomo Bank was the first bank which employed such organizational structure. They carried out the organizational reforms in July 1974, following the proposal by a consulting firm McKinsey & Company. Under the new organization, the bank expanded their loans to maximize profits. However, the independence and the double-checking functions of the credit appraisal division in headquarters were lost, and the credit appraisal function of the banks generally became lax.

During the bubble period in 1980s, the loan appraisal functions of banks became further lax. The commercial banks actively expanded their business into retail banking (small-volume loans to SMEs and individuals), and started competing with small and medium-sized financial institutions.

Banks expanded their loans to real estates and security investments, which were regarded as more profitable businesses. During this period, banks believed that the financial authority would not let them go bankrupt and would provide financial supports. This led to the further lax credit appraisals and moral hazard issues of banks. Similarly, banks provided loans to anyone who had collateral regardless of the purpose of funds. Eventually, loan appraisal functions of banks were severely weakened.

(7) Japan's financial system centered on bank loans and the growth potential of enterprises

Economic White Paper (1964) is one of the many studies that attempted to verify the rationality of the financial system centered on bank loans. It showed the relationship between the sales growth rates of companies and the financing conditions, as in the figures below.

Table 3: Sales Growth Rate and Financing (1955 to 1962)

a. Growth rate band	b. Financing composition (%)		c. Borrowing and deposits increase (times)		d. Capital composition (1963 1H) (%)		e. Main bank financing ratio (%)		f. Degree of fixation of borrowing priority
	Borrowings	Equity capital	Borrowings	Deposits	Borrowing ratio	Equity capital ratio	1955 1H	1963 2H	
I. 8 times or more (21 companies)	32.5	36.3	9.52	17.40	32.3	38.7	65.2	44.5	0.681
II. 5-8 times (34 companies)	36.6	23.3	8.27	8.73	35.5	26.7	42.9	35.1	0.705
III. 3-5 times (55 companies)	41.0	22.3	6.59	5.06	38.7	28.0	55.5	51.6	0.796
IV. 2-3 times (53 companies)	41.8	22.5	4.31	2.86	39.3	31.6	41.1	40.4	0.787
V. Less than 2 times (40 companies)	47.0	17.1	2.74	2.19	39.1	29.4	38.9	41.9	0.808

(Data) Economic White Paper 1964
(Source) Osamu Ito (1995), Historical Structure of Japanese Finance

The observations by Ito (1995) on the table above are as follows;

i) Enterprises with a higher growth rate were less dependent on borrowing because they could obtain financing by issuing shares and by using internal reserves.
ii) Most of the bank loans of high growth enterprises were from their main financing bank in 1955, and this proportion declined substantially. High growth enterprises were flexible in bank relationships, but low growth enterprises had fixed business relationships with the banks.

iii) High growth enterprises reduced their dependence on borrowing, although they increased their loan amount. High growth enterprises seem to have maintained bank relationships to secure loans.
iv) Competition among banks on high growth enterprises was generally severe, and it decreased the dependency on their main financing bank.
v) Large companies increased their sales more rapidly than increasing borrowings, while SMEs increased borrowings more than sales. Large companies accessed to the funds at security market, while SMEs used more bank loans to expand their businesses.

Ito (1995) also suggests that borrowings did not necessarily lead to the business growth, and also that the major factors to determine the business growth would be business management capacities of the companies and business environment.

(8) Financial models for agriculture, forestry and fisheries businesses

Financing has been critical issues for agriculture, forestry and fisheries businesses for their daily operations and also for capital investments for their business expansions and business managerial improvements. Finance is also regarded as a safety net on natural disasters and infectious diseases in livestock, and is essential for maintaining stable business in agriculture, forestry and fisheries sectors.

The specific features of the agriculture, forestry and fisheries industries[7] from viewpoints of financiers include the following.

- ✓ Production and business management activities are unstable because they are influenced by fluctuations in natural conditions
- ✓ It takes a long time to recover investments, and so, it takes a long time to repay the loan
- ✓ The property which is used for collateral is low-liquidity agricultural and forestry land.
- ✓ Profitability is low reflecting the stagnation of product prices.

Agriculture, forestry and fisheries are operated mainly by individuals or sole proprietorships.[8] Therefore, the business operators in these sectors tend to lack durability. In addition, the business management and the household budget of them are not separated from each other. For this reason, finance for agriculture, forestry and fisheries sectors contains relatively large uncertainties and risks in the business management.

Furthermore, it is not easy for banks to collect information on the business management of borrowers, and therefore, risk analysis and evaluations are not easy either. Eventually, financial

[7] Ministry of Agriculture, Forestry and Fisheries, Report of the Study Group on Finance for Agriculture, Forestry and Fisheries (2004)
[8] According to 2011 statistics by the Ministry of Agriculture, Forestry and Fisheries, there are 1,618,000 agricultural businesses of which 1,586,000 (98%) are family-run businesses and 26,000 (1.6%) are corporations.

institutions have been generally reluctant to provide loans to these sectors, and thus JFC as a policy-based bank specialized in agricultural finance and the Japan agricultural cooperative organizations have been playing major roles in this field.

Agriculture finance in Japan, which has been led by the two major players, JFC and the Japan agricultural cooperatives, has been changing over years, according to the economic and political situations.

Table 4: History of Agriculture Finance in Japan

	Major issues, etc.	Major events, etc.
1945-	- The end of the World War II - Food supply problems: Japan faced serious needs for the expansion of food production. - "Farm reform program" started: Lands owned by landlords were distributed to smallholders. Number of smallholders expanded.	1946: Re-organization of Japan Agriculture Cooperatives (JA) 1951: Agricultural Credit Guarantee Scheme started. 1953: Agricultural Financial Corporation (currently JFC AFFF Unit) established.
1960-	- Japan achieved the food production expansion target. - Workers in agricultural sector moved to manufacturing sectors. - Income gap between manufacturing sector and agricultural sector became big. - The gov't targeted on enhancing the efficiency in agricultural production.	1961: Agricultural Modernization Loans started. 1961: Agriculture Credit Insurance System Started.
1990-	1992: “The basic direction of new policies for food, agriculture and rural areas” issued. 1994: “Agricultural Management Reinforcement Law” issued.	1994: Certified farmer system started. Super L loans (fund for strengthening of agricultural management base) started.

(Source) Study team based on Kato (1982), Kimura (2010) and Ministry of Agriculture, Fishery and Forestry.

Since 1945 when Japan lost World War II, Japan suffered from serious food shortage, mainly because (i) lack of labor forces due to military services, (ii) lack of agricultural equipment, fertilizers and seeds. At the same time, farmlands owned by large size landlords were distributed to smallholders under the "Farm reform program", and financial institution could not provide loans to farmers taking farmlands as collateral.

Establishment of Japan Agriculture Cooperatives (JAs) was started in 1948, re-organizing “Agricultural Association” which used to function as part of the governmental organization to control the food productions and supplies in Japan. JAs are private cooperatives, for the mutual aids of farmers, targeting on the enhancement of the welfares of farmers. JAs have been functioned as one of the main providers of the agricultural finances too.

In order to address the food supply issues, Agriculture, Forestry and Fisheries Finance Corporation (AFC, currently JFC AFFF Unit) was established in 1953 to provide long term loans for the capital investments for the expansions of food productions. The reason why the government did not persuade JAs to provide long term loans was that JAs mainly provided short and medium term loans to farmers, and also that the government tried to avoid intervening the business management of JAs[9].

Around 1960, the food shortage problems were cleared, due to the successful food supply expansions. During this period, Japan enjoyed high economic growth, led by the development of the industrial sectors. Then, labor forces started moving from the agriculture sector to the industrial sectors. Accordingly, the gap between the income level of the agriculture and industrial sector increased.

In 1961, Agriculture Basic Act was established, which targeted on the enhancement of the productivity of agriculture sector. Accumulations of the farmlands to large sized farmers were also one of the main aims. Based on this, “Agriculture Modernization Loan” was established by the government, and JAs started providing long-term loans for the capital investment on the agricultural machineries.

At the same time, Agricultural Credit Guarantee Insurance Act was established in 1961. Based on this Act, credit guarantee corporations for the agriculture sector were established in all prefectures to provide credit guarantees to the loans mainly by JAs[10].

The government issued “The basic direction of new policies for food, agriculture and rural areas” in 1992, which was followed by “Agricultural Management Reinforcement Law” in 1994. Based on this, the government started “Certified farmer” system. The government regarded the certified farmers as the focal points of the upgrading of the agriculture, and started providing loans at favorable conditions (long term and low interest rate).

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9 Kato, Y (1982) Agriculture Credit

10 Agriculture Credit Guarantee Fund Associations.

As mentioned above, the agriculture finance in Japan has been dominated by two major players, namely JAs and JFC AFFF Unit, who provide loans to farmers with significant supports by the government.

The table below shows the composition of the loan balances on agriculture business by financial institutions. It shows that JAs and JFC account for almost all agriculture financing and that JAs, with 755 branch network, play the most significant role. This also shows that large part of the agriculture finance has been supported by the government (e.g. interest subsidies).

The target segments of JAs and JFC are different. JAs target on small sized farmers and farm enterprises, while JFC focuses rather on large sized farmers. Similarly, JAs provide short term loans, while JFC provides long term loans.

Table 5: Breakdown of loans outstanding for agricultural businesses by financial institutions

	Mar. 2009	Mar. 2010
JA	58.9%	65%
JFC	39.2%	33%
Local governments	1.7%	1%
Commercial banks	0.2%	0.2%
Total	2.2 trillion yen	2.7 trillion yen
through JA branches	81%	82%
government program loan	72%	56%

(Source) Ministry of Agriculture, Forestry and Fisheries. Annual Report on Food, Agriculture, Rural Areas

“Survey on Financing for Farm Enterprises”[11] by Ministry of Agriculture, Forestry and Fisheries in 2006 and 2007, pointed out that most farm enterprises have access to finance, mentioning that 98.5% of farm enterprises have long-term borrowings and 76.2% have short-term borrowings.

The major loan providers for farm enterprises are JAs and JFC. 77.6% of farm enterprises mentioned that they have obtained loans from JFC AFFF Unit (former Agriculture, Forestry and Fisheries Finance Corporation), while 49.7% from JAs. Smaller proportion of farm enterprises has obtained loans from other financial institutions. 33.0% of farm enterprises have experiences of borrowing from regional banks, and 14.7% from credit unions[12].

Regional banks and leading non-banks have also been increasing their balances of agriculture financing. Recently, major commercial banks are actively proving loans to large-scale

[11] Questionnaire survey of 798 agricultural corporations
[12] It is important to note that amount and balance of borrowing from each financial institution is not reflected in these figures.

agricultural businesses. One of the reasons for this is that such financial institutions are trying to find out new sectors to provide loans, due to the shrinks in the existing loan markets. Another reason is that many companies from food production, food distribution, and restaurants are starting expanding their business to farm productions.

2.2 Financial Systems for Micro, Small and Medium Enterprises

2.2 1 Financing mechanisms and financial products

In the SME finance market, there are several types of players including commercial banks, regional banks, and mutual loans and savings banks (second-tier regional banks). In addition to them, there are governmental financial institutions such as Japan Finance Corporation (JFC) and Shoko Chukin Bank, and credit unions (Shinkin Bank), which are non-profit based regional financial institutions. Governmental financial institutions and credit unions account for about a 25% share of the SME loan market.

When enterprises or borrowers are categorized into (i) micro enterprises and individual business owners and (ii) small and medium-sized enterprises, JFC Micro Business and Individual Unit and credit unions are the major loan providers to the former, while JFC SME Unit and Shoko Chukin Bank are the major providers to the latter.

The following section overviews these organizations and discusses their financing mechanisms.

(1) Japan Finance Corporation Micro Business and Individual Unit

JFC Micro Business and Individual Unit, the former People's Finance Corporation, mainly provides finance to micro and small enterprises. Although they are allowed to offer financing to "small and medium enterprises" by the Small and Medium-sized Enterprise Basic Act, it does not usually extend loans to medium-sized enterprises in practice.

In FY 2011, it concluded 430,000 loan contracts (JPY 2.5061 trillion), out of which 278,773 were business loans, and 87% of which were loans to micro enterprises with not more than nine employees.

The number of existing loan contracts of JFC Micro Business and Individual Unit as of the end of FY 2011 was 2,320,000. The loan balance was JPY 7.3 trillion, of which JPY 6.4 trillion was business loans. The breakdown of the business loans by industry type is as follows:

- Manufacturing industry: 12.1%
- Wholesale and retail industry: 24.5%
- Restaurants and accommodation: 8.6%
- Service industry: 22.0%

- Construction industry: 15.5%
- Other: 17.3%.

Similarly, the breakdown by the loan purposes is as follows;
- Working capital: 67.9%
- Capital investment: 32.1%

The average loan balance per borrower was JPY 6.5 million, and the breakdown by the amount of financing based on the number of companies is as follows:

Table 6 Breakdown of number loans of JFC Micro Business and Individual Unit by size

Loan size	Proportion
- JPY 3 million:	32.8%
JPY 3 million - JPY 5 million:	19.7%
JPY 5 million - JPY 8 million:	13.8%
JPY 8 million - :	33.7%

(Source) JFC Micro Business and Individual Unit

This table shows that 66.3% of enterprises are borrowing JPY 8 million or less. 77.2% of the loans of JFC Micro Business and Individual Unit are unsecured, while 22.8% are secured (covered by collateral).

As in the table below, JFC Micro Business and Individual Unit has been playing its role as "the loan provider for small business". This table clearly shows that the JFC Micro Business and Individual Unit has been providing small sized loans to small businesses.

Table 7: Japan Finance Corporation (Micro Business and Individual Unit)/ Number of borrowers and the Average Loan Balance per Enterprise

	JFC	Credit unions total	Domestic banks total
Number of borrowers (companies)	980,000	1,160,000	2,080,000
Average loan balance per enterprise	JPY 6,510,000	JPY 35,600,000	JPY 82,760,000

(Remarks) Domestic banks include commercial banks, regional banks, second-tier regional banks, trust banks, etc.
(Source) JFC Micro Business and Individual Unit's website

Another policy goal of JFC Micro Business and Individual Unit is to support entrepreneurs. It has established "Entrepreneur Support Desk" in its 152 branches, and provided loans to 41,565 newly established enterprises (within five years after the opening of business) in FY 2011, of which 16,465 were established within one year. It also contributed to employment creation of approximately 64,000 people in one year.

When applying for loans of JFC Micro Business and Individual Unit, applicants (individual business owners and small enterprises) submit required documents including a prescribed loan application form, an enterprise summary (in the case of a first-time application for corporation financing), a business startup plan (in the case of a business launch), the financial statements for the last two year periods, the most recent provisional financial statements, a copy of the registration certificate of the company, and the cost estimates for the equipment the enterprise plans to purchase by loans, to a branch counter of the region in which the head office of the applicant is located. An officer of JFC will interview the applicant, and then carry out the loan appraisals.

The loan limit of a borrower is JPY 48 million, and the maximum loan period is ten years including a grace period of two years for capital investment, or five years including a grace period of one year for working capital. Loan interest rate, which is fixed for the whole loan period, varies from 1.45% to 3.80% (as of the end of February 2013) depending on several conditions including loan purposes, repayment periods, and values of collaterals. It sometimes offers “special loans”, with which special interest rates lower than usual interest rate are applied.

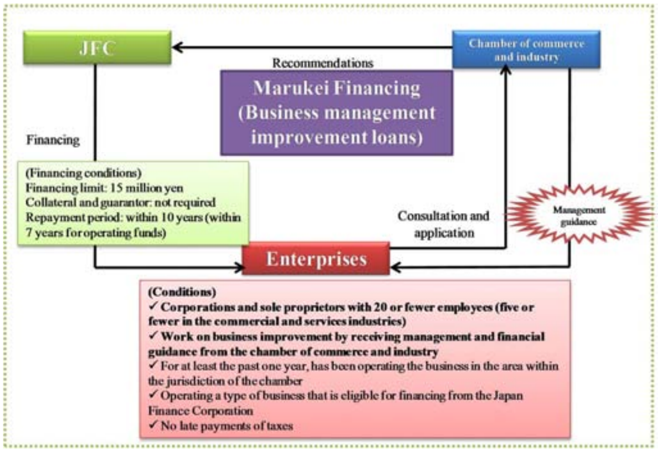
Special loans are provided aiming at achieving policy goals. As of 2013, JFC Micro Business and Individual Unit of JFC offers the following special loans;

- Safety net loans (e.g. Fund for Responding to Changes in the Business Management Environment)
- New enterprise development loans (e.g. New Business Start-Up Fund)
- Enterprise vitality strengthening loans (e.g. Enterprise Vitality Strengthening Fund)
- Loans for environmental and energy measures (e.g. Environmental and Energy Measures Fund)
- Enterprise rehabilitation loans (e.g. Business Reconstruction & Business Succession Support Fund)
- Environmental sanitation loans
- Other special loans

All of the special loans are offered with more favorable conditions than ordinary loans, including financing limits, interest rates, and loan periods.

One of the specific loan products that JFC Micro Business and Individual Unit offers is “Managerial Improvement Loan” which is also known as MARUKEI Loan.

This is a loan product organized by the collaborations between a chamber of commerce and industry and JFC Micro Business and Individual Unit. Small enterprises, which obtained recommendation letters issued by a chamber of commerce and industry, receive technical assistance on business management and financial planning at the chamber, and also can receive program loans for business managerial improvement, without collateral or guarantees. Since the introduction in 1973, JFC Micro Business and Individual Unit has provided “Managerial Improvement Loans” to approximately 4,800,000 borrowers in cumulative total. In FY 2011, 35,159 loans worth JPY 154.3 billion were provided.



[Key points regarding Marukei financing]
Marukei financing reduces credit risk by improving regular monitoring of business conditions and managerial ability by keeping financing to small amounts than the general financing of the Micro Business and Individual Unit (JPY 15 million) and including regular business management guidance in collaboration with the chambers of commerce and industry.

(Source) Prepared by the study team from the Japan Finance Corporation and the Tokyo Chamber of Commerce and Industry web sites.

Figure 6: Overview of the Managerial Improvement Loan (MARUKEI Loan) System

(2) Credit unions (Shinkin Bank)

The financial services provided by credit unions, nonprofit based regional financial institutions, are as almost same as those of commercial banks (Shinkin Bank Act, Article 8). However, credit unions are supposed to provide loans in the spirit of mutual aid. Credit unions are also regulated to provide services only in their designated operational areas[13].

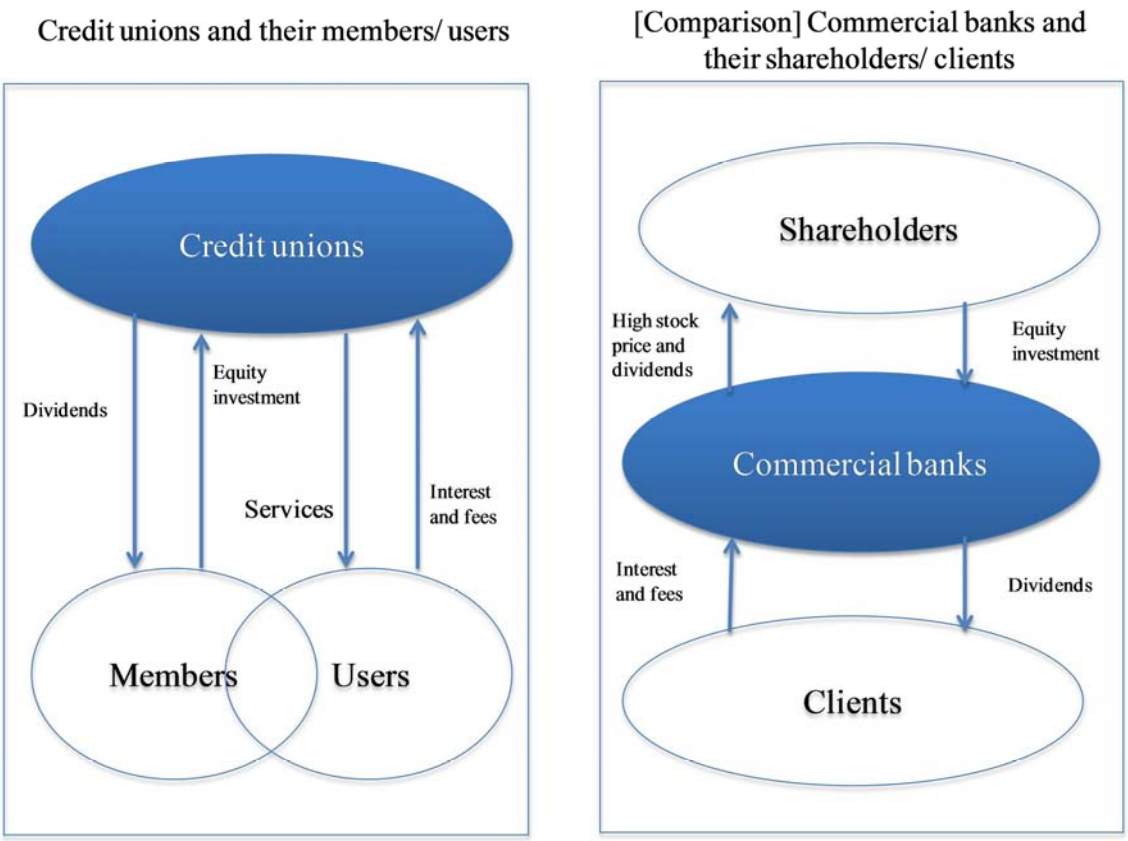
Similarly, they can provide financial services only to the “members”, who are residents, workers, SMEs, company managers in their operational area. Under their definition, SMEs are enterprises with 300 or fewer employees or enterprises with capital less than JPY 900 million.

As mentioned above, credit unions are supposed to provide loans to the members in their operational area with some exceptions. The exceptional loans include;

i) Loans secured with deposits or savings,
ii) Loans to graduates
iii) Small-volume non-member loans
iv) Loans to local governments.

The relationship between credit unions and their members and users can be depicted as in the following figure.

[13] Reference: National Association of Shinkin Banks (2003), Shinkin Bank Reader.



(Source) Yasushi Fujiwara (2003), Exploring the Source of North American Cooperative Structured Finance, Shinkin Central Bank Monthly Review, March 2003

Figure 7: The Relationship between Credit Unions and their Members and Users

According to the statistics by Shinkin Central Bank, there are 270 credit unions with 7,507 branches (270 head offices, 6,984 branches, and 253 sub-branches), 9,314,703 members, and 116,960 officers and regular employees (including 2,241 executive directors) as of the end of November 2012. The loans balance is JPY 63.5 trillion as of the end of September 2012, and JPY 41.1 trillion of this were provided to SMEs.

As financial institutions specialized in SMEs, credit unions have been focusing on providing small sized loans to many borrowers. The loan size of the most borrowers is smaller than JPY 1 million (55.6%, as of the end of March 200).

Financial services provided by the credit unions are very diverse, as shown in the table below.

Table 8: Types of Financing Services by Credit Unions

Classification based on account item			
	Discounted bills		This is the financing format in which bills are purchased after subtracting the interest up until the deadline for the payment of the bills from the owner of bills drawn as the settlement cost of a commercial transaction, as a discount.
	Loans of bills		This is a format for financing by pledging promissory bills (single-name bills with the drawer as the borrower and the recipient as the credit union) instead of the due bills. This borrowing format is simple and requires little effort so it is used for short-term operating funds such as product stocking and purchases of raw materials. The interest is paid in advance.
	Deed loans		This approach pledges a borrowing deed for the financing, and is generally used for the supply of long-term funds such as equipment investment, long-term operating funds, housing loans. The interest is paid afterwards.
	Overdrafts		The counterparty is allowed to make payments using checks that are drawn in excess of the balance of current deposits if the payment is within the scope of a fixed agreement amount based on an overdraft agreement.
Classification based on financing target			
	Financing for corporations	Capital investment	These are business funds used for the purchase or improvement of land and buildings, equipment and machinery, and they are normally long-term financing for over one year.
		Working capital	These are business funds allocated to the stocking of products and raw materials, the settlement of accounts payable and bills payable, and operating expenses, and they are normally short-term financing for less than one year.
	Financing for individuals	Housing-related loans	These come in three types: fixed interest, floating interest, a type for which fixed interest and floating interest can be selected.
		Purpose-type loans	These are consumers loans for which the purpose of use of the funds is restricted. They include education loans, automobile loans, and insurance loans for financing lump-sum insurance premiums.
		Free loans with an unspecified purpose of use	These are loans with an unspecified purpose of use, and are generally financing with guarantees attached from guarantee companies. They include card loans and free loans.
Classification based on collateral.			
	Financing with collateral		Financing collateralized by (i) deposits and savings of the finance corporation, (ii) marketable securities such as bonds, (iii) movable property such as the actual products, (iv) real estate such as

			land, buildings, and (v) commercial bills, golf memberships.
	Financing with guarantee		This is financing with guarantees from the Credit Guarantee Corporations, Shinkin Hosho Kikin, the various kinds of guarantee companies, consumers loan alliance companies.
	Financing based on credit		These loans are known as credit loans, and are uncollateralized and un-guaranteed financing. Note that human guarantees (guarantor, joint and several guarantor) are included in financing based on credit, not in financing with guarantees.

(Source) National Association of Shinkin Banks (2003), Shinkin Bank Reader

A credit union is regulated not to provide loans to a single borrower more than 25% of its paid up capital, so that it can provide small loans to many borrowers. This is designed to avoid the concentration of loans in specific enterprises.

Recently, competition among financial institutions in the SME finance market is getting more severe, and thus the pressures on the reduction of loan interest rates are increasing. However, credit unions are estimated to be securing sufficient profits from loans, as they are providing small-volume long-term loans to many borrowers.

There are some local governments, which provide financial supports to SMEs in their own regions through credit unions, which have close relationships with local communities. Examples of such financial supports are shown in the tables below.

Example of Hamamatsu Shinkin Bank (Hamamatsu Credit Union)

Hamamatsu Shinkin Bank which operates in Hamamatsu region in Shizuoka Prefecture has established the Hamashin Yaramaika Brand Fund, a unique financing systems for enterprises promoting regional local brands.

Table 9: Financing Conditions for Hamashin Yaramaika Brand Fund

Eligible enterprises	Enterprises certified as Hamamatsu regional brands, enterprises which have applied for certification, enterprises which are attempting to launch new business activities
Purpose of use of the funds	Working capital or capital investment for the new business activities, and the manufacture and sale of regional brand products
Financing amount	JPY 50 million
Repayment period	Working capital: within 5 years Capital investment: within 10 years
Rate of interest for the financing	Floating or fixed (fixed rates are granted only to the loans within 3 year repayments)
Collateral and guarantees	Depend on the financing conditions

(Source) Prepared by the study team from the Hamamatsu Shinkin Bank web site.

Example of Kitaiseueno Shinkin Bank (Kitaiseueno Credit Union)

Kitaiseueno Shinkin Bank in Mie Prefecture has developed business loans named as “Hikari”. Kitaiseueno Shinkin Bank carries out the credit appraisals right after receiving credit applications and they notify the appraisal results to the applicants within three business days.

Table 10: Financing Conditions for Business Loan “Hikari”

Eligible enterprises	The applicant has been operating the same business for two years or more, within the operating area of the bank The applicant is able to submit its financial statements and tax declarations for at least two accounting periods The applicant has paid all of its taxes The liabilities of the applicant did not exceed its assets in its most recent settlement of accounts
Purpose of use of the funds	Working capital and capital investment
Financing amount	Minimum JPY 1 million, and maximum JPY 30 million
Repayment period	Over 1 year, and within 5 years and 1 month
Collateral	Not required
Guarantors	Guarantees by individual business managers

(Source) Prepared by the study team from the Kitaiseueno Shinkin Bank web site

(3) Japan Finance Corporation Small and Medium Enterprise (SME) Unit

JFC Small and Medium Enterprise (SME) Unit, which used to be Japan Finance Corporation for Small and Medium Enterprise was established to “supply long-term funds that are necessary for promoting the businesses run by small and medium enterprise operators and are difficult for private financial institutions to supply” as stipulated in Small Business Finance Corporation Act, Article 1. This represents one of the major characteristics of the functions of JFC SME Unit, as the provider of “supplementary finance”. In other words, JFC SME Unit has provided finance to SMEs with conditions that commercial banks and credit unions cannot provide.

JFC SME Unit disbursed loans of JPY 2.4 trillion in FY 2011, of which JPY 2.0 trillion was in direct loans. The number of borrowers as of the end of FY 2011 was 46,599, and the outstanding loan balance was JPY 6.44 trillion, of which JPY 6.40 trillion was in direct loans The average loan balance per company is JPY 137 million.

Loans to manufacturing sector consist of 48.7% of the total loan balance of JFC SME Unit. 65.6% of the loans were for working capital, and the remaining 34.4% were for capital investments. The proportion of the loans for capital investment is decreasing, compared to 53.5% in 2008. This would be due to the stagnant economy in Japan.

Breakdown of the number of loans of JFC SME Unit by the amount are as in the table below;

Table 11 Breakdown of number loans of JFC SME Unit by size

Loan size	Proportion
JPY 30 - 50 million	19.7%
JPY 50 - 100 million	20.3%
JPY 100 million-	14.9%

(Source) JFC SME Unit

This shows that more than half (54.9%) of all loans of JFC SME Unit are more than JPY 30 million.

Similarly, breakdown of the number of loans of JFC SME Unit by the loan period are depicted as in the table below. This clearly shows that JFC SME Unit is focusing on long term financing.

Table 12 Breakdown of number loans of JFC SME Unit by loan period

Loan term	Proportion
- 3 years	4.7%
3-5 years	44.3%
5-7 years	15.1%
7-10 years	28.3%
10-15 years	6.4%
15 years -	1.1%

(Source) JFC SME Unit

JFC explains that the proportion of long-term loans is “50.9% for over five years (on a balance basis)” and compares this with that of private financial institutions of “22.0% for over five years with fixed interest (on a number-of-companies basis).”

Another characteristic of the loans by JFC SME Unit is that it has played a role as adjusting rooms for the SME loan quantities as a whole. Comparing the changes in loan balances of JFC SME Unit and private financial institutions for the period from 1978 to 2011, the loan balance of JFC SME Unit shows increases (decreases), when that of private commercial banks show decreases (increases), so that loan supplies to SMEs can be stable.

JFC SME Unit also provides “Special loans” that JFC Micro Business and Individual Unit provides. Same interest rate and loan period are applied to the special loans of both units, although the upper limit of the loans that JFC SME Unit can provide is 10 times bigger than that of Micro Business and Individual Unit. Basically the individual guarantee of the business manager and physical collateral (such as real estate collateral) are required for the special loans provided by JFC SME Unit.

JFC SME Unit has emphasized the viewpoints of industrial development or industry creations in loan appraisals, considering the future prospects of loan applicants and also the future of the industries. This seems to have induced so called “pump-priming effect” by which private financial institutions were stimulated to provide loans to the same SMEs or the same industries as JFC. It would be possible to say that the loan appraisal capacity of JFC SME Unit has been the key to generate such “pump priming effects”.

Therefore, the enhancement of the loan appraisal capacity at JFC SME Unit is one of the critical issues, while such capacities are sometimes pointed out to have been weakened due to the introduction of IT system into credit appraisal processes.

(4) Shoko Chukin Bank

The Shoko Chukin Bank[14] is one of the governmental financial institutions that established in 1936 for the purpose of facilitating finance for the commercial and industrial associations, and their member SMEs.

The Shoko Chukin Bank was initially established as a cooperative financial institution based on the 1936 Shoko Chukin Banking Act, and then it changed its legal status to a “special company” according to the Shoko Chukin Bank Limited Act in 2008. The government is currently planning to privatize the Shoko Chukin Bank after 2015.

Unlike JFC, the Shoko Chukin Bank is partially funded by commercial and industrial associations. Although the Shoko Chukin Bank can provide loans only to commercial and industrial associations and their members, it provides wide range of financial services, including deposits, deed loans, bill discounting, and overdrafts.

The Shoko Chukin Bank was capitalized in 2008, and the restrictions on deposit transactions were abolished. Then, the Shoko Chukin Bank stopped issuing coupon bank debentures and discount bank debentures, in December 2012, which had been allowed only to special banks for funding. Currently, the Shoko Chukin Bank does not have any special characteristics as a governmental policy-based financial institution. The only characteristic as a policy-based bank is that it can also provide “special loans” that JFC provides.

The loan balance as of the end of September 2012 was JPY 9.5 trillion, while the total amount of funds was JPY 9.3 trillion including deposits of JPY 4.0 trillion, negotiable deposits of JPY61.6 billion, and bonds of JPY 5.2 trillion. It had 4,159 employees and 104 branches, of which 100 are domestic branches.

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[14] The Shoko Chukin Bank can be translated as “Central Bank for Commercial and Industrial Cooperative”.

(5) Loan collaborations among banks, government, and tax accountant corporations

Financial institutions basically provide financing products that are developed by them, but sometimes they provide products developed in the partnership with local governments and with tax accountant corporations.

One of the examples is “financing based on the proposals by financial institutions” program in Osaka prefecture. Under “Financing based on the proposals by financial institutions” program, financial institutions design their own products utilizing their own expertise and specialties to support SMEs. Currently, there are approximately 40 loan products, developed based on the proposals by 20 financial institutions. Loan limits and loan periods vary among products.

Osaka Prefecture provide financial supports to the participating banks, such as making deposits at the banks, in order to achieve lower lending interest rates.

Table 13: Financial Institution Proposal Type Financing (Example of Osaka Prefecture)

Category	Name of financial institution	Financing targets
Growth enterprises (Support for hard-working small and medium-sized enterprises)	Resona Bank	Small and medium-sized enterprises (only corporations) which have business plans for development and growth and are actively adopting environmental initiatives
	Senshu Ikeda Bank	Small and medium-sized enterprises that are aiming to grow by formulating innovate business management plans, or small and medium-sized enterprises that are making investments in fields that contribute to the strengthening of the foundation for growth
	Kinki Osaka Bank	Small and medium-sized enterprises that have formulated business plans and which are supported by the financial institution in the areas of information relation activities and activities to encourage growth
	Nanto Bank	Small and medium-sized enterprises that are judged to have medium- to long-term growth potential and novelty
	Osaka City Shinkin Bank	Small and medium-sized enterprises aiming for technology development and the commencement of new businesses in growth fields
	Kyoto Chuo Shinkin Bank	Small and medium-sized enterprises running businesses in growth fields
Development of sales channels	Bank of Kyoto	Small and medium-sized enterprises aiming for new business development and business expansion
Practitioners	Osaka Shoko Shinkin Bank	As a general rule, practitioners launching their businesses within two kilometers of the branch of the financial institution
Small-scale enterprises	Osaka Shinkin Bank	Small and medium-sized enterprises that consult about business management at the chambers of commerce and industry and at the Osaka business management skills upgrading project, and attempt to seriously implement the advice they receive
Manufacturing enterprises	Senshu Ikeda Bank	Enterprises selected as one of the “300 of Japan’s Exciting Monozukuri (Manufacturing) SMEs” and enterprises that have won the “Outstanding Osaka Manufacturing Company Prize”.
	Osaka Higashi Shinkin Bank	Small and medium-sized enterprises that wish to obtain their own properties (factories and offices)
Regional medical and long-term care enterprises	Taisho Bank	Medical practitioners that are setting up their practice or upgrading their equipment based on a proper business plan
	Nozomi Shinyoukumiai	Enterprises running or attempting to start a business related to long-term care

New industrial fields	Kansai Urban Banking Corporation	Small and medium-sized enterprises developing their business in the new energy field. Small and medium-sized enterprises cutting costs and contributing to the alleviation of environmental impacts by utilizing new energy.
Service industry	Kansai Urban Banking Corporation	Small and medium-sized enterprises related to the food that support the food culture of Osaka
Regional revitalization	Osaka City Shinkin Bank	Small and medium-sized enterprises that are involved in the regional economy and are working to revitalize the region (examples: medical business operators responsible for regional medical care, business operators utilizing vacant stores or shopping streets)
	Taisho Bank	Small and medium-sized enterprises operating in Osaka Prefecture and with a business history of three years or more (there are some industry types which are outside the scope of the program), which have business plans leading to the revitalization of the regional economy (development of sales channels, opening of new stores, provision of new products and new services.)

(Source) Prepared by the study team from the Osaka Prefecture web site

There is also a financial product called as “TKC strategic business manager loan”, which was developed in collaboration between banks and a tax accountant corporation, TKC.

TKC, which is an organization of more than 10,000 certified accountants and tax accountants, offers wide range of supports to SMEs, including preparation of financial statements, business management improvement plans formulations, and financial consulting.

“TKC strategic business manager loan” is a loan product, whose credit appraisals can be carried out very quickly, based on the huge amount of financial data of SMEs stored at TKC.
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Table 14: TKC Strategic Business Manager Loans
(Example of Bank of Tokyo-Mitsubishi UFJ)

Eligible enterprises	Debts does not exceed assets by more than JPY 30 million, for more than one year The applicant has never been late to pay a financial institution or rescheduled its debt The applicant has paid all of its taxes.
Purpose of use of the funds	The funds necessary for the business
Financing amount	JPY 3 million or more and under JPY 100 million
Repayment period	One month or more and within 60 months
Rate of interest for the financing	In the case of a financing period of one year or less: annual rate of 1.60% to 9.00% In the case of a financing period of over one year: annual rate of 1.80% to 9.00% However, if certain conditions are satisfied the applicant may receive a preferential interest rate of a maximum of 0.375%.
Collateral	Not required
Guarantees	Representative (the president) of the applicant

(Source) Prepared by the study team from the TKC Group web site

Beside Bank of Tokyo-Mitsubishi UFJ, 35 regional banks and mutual loans and savings banks use this loan product. Application for this loan product can be completed simply by entering some necessary data into the system provided by TKC, and applicants do not have to visit financial institution upon application.

2.2.2 Credit guarantee system

(1) History

The origin of the credit guarantee system in Japan is the partial loss guarantee system which was launched in 1931 in Aichi Prefecture and Osaka Prefecture. In the partial loss guarantee system, local governments compensated financial institutions for a fixed percentage of SME loan losses. However, this system contained problems such as cumbersome procedures and low guarantee limits. Therefore, a concept on setting up CGCs was formulated for the purpose of solving these problems, although large amounts of state budgets were required. Then the first credit guarantee corporation, Tokyo Guarantee, was established in 1937.

In 1948, the Guidelines on SME finance were approved by the cabinet, aiming at the recovery from the economic turmoil after the end of World War II. A credit guarantee system was established as one of the measures for facilitating SME finance.

The original form of the current credit insurance system was established under the Small and Medium-sized Enterprise Credit Insurance Act which was passed in 1950. Before this, the national government itself compensated 75% of SME loan loss to the financial institutions in the form of insurance payouts. Then, in 1958, the Small Business Credit Insurance Corporation, which is currently a part of JFC SME Unit, was established, creating a system that is largely the same as the current system.

Subsequently, credit guarantee program, including eligible borrowers for credit guarantees, have been revised in response to the changes in economic conditions.

Table 15: A Brief History of the Credit Guarantee System and Credit Insurance System in Japan

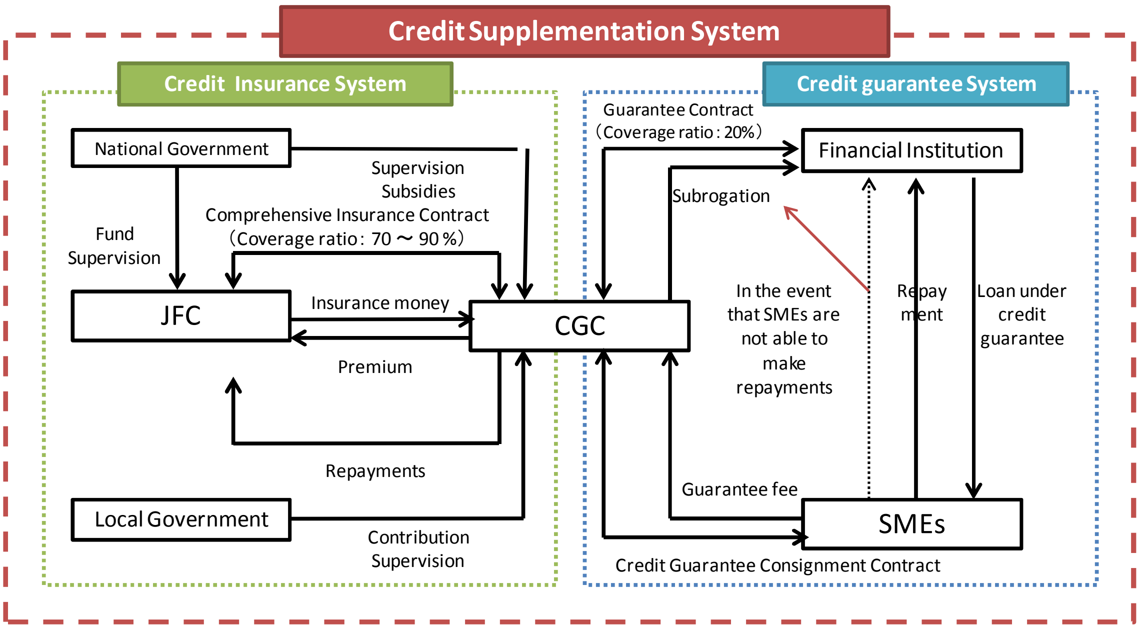
	Event
1937	Establishment of Tokyo Guarantee, the first credit guarantee corporation
1950	Promulgation and coming into force of the Small and Medium-sized Enterprise Credit Insurance Act (establishment of the financing insurance system)
1953	Promulgation and coming into force of the Credit Guarantee Corporation Act (the law providing the basis for the current Credit Guarantee Corporation)
1958	Establishment of the Small Business Credit Insurance Corporation (currently the JFC)
1997	Implementation of the government’s emergency economic measures.
1998	Announcement of the Guidelines for Measures to Encourage Banks to Loan to Small and Medium Enterprises. Introduction of the Special Guarantee

	Program for the Stabilization of Finance for Small and Medium Enterprises (total value of JPY 30 trillion).
2001	Establishment of Credit Guarantee Servicer Incorporated with equity investment from 52 credit guarantee corporations nationwide Establishment of the SMEs credit risk information database
2006	Introduction of flexibility to credit guarantee fees
2007	Introduction of the responsibility sharing system
2008	Emergency guarantee program (October 31 onwards)

(Source) Prepared by the study team based on Credit Guarantees in Japan 2012 and The Credit Guarantee System Third Edition (National Federation of Trust Bank Employees' Unions)

(2) Mechanisms of the credit supplementing system

One of the characteristics of the credit guarantee system in Japan is that it is combining the "credit guarantees" function and the "credit insurance" function. Credit guarantee corporations (CGCs) provide guarantee to the loans from financial institutions to SMEs, which are also backed by insurance or re-guarantee provided by JFC (the former Small Business Credit Insurance Corporation). This integrated mechanism is called as the "credit supplementing system," which is depicted as in the figure below.



(Source) Prepared by the study team based on Ministry of Finance data

Figure 8: Credit Supplementary System in Japan

Credit guarantees function (credit guarantee corporations)

Credit guarantee corporations (CGCs), which provide guarantees to loans from financial institutions to SMEs, are corporations that were established based on the Credit Guarantee Corporations Act (August 10, 1953, Law No. 196). Currently, there are 52 CGCs in all prefectures in Japan, with 188 offices and branches, and over 6,000 employees.

The purposes of the establishment of CGCs, which are clearly stated in the Credit Guarantee Corporations Act, Article 1[15], are facilitating finance for SMEs and encouraging the sound development of SMEs through credit guarantees. Article 20 of the Act also defines that their major operations are to provide guarantees to the loans from financial institutions to SMEs or bills discounted at financial institutions.

CGCs have also provided supports to the development of SMEs by holding business matching events and providing business management consultation services through certified management consultants.

For stable operations of credit guarantees, financial soundness of CGCs is essential. Therefore, CGCs are required to have sufficient capital, which is called as “basic assets” in case of CGCs.
“Basic assets” is comprised of (i) equity contributions by local governments and financial institutions, (ii) “fund” contributions by financial institutions and (iii) the fund reserves from net profits in the past.[16]

Generally the maximum limit on the guarantee amount of a CGC in each region is decided based on the amount of basic assets.[17]
Sequences of the credit guarantee procedure are depicted in the following figure.

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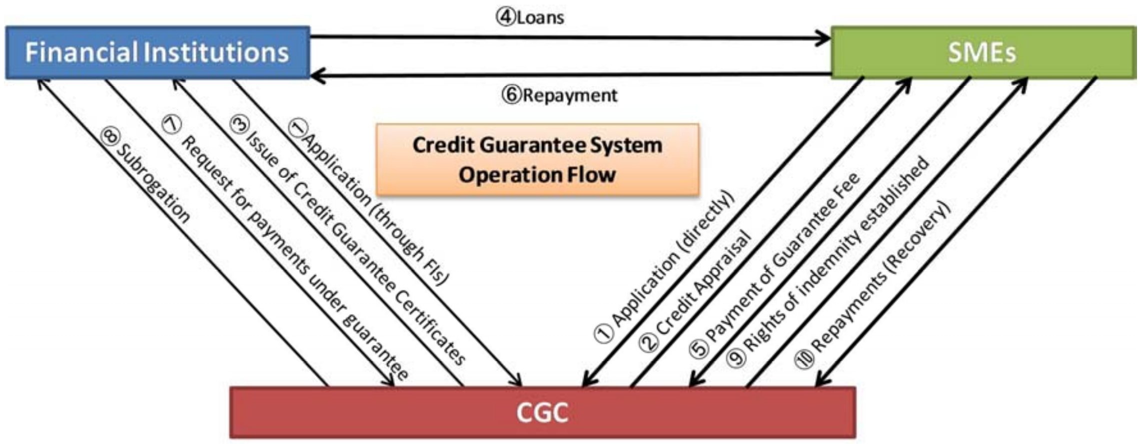
[15] Credit Guarantee Corporations Act, Article 1: This law establishes a system of credit guarantee corporations whose main operations involve providing guarantees of loans and other debt resulting when small and medium enterprise operators, etc. receive loans, etc. from banks and other financial institutions, and the purpose of the law is to facilitate financing for small and medium enterprise operators, etc.
[16] For example, CGC Tokyo has basic property of JPY 230.8 billion, which is structured by this fund reserves, the accumulated income, are JPY 215.4 billion, and the funds from the contributions of the Tokyo Metropolitan Government and the local governments are JPY 15.4 billion (Tokyo Guarantee Report 2012).
[17] For example, the maximum limit of the guarantee amount by CGC Tokyo is stipulated as follows in Article 7 of the Articles of Incorporation.
* The maximum limit of the guarantee amount by CGC Tokyo shall be 60 times the total of the basic property of the corporation.



(i) Application for guarantee by SMEs (to credit guarantee corporation or financial institution)
(ii) Credit appraisal by the credit guarantee corporation
(iii) Issuance of a credit guarantee certification by the guarantee corporation
(iv) Execution of the financing by the financial institution based on the guarantee certification
(v) Payment of guarantee commissions by SMEs.
(vi) Repayment of the loan to the financial institution by SMEs
(vii) Subrogation request by the financial institution (when SMEs is unable to repay the loan)
(viii) Subrogation by the guarantee corporation
(ix) The guarantee corporation obtains a right of indemnification against SMEs
(x) Recovery of the subrogated amount by the guarantee corporation
(Source) Prepared by the study team based on The Credit Guarantee System in Japan 2012

Figure 9: The Credit Guarantee System Operation Flow

The enterprises eligible for the guarantees are the SMEs defined in the Small and Medium-sized Enterprise Credit Insurance Act of Japan. Applicants from agriculture, forestry, fisheries, finance, and insurance industries are not eligible.

Types of the loans that can be backed by guarantees are restricted to working capital and capital investment necessary. Living expenses, housing funds, and speculative funds are not eligible.

The guarantee limits and guarantee periods vary widely depending on the types of guarantee programs and financing. In general, the guarantee period is within ten years and the guarantee limit is JPY 280 million.

The guarantee fee levels[18] are basically determined based on both a financial evaluation (quantitative evaluation) and a non-financial evaluation (qualitative evaluation) utilizing the statistical model of CRD (Credit Risk Database). Different fee levels are applied in case of special guarantees or financial products provided by national or local governments.

[18] Guarantee fees are paid from the SMEs to the credit guarantee associations. Guarantee fees are allocated to business expenses including the insurance premiums for the credit insurance, compensation of losses arising from subrogation, personnel expenses and so on.

Table 16: The Standards in the Credit Guarantee System of Japan

<table>
<tr><td rowspan="5">Eligible enterprises</td><td colspan="2">Industry type</td><td colspan="4">Capital</td><td colspan="4">Employees</td></tr>
<tr><td colspan="2">Manufacturing industry, etc.</td><td colspan="4">JPY 300 million or less</td><td colspan="4">300 or less</td></tr>
<tr><td colspan="2">Wholesale industry</td><td colspan="4">JPY 100 million or less</td><td colspan="4">100 or less</td></tr>
<tr><td colspan="2">Retail industry</td><td colspan="4">JPY 50 million or less</td><td colspan="4">50 or less</td></tr>
<tr><td colspan="2">Service industry</td><td colspan="4">JPY 50 million or less</td><td colspan="4">100 or less</td></tr>
<tr><td rowspan="4">Guarantee format</td><td>Format of the guarantees</td><td>Purpose of use of the funds</td><td colspan="5">Period</td><td colspan="3">Guarantee limit</td></tr>
<tr><td>Individual guarantees</td><td>Capital investment
Working capital</td><td colspan="5">As a general rule, within ten years
However, there are also systems with a period for operating funds of within 15 years and for equipment investment of within 20 years.</td><td colspan="3" rowspan="3">JPY 280 million
Collateralized: JPY 200 million
Uncollateralized: JPY 80 million</td></tr>
<tr><td>Revolving guarantees</td><td>Working capital</td><td colspan="5">Within one year or two years</td></tr>
<tr><td>Overdraft revolving guarantees</td><td>General business purpose</td><td colspan="5">One year or two years</td></tr>
<tr><td rowspan="3">Guarantee fee</td><td>Guarantee fee rate category</td><td>(i)</td><td>(ii)</td><td>(iii)</td><td>(iv)</td><td>(v)</td><td>(vi)</td><td>(vii)</td><td>(viii)</td><td>(ix)</td></tr>
<tr><td>Responsibility sharing guarantees</td><td>1.90</td><td>1.75</td><td>1.55</td><td>1.35</td><td>1.15</td><td>1.00</td><td>0.80</td><td>0.60</td><td>0.45</td></tr>
<tr><td>Non-responsibility sharing guarantees</td><td>2.20</td><td>2.00</td><td>1.80</td><td>1.60</td><td>1.35</td><td>1.10</td><td>0.90</td><td>0.70</td><td>0.50</td></tr>
<tr><td rowspan="2">Individual guarantor and collateral</td><td>Individual guarantor</td><td colspan="9">Corporations: as a general rule, a joint and several guarantor other than the representative is not required
Individuals: as a general rule a joint and several guarantor is not required</td></tr>
<tr><td>Collateral</td><td colspan="9">In the case of financing with guarantees of a total amount of JPY 80 million or less or a guarantee period of ten years or less, as a general rule collateral is not required but it may be necessary depending on business performance.</td></tr>
</table>

(Source) Prepared by the study team using The Credit Guarantee System in Japan 2012 and the web site and pamphlets of Tokyo Guarantee

Guarantee fee level also depends on whether or not a "responsibility sharing system" is applied. The responsibility sharing system was introduced in 2007, so that CGCs and financial institutions can enhance collaborations with each other, through sharing responsibilities in SME loans. This system comprises of two methods: (i) the partial guarantee method[19] and (ii) the burden charge method.[20] Financial institutions are to choose either the partial guarantee method or the burden charge method.

Upon the introduction of the responsibility sharing system, CGCs stopped providing 100% guarantees to SME loans. However, there are several exceptional guarantee systems which provide 100% guarantee, including (i) the small-volume micro enterprises guarantee program, (ii) the guarantees on insurance for entrepreneurs, and policy-based guarantee programs such as

[19] As a general rule, the CGC guarantees 80% of individual loans (the CGC carries out subrogation to the financial institution), and the remaining 20% is borne by the financial institution.

[20] At the time of the guarantee, initially 100% is guaranteed, and the credit guarantee corporation carries out 100% subrogation to the financial institution, but at a later date the CGC receives a payment of a burden charge of approximately 20% from the financial institution. A fixed proportion of this is paid to the Japan Finance Corporation.

(iii) safety net guarantees and (iv) the guarantees for earthquake disasters.

The guarantee products at the CGCs are not all the same among prefectures. They can be broadly divided into four types: (i) "nationwide guarantee system" established based on the instructions of the national government,[21] (ii) "local government systems" operated by local governments with their own unique conditions,[22] (iii) "CGC programs" that are run by the CGCs in their own conditions, and (iv) "collaborative guarantee programs" run jointly by financial institutions and CGCs.

The credit appraisals by the CGCs mainly examine if the guarantees would facilitate the financing to SMEs and also if the guarantees would promote their businesses. Appraisals are mainly carried out through checking application forms, and sometimes through interviews and site visits (Refer to the table below for the key points in the credit appraisal.) The appraisal period is generally short. In most cases, the appraisals are done in about one week for clients that already have good credit track records with CGCs and whose businesses are performing well. The appraisals of new applicants and existing clients whose business performance is not sufficient would take about two weeks[23]. However, it has been reported that appraisals take more than one month in case applicants do not fulfill necessary conditions.

Table 17: Items Appraised by Guarantee Corporations

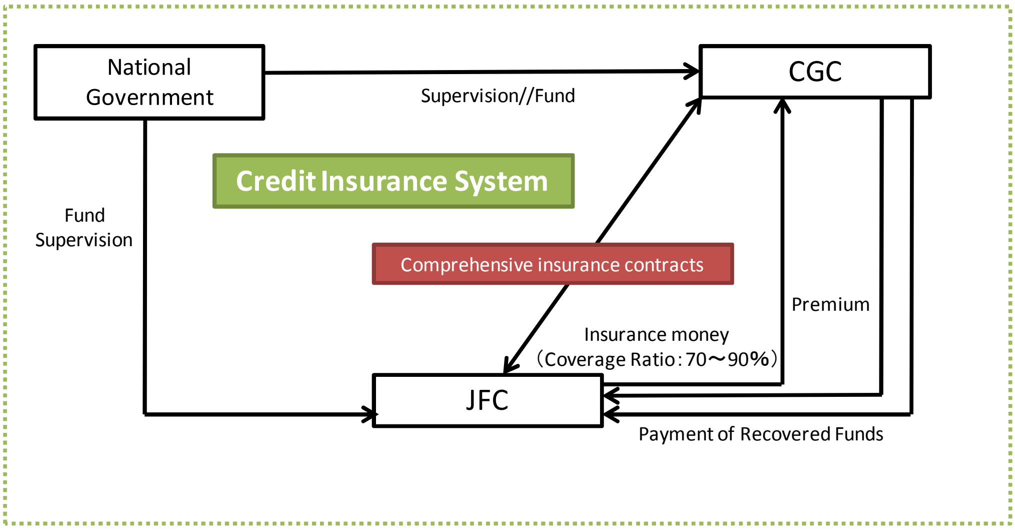
Key points in the credit appraisal	Character of the manager, purpose of loans, repayment capacity, future potential
Appraisal Items(examples)	✓ Information in guarantee application: amount, period, repayment method, loans types, funds purpose of use ✓ Recipient of guarantee: representative, address (location of main branch), telephone, personal reputation and industry type (major products and handled items), family (officers), work history, employees ✓ Property and income: balance sheet, profit-and-loss statement, major account item statements, taxes ✓ Overview of business: purchases, sales volume, business partners, the past performance ✓ Collateral: types, locations, appraisal value ✓ Joint and several guarantor: name (age), occupation, address, assets ✓ Guarantee history: number of times, peak balance, current balance, repayment conditions ✓ Other: industry trends, site conditions

(Source) Prepared by the study team using Credit Guarantees Third Edition

21 Typical examples include the safety net guarantees, earthquake disaster reconstruction guarantees, etc.
22 In many cases local governments offer credit guarantees to the credit guarantee corporations or provide fiscal support such as replenishing the guarantee fees to the SMEs, etc.
23 Small and Medium Enterprise Agency (2004), The Present Status and Challenges of the Credit Supplementing System

Credit insurance function (JFC)

The credit insurance by JFC SME Unit (former Small Business Credit Insurance Corporation)[24] is offered to CGCs to share a part of the credit risks of CGCs. The credit insurance is expected to facilitate SME financing, through encouraging CGCs to further increase credit guarantees to SME loans.



(Source) Prepared by the study team based on JFC web site

Figure 10: Series of Steps in the Credit Insurance System

The main characteristics of the credit insurance are (i) insurance underwriting, (ii) payment of insurance claim, and (iii) the payment of recovered funds.

(i) Insurance underwriting (comprehensive insurance)

If credit guarantees given by a CGC meet certain requirements, credit insurances are automatically provided to these credit guarantees. Based on this arrangement, JFC underwrites the insurance liability and receives the payment of insurance premiums[25] from the CGCs.

(ii) Payment of insurance claim

If the SME becomes unable to repay its loans to the financial institution, the CGC makes the payment to the financial institution instead of the SME. Then, JFC pays the insurance claims (70-90% of the subrogated amount[26]) to the CGC.

(iii) The payment of recovered funds

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[24] The predecessor of the Japan Finance Corporation (Insurance) was the Small Business Credit Insurance Corporation established in 1958. Subsequently it became the present organization through a series of integrations, mergers, and structural reforms. Its main operations are (i) providing insurance to the credit guarantee corporations and (ii) financing for the guarantee corporations. However, in recent years it has not provided any financing to the guarantee corporations.

[25] The insurance premiums are in a form corresponding to the guarantee commissions, are generally established in nine levels, and are set slightly lower than the guarantee commissions.

[26] The subrogation rate is generally 70-80%. Subrogation rates of 90% are restricted to highly political guarantees.

After the CGC receives the payment of the insurance payout, the CGC endeavors to recover the right of indemnification obtained through the subrogation. When the CGC recovered (a part of) the loan, the CGC pays certain amount to the insurance company or JFC based on the amounts of insurance claims it received.

(3) Performance of the credit supplementing system

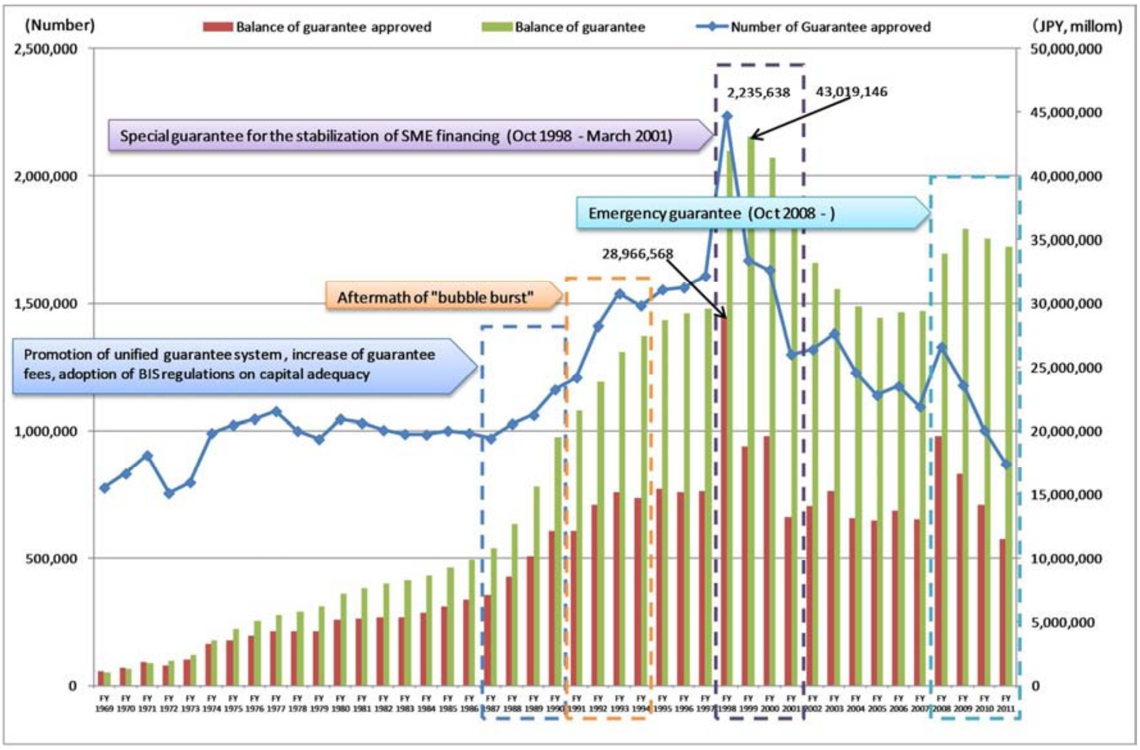
Guarantee authorization and subrogation

Since the beginning of the credit guarantee system, the number and balance of guarantees has steadily increased, responding to the SME's demands for funds. In spite of the slowdown in Japan's economy due to the collapse of the bubble economy, it kept increasing.

Particularly, the guarantee amount reached record highs in FY 1998 in response to the introduction of the Special Guarantee Program under the Stabilization of Finance for Small and Medium Enterprises in October 1998. In this year, 2.2 million guarantees worth JPY 29 trillion were authorized. The outstanding guarantees peaked at JPY 43 trillion in FY 1999.

Subsequently, use of the credit guarantee system began to decline. It again increased temporarily due to the emergency guarantee program introduced to support SMEs struggling in the difficult economy following the bankruptcy of Lehman Brothers in 2008. Nonetheless, currently both the number and amount of guarantees authorized are slowly decreasing, although the outstanding guarantees is still high, peaked at JPY 35 trillion in FY 2011.

The subrogated amount has been affected by the recession after the collapse of the bubble economy, increasing rapidly after FY 1991 and peaking in FY 2002 (subrogated amount: JPY 1.2 trillion, subrogation rate of 3.8%). The subrogated amount increased once again after the introduction of the emergency guarantee program in 2008. Although the subrogated amount has been declining, it is at very high level.



(Source) Prepared by the study team based on Credit Guarantees Third Edition, The Credit Guarantee System in Japan 2012

Figure 11: Trend of credit guarantee system

<u>The utilization ratio of guarantees (penetration ratio)</u>

The penetration ratio or the utilization ratio of the credit guarantee, which is a ratio of the number of guarantee users to the number of total business entities, was 36.8% in FY 2011 in Japan. The ratio peaked at 45% in 2000, when the Special Guarantee Program was introduced, and has been decreasing since then.

The level of the penetration rates varies among regions. The penetration rate of Tokyo is 47.3% which is much higher than average, while that of Kagoshima is only 25.8%.

Table 18: Characteristics of the Use of the Credit Guarantee Corporations

Item	Characteristics
Degree of penetration	Major variations among regions such as 47.3% in Tokyo and 25.8% in Kagoshima.
Industry type	In terms of local area there is a lot of use by the construction industry but comparatively all industry types are used.
Financial institutions	In Tokyo, commercial banks have an overwhelming market share, but in regions where the commercial banks are weak, regional financial institutions such as regional banks and credit unions have an extremely high market share.
Purpose of fund	Use for working capital accounts for the majority of use, at about 90% of the total.
Guarantee	There are few guarantees with a period of over seven years although regional

period	differences are marked.
Employees	The majority are SMEs with 20 or fewer employees.

(Source) Prepared by the study team from the disclosure reports and web sites of each guarantee corporation

Public relation activities of CGCs

Public relation activities are carried out at all levels including nationwide level (by national government), the prefectural level (by credit guarantee corporations, prefectural governments, chambers of commerce and industry), and the municipal level.

In particular, the CGCs engage in vigorous public relations activities. The table below shows the example of the public relations activities of Tokyo Guarantee. Tokyo Guarantee has been remarkably active in public relations activities to encourage the use of the credit guarantee system. Tokyo Guarantee held 2,728 briefing sessions for financial institutions in one year in FY 2012.

Table 19: Public Relations Activities by Credit Guarantee Corporations (the Example of Tokyo Guarantee)

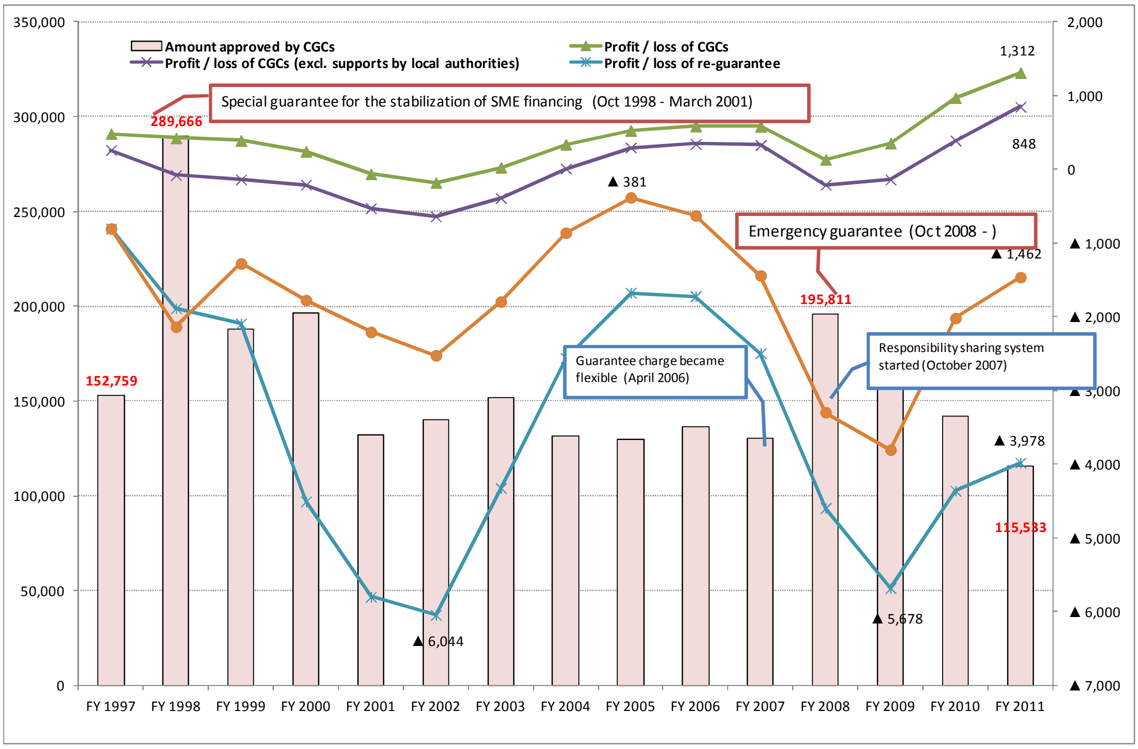
Activities	Details of the activities
Visiting financial institutions to hold briefing sessions	Visiting financial institutions and organizations supporting SMEs to hold briefing sessions (explanations of guarantee operations and administrative procedures). FY 2011 achievements: 2,728 briefing sessions held
Publication of information booklets Publishing of an internet e-mail magazine	Monthly magazine: issuing of a monthly magazine describing the points that are changed in system revisions. Handbooks and guidebooks: handbooks describing the mechanisms of credit guarantee corporations, the enterprises eligible for guarantees, financial menus. Advertising: publicize the system and organizations by placing regular advertisements in daily magazines. Internet e-mail magazine: on the Internet it is also possible to download the documents necessary to explain the various systems.
Exhibiting	Setting up a specialized booth at exhibitions
Individual seminars	Holding of business start-up support seminars, business management support seminars, business matching events

(Source) Prepared by the study team from the Tokyo Guarantee Report 2012

Financial performance of CGCs and JFC (Credit Insurance)

The financial performance of the CGCs has been generally stable thanks to the risk sharing by credit insurance and the supports by local governments.

On the other hand, the financial performance of the credit insurance (insurance income and expenditure) has continued to record large deficits, which are then covered by state budgets. In particular during the economic turmoil caused by the bankruptcy of Lehman Brothers in 2008, JFC (Credit Insurance) post huge deficits and the government decided to provide approximately JPY 2.0 trillion. According to the Ministry of Finance, a cumulative total of nearly JPY 8.0 trillion has been injected into the credit insurance and related sectors since FY 1998.[27]



(Source) Prepared by the study team based on the Ministry of Finance data, the Japan Finance Corporation web site

Figure 12: Income and Expenditure Trends in the Credit Guarantee Corporations and Credit Insurance

<u>The impact of credit supplementing systems in Japan on the business activities of SMEs</u>

According to the interview survey with member enterprises of Tokyo Guarantee,[28] 85% answered that the Credit Guarantee Corporation was effective for financing.

A study by Tokyo Chamber of Commerce and Industry [29] shows that more enterprises with fewer employees are accessing to credit with guarantees (0-5 employees: 73.9%, 6-20 employees: 84.0%). It also shows that more smaller enterprises are accessing to uncollateralized

[27] Government investments were about JPY 5.0 billion from 1965 to 1974, JPY 30 to 40 billion from 1975 to 1984 and JPY 10 to 20 billion since the beginning of the Heisei period in 1989.

[28] Report on the Results of the 18th Questionnaire of Small and Medium Enterprise Operators (2012) by CGC Tokyo , targeted enterprises: the 7,000 enterprises that used Guarantee Tokyo within six months of the survey commencement date (number of valid responses: 3,155 enterprises, valid response rate of 45.1%), survey implementation period: the end of August to the end of October 2012

[29] Results of the Survey of Finance for Small and Medium Enterprises (2012) by the Chamber of Commerce Tokyo, targeted enterprises: 1,981 enterprises that are members of the Tokyo Chamber of Commerce and Industry (number of valid responses: 479 companies, valid response rate of 24.2%), survey implementation period: June 2012.

financing (0-5 employees: 48.9%, 6-20 employees: 27.6%). Therefore, it is possible to say that the credit guarantee system is more effective for the funding of small scale enterprises.

A study by the Mizuho Research Institute in 2009 commissioned by the Small and Medium Enterprise Agency has carried out quantitative analysis of credit guarantee on SMEs using the data from FY 2002 to FY 2006.

Table 20: The Economic Effect of the Credit Guarantee System

Due to the use of credit guarantees	Amount estimate
(i) Realized investment	JPY 2.2 to 4.7 trillion in each FY
(ii) Amount of added value (GDP) creation by SMEs that were able to operate business	JPY 9.5 to 16.7 trillion in each FY
(iii) Tax paid by SMEs that were able to operate business (the effect of securing tax revenues)	JPY 200 to 600 billion in each FY
(iv) The amount of unemployment allowances that would have been paid when the SMEs had gone bankrupt (the effect of reducing payments of unemployment allowances)	JPY 2.5-4.4 trillion

(Source) Prepared by the study team from Mizuho Research Institute (March 2011), Report on the Policy Effects of the Credit Supplementing System

This study shows that credit guarantee has positive effects on investments, creation of value added, increase in tax revenues, and the reductions in unemployment allowances. Therefore, it is possible to say that the credit supplementing system has helped SMEs maintain their businesses and generated some economic benefits for the national economy.

<u>Issues in the credit supplementing system in Japan</u>

One of the characteristics of the Japanese credit supplementing system is its two layer structure with credit guarantee system run by CGCs and the credit insurance system under which JFC further insures the guarantees of the CGCs. This system supplemented the credit risk and physical collateral of SMEs, contributed to the smooth financing by financial institutions, and also contributed to the development of the SMEs that underpin the Japanese economy.

On the other hand, in recent years due to the deterioration in the economy, the subrogated amount by CGCs has swollen and the credit insurance of JFC faced large deficits, resulting in an enormous fiscal burden on the government.

One of the major reasons for this is a moral hazard issue at the financial institutions and borrower enterprises. Especially when CGCs provided 100% guarantee, financial institutions would not have any motivations to carry out serious credit appraisal and credit monitoring, unlike in the case of financing without credit guarantee. Borrowers might have accesses to the loans with credit guarantee without serious considerations, as they can finance uncollateralized long-term funds comparatively easily. It is also said that these moral hazards led to the large fiscal burden of the government.

In order to overcome moral hazard issues, the government introduced more flexibility into guarantee fees, and commenced a system charging guarantee fee according to the levels of credit risks, abolishing the uniform guarantee fee rates for all enterprises in April 2006. Furthermore, from October 2007 the government introduced a system for sharing responsibilities between financial institutions and CGCs. The coverage by the guarantee was decreased from 100% to 80%. However, it is difficult to measure the effectiveness of these system changes quantitatively because the emergency guarantee program, which provided 100% guarantee, was introduced due to the economic deterioration in 2008.

Under these conditions, the government is continuing its discussion on the best approach to credit supplementing systems in the future.

2.2.3 Basic financial infrastructure

(1) The Credit Risk Database

1) Purpose of the introduction

The Credit Risk Database (CRD) was established in 2001 to accumulate financial and non-financial data and default information of SMEs, aiming at facilitating SME finance through measuring the credit risks of SMEs.[30]

In the case of SMEs, it is not always easy to distinguish between good and bad enterprises. Therefore, the CRD was established to enable statistical judgments on the credit risk of SMEs, with the goal of facilitating finance for SMEs, under the initiative of Small and Medium Enterprise Agency of Ministry of Economy, Trade and Industry.

The CRD also aimed at enabling objective judgments on the financial status of individual enterprises, so that financial institutions can provide loans without depending too much on collateral and guarantees.[31]

2) CRD mechanisms

The guarantee agencies and financial institutions, members of the CRD, input the data of borrowers, while they receive a range of services developed based on the data accumulated from the CRD.

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30 CRD Association
31 Yoshiaki Shikano (2006), The State of Finance for Small and Medium Enterprises in Japan as Revealed by the CRD Database

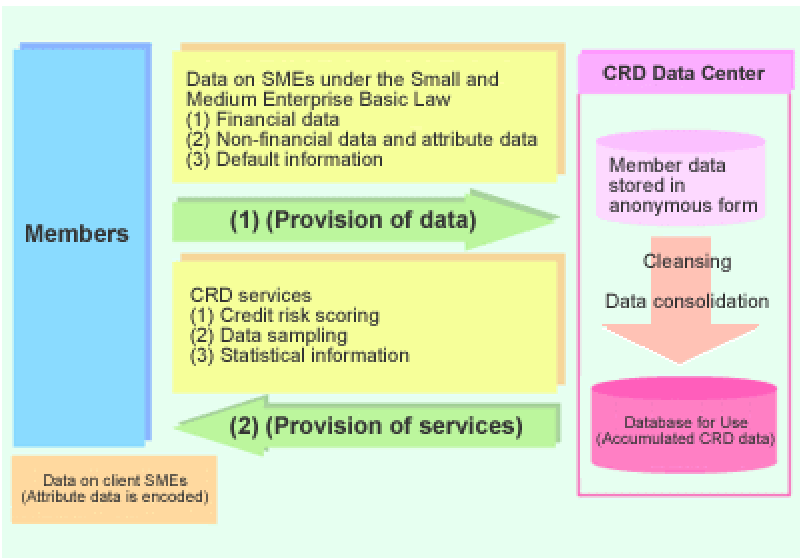
As of April 2012, the CRD has 185 members, including CGCs, governmental and private financial institutions, and six government agencies that use the data and models.

The credit guarantee corporations and financial institutions, the members of the CRD, provide the financial data, non-financial data, and default data of the borrowers to the CRD. All of the names of the enterprises are encrypted so the names of individual enterprises cannot be identified in the system.

As of 2003, a total of 1,127,000 sets of financial data of corporate debtors (including 86,000 sets of default data), and 357,000 sets of financial data of individual business owners (including 30,000 pieces of default data) are stored in the CRD.

The CRD provides the various financial indicators of the SMEs, which would be needed for loan screening, to its members. The members can also obtain the mean, median, and standard deviation of financial indicators of non-default enterprises and default enterprises, by size, industry type, and region.

The members can also obtain sample financial data stored in the CRD in the form of financial statements, although they cannot specify individual enterprises. Such sample data are used by members, when they construct their own scoring models for internal ratings.



(Source) CRD Association web site

Figure 13: CRD Mechanisms

The construction of the CRD was started in 2000. At the beginning, 52 credit guarantee corporations provide 600,000 datasets (financial and non-financial data) in total to the CRD, and CRD used them to formulate credit scoring model.

At the beginning, the number of members was only 20. Major commercial banks, which operate their own credit database, did not join CRD. This would suggest that the data collection at the earliest stage is not easy, if there are not any institutions (such as CGCs in this case) which are willing to provide sufficient amount of data.

Members can have full access to the service including scoring services, sample data service and statistical information service, while the members are obliged to provide financial and non-financial data to the CRD. Annual membership fee is JPY 4 million (IDR 400 million) and initiation fee is JPY 2.0 million (IDR 200 million).

The guarantee corporations categorize debtors with the risk evaluation systems created using the CRD data, and set the guarantee commissions for each category. (There are nine categories with a maximum guarantee commission rate of 2.20%.)

(2) Other credit information system

In addition to the CRD, there are several credit information systems as in the following table.

Table 21: Credit Information system for SMEs

		Risk Data Bank of Japan (RDB)	Credit Risk Database (CRD)	Credit Risk Information Total Service (CRITS)	Shinkin Data Bank (SDB)
Established in		2000	2001	2004	2004
Members		61 institutions (initially 22 financial and non-financial institutions)	125 members (Financial institution), and 52 credit guarantee corporations	64 regional banks	Shinkin Central Bank & 278 shinkin banks
Number of data stored	Financial statement	550,000 (corporations and sole proprietors)	More than 3,000,000 (corporations and sole proprietors, focuses on SME)	679,000	684,000 (corporations)
	Default data	157,000 (corporations and sole proprietors)	More than 300,000 (corporations and sole proprietors)		
Services		- Scoring services - Statistical information - Sample data	- Scoring services - Statistical information - Sample data - Consulting services	- Scoring services - Statistical information - Portfolio analysis	- Scoring services - Statistical information - Risk & portfolio management report

(Source) The study team based on several data sources

Financial institutions can choose credit information system to join as members. Major financial institutions, such as Mitsui Sumitomo Bank, Bank of Mitsubishi Tokyo UFJ and Mizuho Bank are not the members of CRD, but Risk Database of Japan. Rural banks and Shinkin Bank (Credit cooperatives) join Credit Risk Information Total Service (CRITS) and Shinkin Data Bank (SDB) respectively, and some of them join CRD, too.

(3) Tax reporting

When tax payers, including companies and sole proprietors (individual business owners) report their income to tax offices in Japan, they are supposed to submit several documents that show the records of incomes and expenditure, together with evidences. They can enjoy tax incentives, when tax payers carry out book keeping following specific rules with sufficient quality,

Tax payers are then requested to carry out “double entry” book keeping, and also to prepare balance sheets and profit and loss statements. If tax payers report their income with such documents before deadlines, JPY 650,000 will be deducted from their taxable incomes[32].

However, because tax payers are obliged to carry out double entry book keeping and to formulate financial statements, they have to have sufficient knowledge in book keeping. Alternatively, they can seek for the supports by experts including accountants or tax accountants. Recently, the book keeping can be also supported by software packages.

2.3 Financial Systems for the Agriculture, Forestry and Fisheries Industries

This chapter focuses on agriculture finance[33], describing its financing mechanisms, financial products, credit guarantee system, and basic financial infrastructure.

2.3.1 Financing mechanism and financial products

This section explains the financing performance and financial products of two major players in agriculture finance namely, (a) JA Bank and (b) JFC.

(a) JA Bank

JA or Japan Agricultural Cooperatives are private based cooperatives which were established on the spirit of mutual aid of farmers. JAs run variety of economic activities including collective marketing of crops, supply for production materials. JAs also carry out mutual insurance

32 National Tax Agency of Japan
33 The gross domestic product by industry type in 2011 was JPY 4.6025 trillion for agriculture, JPY 159.2 billion for forestry, and JPY 688.0 billion for the marine products industry.

including life mutual aid or automobile mutual aid. JAs also conduct credit activities, such as savings and loans.

There are “credit federations” at prefectural level, which support the credit operations of JAs at municipal level. At national level, there is Norinchukin Bank or Central Cooperative Bank for Agricultural and Forestry, a private financial institution that serves as the central bank for JAs, which was funded by JAs, fisheries cooperatives and forestry cooperatives.

JA Bank, which can also be called as agriculture cooperatives financial institutions, is a comprehensive terms for the financial structure for of JAs, credit federations at prefectural level and Norinchukin Bank at National level. There are a total of 755 members of the JA Bank including 718 agricultural cooperatives, 36 JA Prefectural Credit Federations, and the Norinchukin Bank (as of July 2011).

The structure of JA bank is depicted as in the following figure.

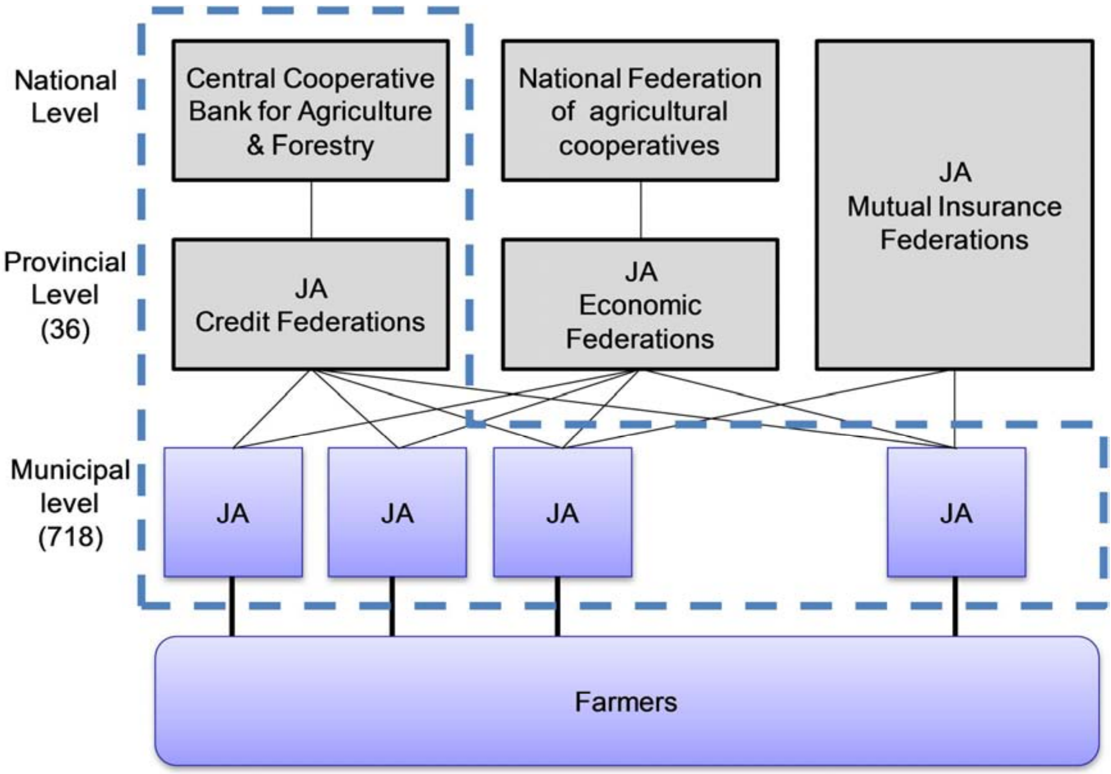
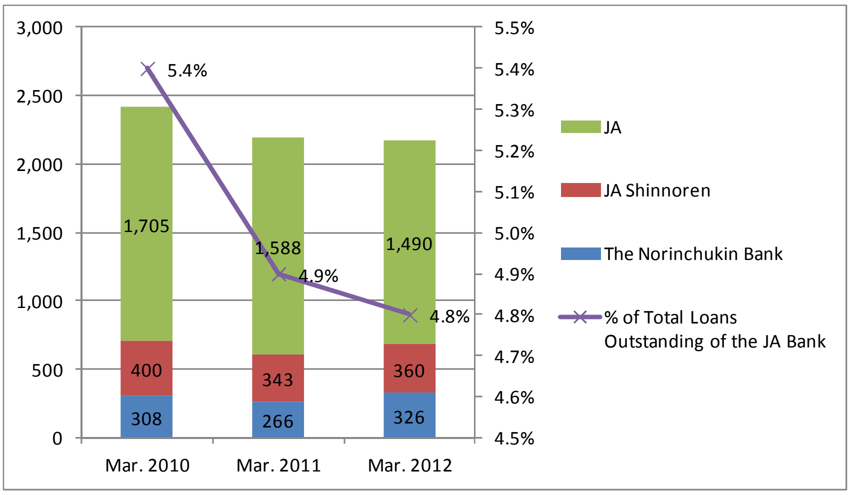


Figure 14: Structure of JA Banks

Figure 14 shows the trend in the balance of loans for agriculture and related industries in the JA Bank. As of the end of March 2012 the JA Bank had a loans balance of JPY 2.2 trillion to agriculture and related industries and in recent years this balance has been trending at slightly over JPY 2.0 trillion.

Looking at the loans by type of institution, JAs which have many branches nationwide have played the largest role. However, only 5% of the total loans in JA Bank (JPY 45.5 trillion at the end of March 2012) were directed to agriculture. The reason for this is that JAs offer a lot of housing loans to households, and both JAs and Norinchukin Bank offers a lot of financing to local governments.

In March 2012, the loan balance of JA Bank to the forestry sector was JPY 17.9 billion, while that to the fisheries was JPY 555.3 billion, which were comparatively smaller than the loan balance to the agriculture sector.



(Source) Financial Statistics of Agriculture, Forestry and Fisheries

Figure 15: Loans outstanding for the agricultural businesses of the JA Bank (JPY billion)

The following table presents an overview of the agriculture financing program of JA Bank.

"Agricultural modernization fund" is a low-interest, long-term financing program established by the Act on Financing for Agricultural Modernization, to which the national government provide interest subsidies. "Agricultural modernization fund" is available for all financial institutions, but mostly disbursed by JA Bank.

"New Super S Loan" is for short-term working capital also with interest subsidies by the national government.

Table 22: Overview of the Agriculture Financing Program by JA Bank

	Balance at the end of FY2011	Eligible businesses	Purpose of use of the funds	Financing limit	Repayment period (grace period)	Interest rate	Collateral and guarantor
Agricultural Modernization Fund	1,882	Certified farmers, certified new farmers, other	This is a long-term, low-interest program fund for improving the business management of "providers" of agriculture. It covers the acquisition and expansion of facilities, purchase of equipment and tools, long-term operating funds, etc. There are special provisions offering preferential interest rates, etc. to "Certified farmers."	[Individual] 18 million yen [Corporation] 200 million yen	Within 17 years (within 5 years) However, varies depending on the classification of the business	N.A.	N.A.
Agricultural Management Improvement Promotion Loan (New Super S)	Combined with other program funds 4,444	Certified farmers	This is a short-term program fund providing the operating funds necessary for the management of agricultural businesses at low interest rates	[Individual] 5 million yen [Corporation] 20 million yen	Short-term: Within 1 year	Floating interest rate	N.A.
New Agriculture Promotion Fund (Agri-Mighty Fund)		Certified farmers, certified new farmers, other	This is **a unique JA Bank fund** that can meet all funding needs related to agriculture, from acquisition and expansion of facilities and purchase of equipment and tools to short-term operating funds. It is capable of meeting these needs more quickly than a program fund.	N.A.	Within ten years (within 3 years) Short-term: Within 1 year	N.A.	N.A.
JA Agricultural Equipment and Greenhouse Loans		Certified farmers, certified new farmers, other	This is a **unique JA Bank financing product** which offers loans through quick and simple screening when farmers intend to acquire agricultural machinery, etc. to improve their agricultural production.	N.A.	N.A.	N.A.	N.A.
Agribusiness Loans	15,434	Certified farmers, certified new farmers, other	This is a **unique JA Bank fund** which can be used for the purchase of agricultural tools and all agribusiness-related funds such as operating funds, etc., and can provide the loan quickly.	N.A.	Short-term: Within 1 year	N.A.	N.A.
Agriculture, Forestry, and Fisheries Environmental Business Loans		As a general rule, agricultural corporations, etc. that can submit financial statements for three fiscal periods and have no losses carried forward	These are loans for funding needs such as operating funds and equipment funds, etc., and the Norinchukin Bank provides the financing. Its characteristic features are that the borrower can obtain the advantage of a preferential interest rate, and that the loans are easy to take out because of more flexibility regarding collateral and guarantors.	N.A.	Within ten years	Short-term prime rate + α, Long-term prime rate + α	As a general rule, collateral is necessary but individual guarantees are not required. (Uncollateralized is possible for short-term funds.)
Total other	21,760						
Deposited loans balance (Program funds including the JFC Super L Fund, Fund for Strengthening Management, Agriculture Improvement Fund, etc.)	6,008	Explained on the next page					

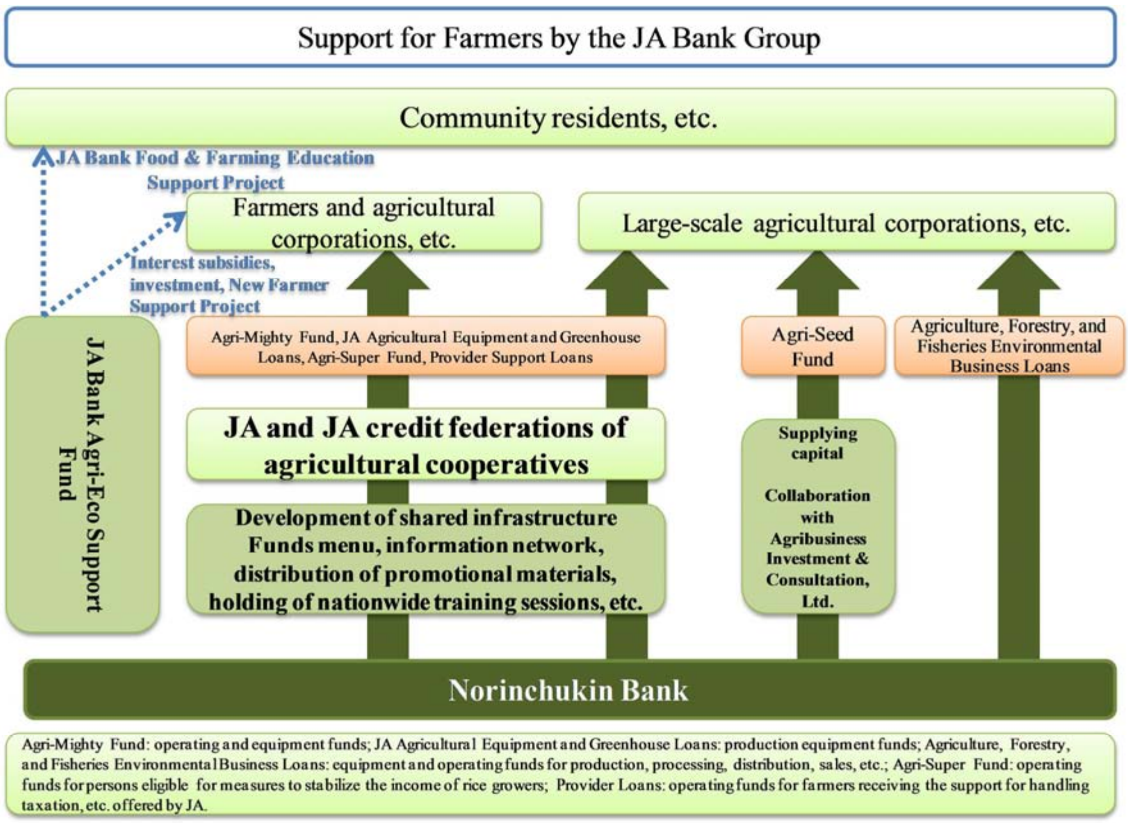
(Source) Study Team based on the information of Norinchukin Bank

As shown in Figure 16, JA Bank provides equity, interest subsidies, and supports for new farmers, in addition to agriculture finance.

Agri-Seed Fund by Norinchukin Bank started in 2010, provide equity to farm enterprises, which are technically-competitive but do not have sufficient capital. This fund was established to support the certified farmers. By the end of September 2012 it had supplied a total of JPY 401 million to 45 farm enterprises.

Agri-Eco Fund is one of the JA Bank's corporate social responsibility (CSR) projects and it supplies capital to farmers and farm enterprises that are actively contributing to the environment and communities. By the end of September 2012, it had supplied a cumulative total of JPY 1,152 million to 33 entities.

Furthermore, as an initiative for environmental finance, JA Bank introduced the Agriculture, Forestry and Fisheries Environmental Rating System in December 2010. With this system, preferential interest rates are granted on loans depending on rating. JA Bank also conducts business matching events, and the capacity building of experts in agriculture finance.

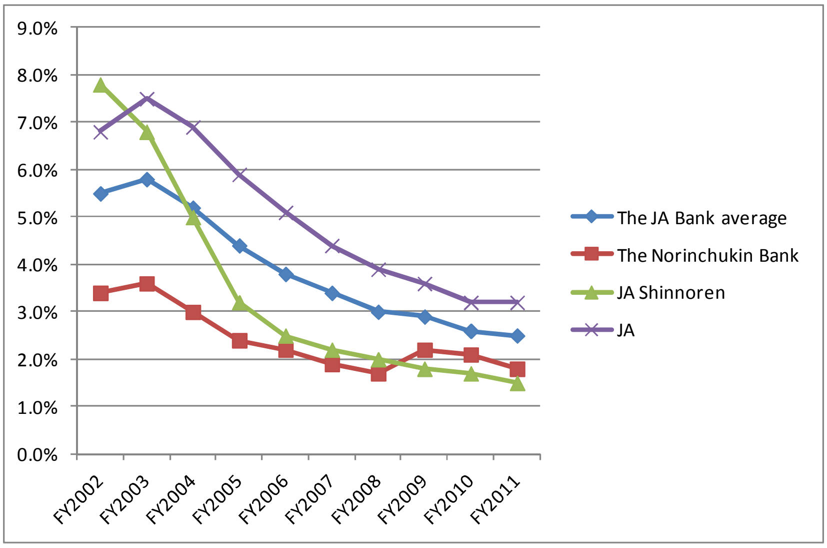


(Source) Explanatory Material regarding the Financial Statements of Norinchukin Bank for the Half of FY 2012

Figure 16: Overview of Support for Agriculture by the JA Bank Group

Figure 17 shows the trends in the non-performing loans ratios of JA Bank. This clearly shows the decline in NPL in all institutions. However, as stated above, only 5% of JA Bank loans are directed to agriculture (and remaining are for housing loans and finance to the local governments), and this does not necessarily represent the NPL of the agriculture sector.

JAs used to have a strong understanding of the financial position of farmers within a region, but in recent times, it is said that JAs are losing its close connection to the farmers, due to mergers between JAs, and thus other financial institutions are increasing their presence in the market.



(Source) Ministry of Agriculture, Forestry and Fisheries

Figure 17: NPL ratio of JA Bank

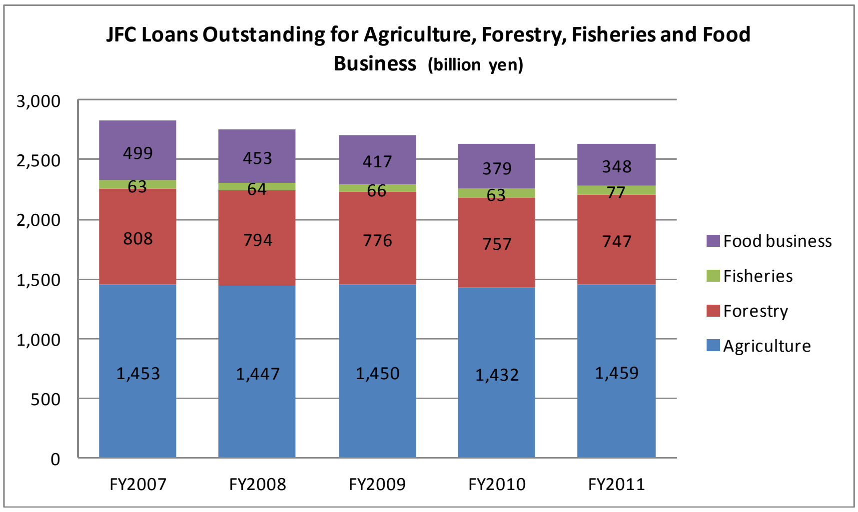
(b) JFC AFFF Unit

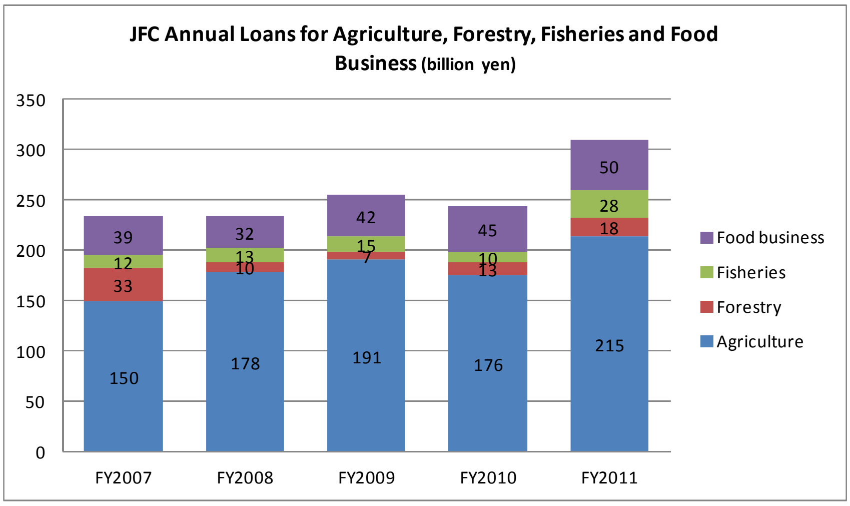
In the JFC, AFFF Unit (Agriculture, Forestry, Fisheries, and Food Business Unit) implements agricultural finance. The former body of JFC AFFF Unit was the Agriculture, Forestry and Fisheries Finance Corporation (AFC), which was a policy-based financial institution, established in 1953 for the purpose of supplying long-term, low-interest funds to agriculture, forestry and fisheries businesses. Currently, 48 branches of JFC have Agriculture, Forestry, Fisheries, and Food Business Units. As of the end of March 2012, a total of 851employees are engaged in the operations for agriculture, forestry, and fisheries businesses.[34]

The following figure shows the trends in the loan balance and the disbursement of JFC AFFF Unit. The overall loan balance of JFC AFFF Unit is around JPY2.5 trillion, and more than half have been directed to agriculture (55% at the end of FY 2011). Loan disbursement to the agriculture accounts for the largest share at about 70% of the total (JPY 214.5 billion, 69% of the total, in FY 2011).

[34] JFC Securities Report

JFC AFFF Unit is the second largest player in the agriculture finance, next to JA Bank, whose loan balance to agriculture sector at the end of FY 2011 was JPY 2.2 trillion.

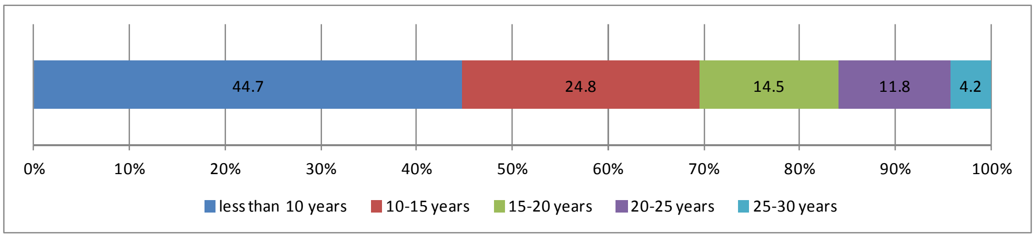




(Source) JFC

Figure 18: JFC Loans disbursement for Agriculture, Forestry, Fisheries and Food Business

The following figure shows the financing amount percentages by loan period as of the end of FY 2011. Long-term financing for over ten years accounts for the majority of the financing, and the average period is 13.0 years. This confirms that long-term financing that is difficult for private commercial banks can be provided by JFC.



(Source) JFC

Figure 19: JFC Loans for Agriculture by loan Period

The following table shows the overview and performances of the loan programs of JFC AFFF Unit in 2011.

"Super L Loan" is the most typical loan product of JFC AFFF Unit, whose loan period is maximum 25 years (with 10 year grace period). The main purposes of the program are the expansions of the farmland and improvement, investment in processing facilities, investment in supply chain facilities, and investment in agriculture machineries. Super L loans are available only for "certified farmers".

Certified farmers are the farmers that the government intensively supports, to achieve its goals for the promotion of agricultural business. Certified farmer system was established based on "the basic direction of new policies for food, agriculture and rural areas (new policy)". The new policy aims at promoting "productive and stable farmers and farm enterprises" which realize the same labor inputs and incomes as other industries[35].

In order to be certified farmers, farmers need to prepare "plans for the improvement of agricultural business management", and have it approved by municipal governments. The plans have to indicate (i) expansion of business size, (ii) improvement in the productivity, (iii) improvement in business management, and (iii) improvement in the efficiency in the labor management.

The number of certified farmers in total in 2012 was 234,000[36], which consist of 15% of all farmers. The farmland area owned by certified farmers consists of 23.8% of total[37]. Thus, the farmland sizes of certified farmers is much bigger than the average.

Certified farmers can have access to loans with favorable terms (e.g. Super L Loans). Leasing cost for equipment and machineries are also subsidized.

[35] "Trend and Issues of Certified Farmers", Fujino, Y
[36] Ministry of Agriculture, Forestry and Fisheries。
[37] Hokkaido Prefecture, "Farmland Concentrations to Certified farmers"

Table 23: Overview and Performance of the JFC Agriculture, Forestry, Fisheries, and Food Business Unit Program of System Fund Loans (FY 2011)

As of January 24, 2013

	FY2011	Eligible businesses	Purpose of use of the funds	Financing limit	Repayment period (grace period)	Interest rate	Collateral and guarantor
Agricultural Management Framework Reinforcement (Super L)	983	Certified farmers	The following funds necessary for the achievement of the agriculture business management improvement plan	[Individual] 150 million yen [Corporation] 500 million yen	Within 25 years (within ten years)	Generally: 0.40 ~ 1.30% However, in the initial 5 years a zero real interest rate (the Agriculture, Forestry, and Fisheries Long-Term Financing Association provides interest subsidies)	As a general rule, necessary (If certain criteria are satisfied, borrowing up to 5 million yen may be uncollateralized and without guarantees)
Agriculture, Forestry, or Fisheries Safety Net Fund	386	Certified farmers, certified new farmers, other	The funds necessary to maintain and stabilize the business in the case that business management has been affected by a disaster or changes to the social or economic environment	[General] 6 million yen [Special permission] Within 3\12 of annual business management expenses, etc.	Within ten years (within 3 years)	0.40 ~ 0.85%	As a general rule, necessary
Agriculture, Forestry, or Fisheries Facilities Fund	340	Individuals running agriculture, forestry, or fisheries businesses, agricultural cooperative associations, the Federation of Agricultural Cooperative Associations, agricultural mutual relief associations, the Federation of Agricultural Mutual Relief Associations, land improvement districts, the Federation of Land Improvement Districts and agriculture promotion corporations, etc.	The improvement, development, restoration or acquisition of the shared-use facilities necessary for the production, distribution, processing, or sale of agriculture, forestry, or fisheries products, and other shared-use facilities	80% of the burden amount	Within 20 years (within 3 years)	0.40 ~ 4.90%	N.A.
Agriculture Improvement Fund	244	Certified farmers, certified new farmers, full-time farmers, people who have concluded family agreements, village agribusiness organizations, eco-farmers, certified small and medium enterprises, etc.	The following funds necessary for the implementation of the plan related to agricultural improvement measures (*) * This refers to any business management improvement funding plan for which the prefectural governor has certified the content of the agricultural improvement measures	[Individual] 50 million yen [Corporation] 150 million yen	Within ten years (within 3 years)	Interest-free	As a general rule, necessary
Fund for Strengthening Management	50	Individuals running farms, corporations or groups that have submitted a business management improvement funding plan or a business management improvement plan to a lending agency, certified new farmers, corporations that have entered agriculture, etc.	The funds necessary to improve agricultural business management based on the business management improvement funding plan or the business management improvement plan	80% of the burden amount or [Individual] 150 million yen [Corporation] 500 million yen	Within 25 years (within 3 years)	1.30%	As a general rule, necessary
Agricultural Land Base Improvement Loan	73	People running farms, agricultural cooperative associations, the Federation of Agricultural Cooperative Associations, agricultural mutual relief associations, the Federation of Agricultural Mutual Relief Associations, land improvement districts, the Federation of Land Improvement Districts and agriculture promotion corporations, etc.	Expenses related to improving the production infrastructure and improving the rural environmental infrastructure in order to expand agricultural production capacity and increase agricultural productivity, etc.	Burden amount	Within 25 years (within ten years)	1.30 ~ 1.40% (0.40 ~ 1.30% for disaster recovery)	N.A.
Loan for land aggregation for reinforcement of core farmers	65	People running farms, agricultural cooperative associations, the Federation of Agricultural Cooperative Associations, agricultural mutual relief associations, the Federation of Agricultural Mutual Relief Associations, land improvement districts, the Federation of Land Improvement Districts and agriculture promotion corporations, etc.	The funds necessary for newly establishing, improving, and developing agricultural land and pastures (However, only projects adopted as management promotion projects are eligible)	The lowest of the following two amounts: * The amount equivalent to 5/6 of the amount borne by the borrower in the relevant fiscal year * The amount equivalent to 10% of the business expenses covered by the loan in the relevant fiscal year	Within 25 years (within ten years)	Interest-free	N.A.
Total other	2,145						

(Source) Prepared by the study team from JFC (2012), Guide to the Agriculture, Forestry, Fisheries, and Food Business Unit, the web site

Since 2008, JFC has been promoting asset-based lending (ABL), in order to avoid depending excessively on real estate collaterals or guarantees. One of the typical collateral for ABL is livestock.

The table below shows the financial performance of JFC AFFF Unit. JFC AFFF Unit reported break-even results for FY 2010 and FY 2011.

Table 24: Financial Performance of JFC AFFF Unit

(billion JPY)

	FY2010	FY2011
Operating Income	73	66
Operating Expenses	72	66
Operating Profits	1	0
Net Profits	0	0
Total Assets	2,638	2,628
Net worth	328	345
Capital contributions by the government	-	16.4

(Source) JFC

However, the break-even results are largely due to the government subsidy. As indicated in the table below, 30% of the operating income of JFC AFFF Unit is from government subsidy. The reason why the government provides such subsidy to JFC AFFF Unit is not disclosed, but it is estimated that the government covers the transaction costs for loan disbursements or monitoring, in order to keep the interest rate low enough for farmers.

Table 25: Breakdowns on the operating income of JFC AFFF Unit

(million JPY)

	2005	2006	2007
Operating income	131,852	120,453	115,910
Interest income	73,108	65,654	60,995
Government subsidy	37,792	38,132	35,523
Loans	3,105,950	2,942,501	2,823,225
Interest / Loans	2.35%	2.23%	2.16%
Government subsidy / loans	1.22%	1.30%	1.26%

(Source) Disclosure of AFC (2007)

The table below shows the non-performing loans (NPL) ratio of JFC AFFF Unit. The NPL ratio of JFC AFFF Unit is relatively low.

Table 26: NPL ratio of JFC AFFF Unit

	JFC			Commercial Banks	Regional Banks	2nd-tier Regional Banks	Shinkin Bank	Credit Unions
	Agriculture, Forestry, Fisheries and	Micro Business	SME					
Non-Performing Loans Ratio based on the Financial Reconstruction Act (Mar.	4.12%	10.73%	8.57%	1.85%	3.05%	3.74%	5.98%	7.99%

(Source) JFC

In addition to the long-term low-interest financing, JFC AFFF Unit provide technical supports to farmers and regional banks by their agriculture business advisors[38]. It also offers business matching supports, by which JFC supports farmers and food processing and marketing companies to expand their business and networks.

3.3.2 The agriculture credit guarantee system

The agricultural credit guarantees system, which supplements the creditworthiness of farmers, is targeting on smooth fund supply to farmers.

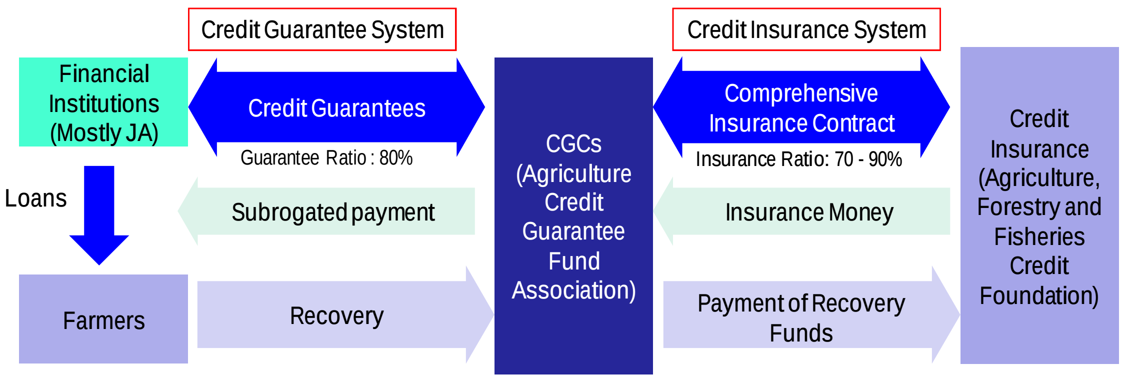


Figure 20: Structure of Agriculture Credit Guarantee System

There are two kinds of major players in the agricultural credit guarantees system namely, (i) Agriculture Credit Guarantee Fund Associations, and (ii) Agriculture, Forestry and Fisheries

[38] The agricultural business advisor program was established in 2005, 14 tests were completed up until the end of March 2012, and currently there are a total of 1,660 agricultural business advisors and JFC holds two training sessions every year. The breakdown of the parent organizations of the agricultural business advisors is as follows: 648 from cooperating financial institutions, 586 tax accountants and small and medium enterprise management consultants, etc.

Credit Foundations.

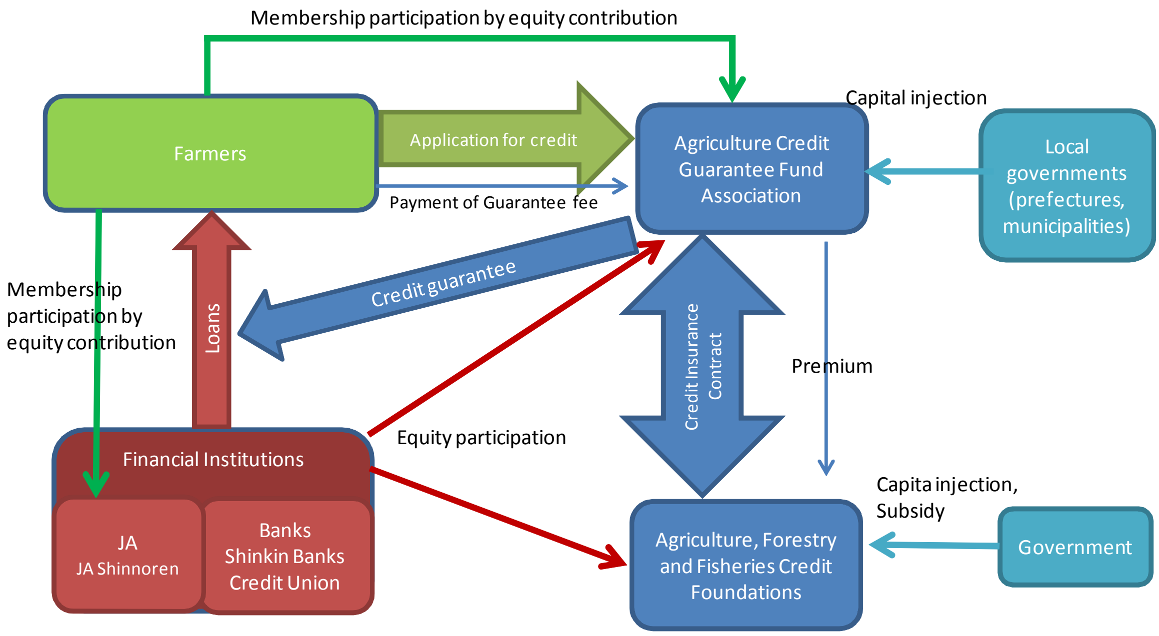
As depicted in Figure 20, (i) Agriculture Credit Guarantee Fund Associations provide credit guarantees to the loans by the financial institutions to farmers. There are Agriculture Credit Guarantee Fund Associations in all prefectures, with the capital contribution of JAs (in the same prefecture) and the prefectural governments.

The guarantees by the (i) Agriculture Credit Guarantee Fund Associations is then backed by the insurance or re-guarantee by (ii) Agriculture, Forestry and Fisheries Credit Foundation, at the national level. In other words, financing to farmers are facilitated through the risk sharing of (i) Agriculture Credit Guarantee Fund Associations at the prefectural level and (ii) Agriculture, Forestry and Fisheries Credit Foundation.

When using the agriculture credit guarantees mentioned above, financial institutions are requested to make capital contributions to (i) Agriculture Credit Guarantee Fund Associations. Most of the users of the agriculture credit guarantee are JAs. Banks and credit unions can also use agriculture credit guarantee, while JFC AFFF Unit, as governmental policy bank, cannot have access to it.

When farmers (borrowers) are unable to repay their debts, the Agricultural Credit Guarantee Fund Association (guarantor) makes payment in subrogation to financial institutions. Then, Agriculture, Forestry and Fisheries Credit Foundation (re-guarantor / insurance provider), pays 70% of the subrogated amounts to the guarantor. Agriculture Credit Guarantee Fund Associations changed its coverage ratio from 100% guarantee to partial guarantee (80%) in 2007, as a measure to reduce moral hazard problems.

Agriculture, Forestry and Fisheries Credit Foundation also provides direct credit guarantee to the loans by Norinchukin Bank or the Central Cooperative Bank for Agriculture and Forestry. It also provides loans to Agriculture Credit Guarantee Fund Associations for the funds for subrogation.

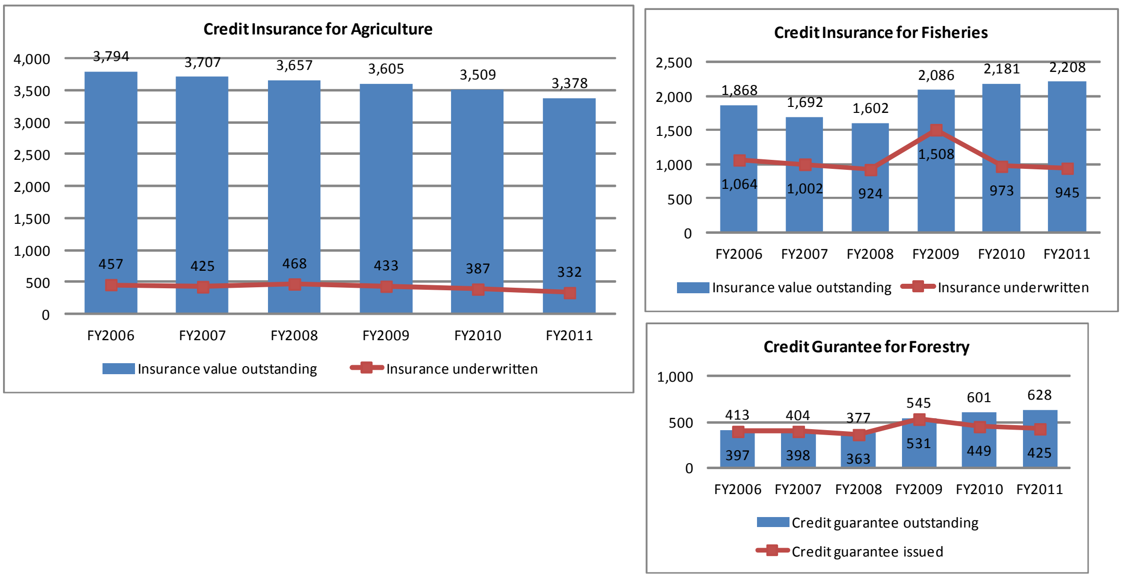


(Source) Agriculture, Forestry and Fisheries Credit Foundation

Figure 21: Credit Guarantee and Credit Insurance System for the Agricultural Sector in Japan

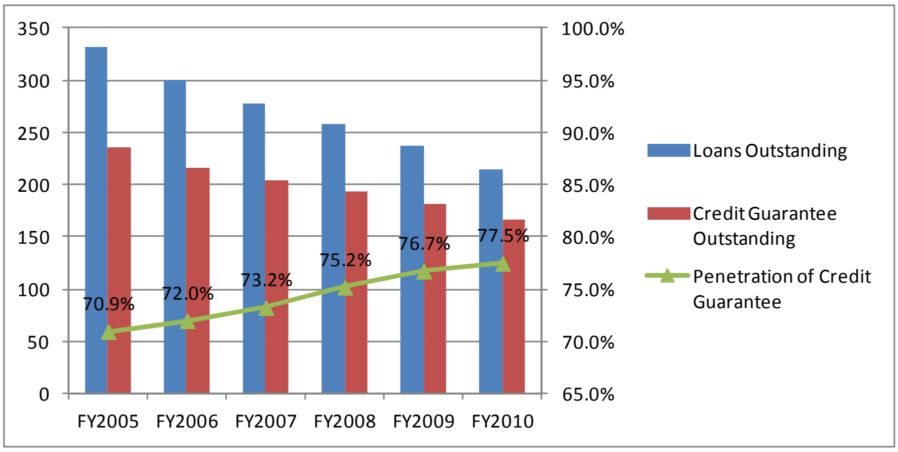
The following figure shows the outstanding credit insurance of Agriculture, Forestry and Fisheries Credit Foundation. The outstanding credit insurance in FY 2011 was approximately JPY 3.4 trillion. This suggests that most of the loans by JA Bank are backed by credit guarantee.

These charts also suggest that the outstanding credit guarantee of the fishery and the forestry sectors are much smaller than the agriculture sector.



(Source) Ministry of Agriculture, Forestry and Fisheries

Figure 22: Performance of Agriculture, Forestry and Fisheries Credit Foundations



(Source) Agriculture, Forestry and Fisheries Credit Foundations

Figure 23: Penetration of Credit Guarantee in Agricultural Modernization Fund

The table below shows the financial performances of Agriculture, Forestry and Fisheries Credit Foundation. The foundation generally makes profits in the agriculture sector, while making loss for the subrogation in the forestry and fishery sector. The loss of the foundation is covered by the state budget.

Table 27: Financial performance of Agriculture, Forestry and Fisheries Credit Foundations and subsidy from the government

(million yen)

		FY2008	FY2009	FY2010	FY2011	FY2012
Subsidy from the government		2,330	2,888	3,541	3,721	6,682
Credit insurance for agriculture						
	Premium (A)	3,633	3,711	3,757	3,660	
	Collection (B)	3,124	3,222	3,118	3,119	
	Insurance payout (C)	7,084	6,114	5,986	5,176	
	(A) + (B) - (C)	▲ 327	819	889	1,603	
Credit guarantee for forestry						
	Guarantee fee (A)	397	864	602	485	
	Collection (B)	360	271	560	415	
	Subrogation payment (C)	2,652	1,681	1,362	1,822	
	(A) + (B) - (C)	▲ 1,895	▲ 546	▲ 200	▲ 922	
Credit insurance for fisheries						
	Guarantee fee (A)	530	660	916	978	
	Collection (B)	1,246	1,173	877	1,084	
	Subrogation payment (C)	7,064	2,568	2,392	7,100	
	(A) + (B) - (C)	▲ 5,288	▲ 735	▲ 599	▲ 5,038	

(Source) Ministry of Agriculture, Forestry and Fisheries

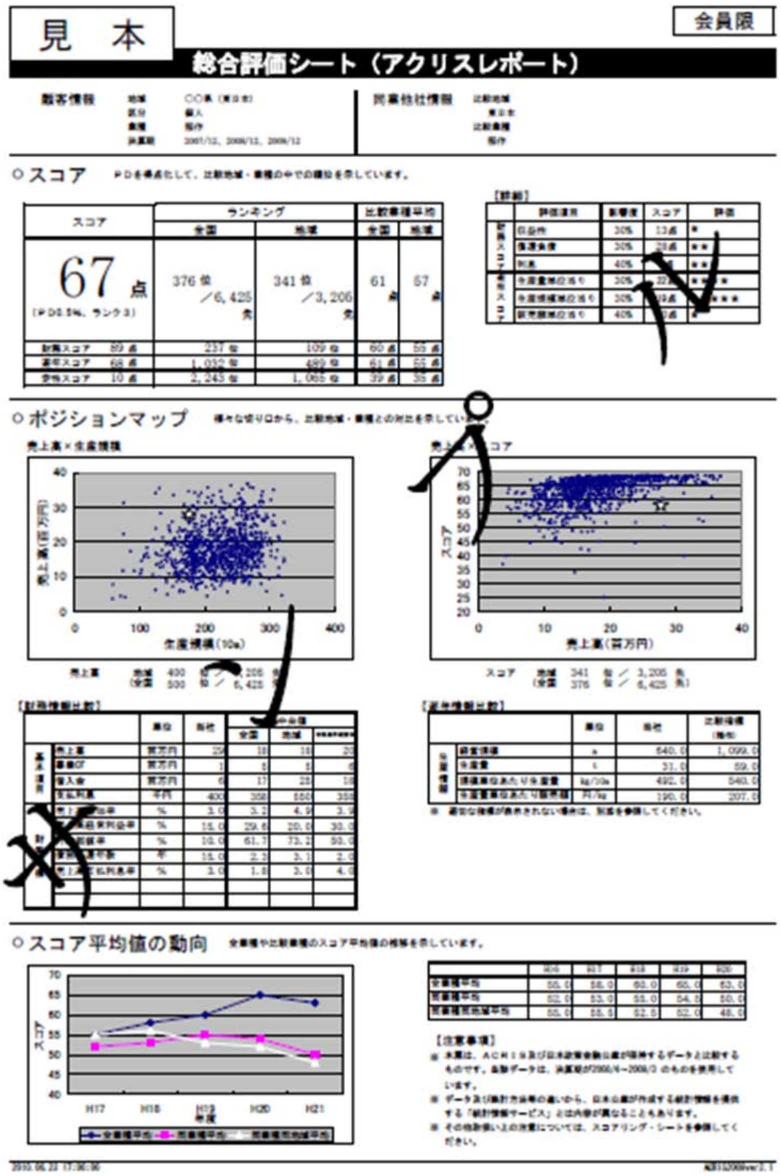
2.3.3 Basic financial infrastructure

The Agricultural Credit Risk Information Service (ACRIS) is the dedicated scoring model for the agriculture sector. This was established by JFC in November 2008, so that private financial institutions can enter and increase agriculture financing. According to JFC, the number of recipients of the service had increased to 106 as of the end of November 2010 (of which 39 is private financial institutions).

ACRIS's current datasets are around 20,000, which are much smaller than those of CRD, because ACRIS has been developed by JFC only utilizing financial and non-financial data of the agricultural businesses or farmers.

ACRIS stores approximately 20,000 datasets of financial data, non-financial data, and default data of farmers. Members of ACIRS[39] have access to several services including so called "comprehensive evaluation report" of loan applicants. The report shows the position of the applicants in the same subsector and the same region. It also shows the financial indicators and the credit scores of the applicants for the last few years.

[39] ACRIS offers the option of annual membership fees of JPY 100,000-600,000 depending on the services that can be used, or a model service provision fee of JPY 500,000.



(Source) JFC

Figure 24: Sample ACRIS Evaluation Sheet

Some JAs started introducing ACRIS into their operations, but the utilization of ACRIS at JAs is still limited. This is because the loans by JAs are not always determined based on the financial status of the applicants, but mainly based on the amount agricultural productions to be purchased by JAs.

ACRIS would be most applicable, when financial institutions carries out the credit appraisal of farmers and farm enterprises who prepare financial statement. It would not be possible to carry out such assessment on the farmers who do not prepare financial statements.

The Report on the Field Survey of Financing for Agricultural Corporations published by the Ministry of Agriculture, Forestry and Fisheries in FY 2006 states that it is necessary for agricultural corporations, agricultural cooperatives, banks and credit unions to develop their respective environments and structures in order to facilitate the financing of agricultural corporations. It presents the following specific issues for each of these entities to examine.

The report states that agricultural corporations must publish accurate financial statements and disclose information about their business management regularly and actively, so that the private financial institutions can make accurate judgments about the characteristics of agriculture, the state of the business management and cash flow of the agricultural corporations, and other facts that help determine their creditworthiness.

For agricultural cooperatives the report suggests utilizing ABL and other new financing techniques, introducing credit ratings systems and setting the interest rate and other financing terms based on the amount of credit risk, strengthening post-financing monitoring, and developing human resources capable of offering advice about agricultural business management. It also recommends that banks and credit unions accumulate agriculture financing know-how and perform studies on how to utilize guarantee programs.

2.4 Implications from the Experience of Japan

As discussed earlier, original form of the current financial systems for SMEs and the agriculture industry in Japan had been constructed from the end of World War II to the end of 1950's. The most important characteristic of the Japanese SME finance system is that the policy-based financing, including the government loan program, interest subsidy and credit guarantee, has been playing significant role in complementing the private financial sector. Roles of policy-based finance for SMEs and the agriculture industry have been changing depending on the industrial and financial policies of the government and the economic conditions. We would like to emphasize that the Japanese financial systems for SMEs and the agricultural industry is still changing. It should be also noted that the Japanese government has spent substantial amounts of state budget to maintain the policy-based finance system. The Japanese government also took initiative in the developing of credit information system which is now an essential basic financial infrastructure for SME financing.

In general, SME financing faces the fundamental problem of "information asymmetry". In order to overcome the high transaction costs involved in SME financing, there are three theoretical approaches as follows;

(i) The government or the whole society bears the costs of information asymmetry,

(ii) Costs of information asymmetry are reduced from efficient loan appraisal processes, and

(iii) Costs of information asymmetry are passed to borrowers.

In the Japanese financial systems for SMEs and the agricultural industry, (i) has been put in practice through policy-based financing and credit guarantee system. (ii) has been implemented by credit unions, mutual loan and savings banks in the field of SME finance and JAs in the agricultural finance, through enhancing their expertise in their specialized field. Recently financial institutions are achieving the efficiency in loan appraisal utilizing IT based credit information system. (iii) has not been put in practice fully in Japan, mainly because interest rates have been politically very low for many years and there has been severe competition among banks. The most important factor to solve the problem of information asymmetry is credit analysis capability of financial institutions, and this can be fostered by accumulating experiences and know-how in the SME and agricultural financings.

This section discusses implications of Japanese experiences in the field of SME and agriculture financing, including advantages and disadvantages, in the following four topics: (1) Policy-based financial institutions focusing on SME financing and agricultural financing, (2) Two-layer credit guarantee system, (3) Agriculture financial services in line with agriculture policy, and (4) Credit information system - government initiative to support SME financing and private credit information system.

2.4.1 Policy-based financial institutions focusing on SME financing and agricultural financing

As described earlier, there are policy-based financial institutions focusing on SME financing or agricultural financing. These are the former People's Finance Corporation (JFC Micro Business and Individual Unit) and the former Japan Finance Corporation for Small Business (JFC SME Unit) in the field of SME finance, and the former Agriculture, Forestry and Fisheries Finance Corporation (JFC Agriculture, Forestry, Fisheries and Food Business Unit) in the field of agriculture finance. These policy-based financial institutions have been playing important roles to complement the private financial sector.

Policy-based financial institutions have provided long-term low interest funds, which private banks are not able to supply. Loans of policy-based financial institutions have been used for the capital investment and R&D activities of SMEs and farmers in Japan, and hence, have contributed to the enhancement of their technology and production capacity. The policy-based financial institutions also functioned as safety net and provided stable funding to borrowers, even when private banks could not supply sufficient loans during the economic turmoil such as the financial crisis after the Lehman shock and large scale natural disasters. The experiences and know-how accumulated by policy-based banks have been shared with private banks, and this led to "pump-priming effects" to induce private banks' loans and reduction of "information asymmetry" issues. In summary, the Japanese government has utilized financing of policy-based banks as an important tool to achieve its policy goals.

However, at the same time, the government has borne large budgetary burden to maintain policy-based financial institutions. Policy-based financial institutions, by their nature, have provided loans to companies or projects with higher risk, which private banks find difficult to deal with based on their analysis on risk and return. Hence, policy-based banks tend to make loss from their operations. Net loss of JFC in FY 2012 is JPY 1,366 million for Micro Business and Individual Unit, and JPY 24,687 million for SME Unit. Agriculture, Forestry, Fisheries and Food Business Unit is break-even after receiving government subsidies. The government has supported these policy-based banks by injecting additional capital and supplying grant-in-aid, and thus it is difficult to maintain this system without substantial budgetary supports by the government.

Policy-based banks are sometimes criticized for causing "crowding out" effect on private banks' businesses and market distortion, especially when their roles and functions in the market is too large.

2.4.2 Two-layer credit guarantee system

The credit guarantee system in Japan is characterized by its two-layer framework, with local CGCs (credit guarantee corporations) at prefectures and a national credit insurance company, which shares the credit risks of CGCs through re-guarantee or insurance.

This system has worked effectively to improve financial access of local SMEs and the agricultural industry, since a CGC in their region is more convenient for borrowers and local financial institutions to utilize credit guarantee services.

As mentioned above, equity contribution to local credit guarantee corporations has been made by not only local governments but also by local financial institutions. This equity participation is considered to have contributed to the reduction of "moral hazard" issues of banks.

However, the Japanese government has spent large amount of state budgets to maintain the credit guarantee system. JFC's credit insurance business, which re-guarantees credit risk taken by local credit guarantee corporations, has been making large losses for the past years (net losses is JPY 999 billion in FY 2009, JPY 812 billion in FY 2010, JPY 301 billion in FY 2011 and JPY 231 billion in FY 2012), and the cumulative budgetary amount spent for the national credit insurance business since 1998 are calculated to reach almost JPY 8 trillion.

The credit guarantee system in Japan still poses "Moral hazard" problems of banks. Such moral hazard problem has been most critical when guarantee ratio was 100% (before October 2007 and after 2008 when "Urgent Special Credit Guarantee Program" was started).

2.4.3 Agriculture financial services in line with agriculture policy

In Japan, agriculture finance has been designed to be in line with the agricultural policy. In 1960s, the government designed "agricultural modernization loans" to provide long term loans to promote upgrading farm productions through the introductions of agricultural machineries and expansions of farm lands. This was based on the government policy to fill the income gap between industrial sector and agricultural sector.

In 1992, the government issued "The basic direction of new policies for food, agriculture and rural areas", one of whose aims is the promotion of large sized farmers. This is followed by certified farmer system in 1994. Certified farmers, who are expected to be the major players in future agricultural productions in regions, are given access to loans with more favorable conditions and tax incentives.

Partly because of such government supports, the average loan amounts of farmers are increasing, although the number of farmers is decreasing. This would suggest that the average size of agricultural producers is expanding. Therefore, it is possible to say that financial services can be one of the major tools to promote agricultural policies.

However, the policy costs for such agricultural loans to achieve policy goals can be very big. JFC AFFF Unit, which provides long term loans with very low interest rates, receives large subsidies from the government every year. More than 30% of the revenue of JFC AFFF Unit is from government subsidies.

Intensive government supports on agricultural finance might cause moral hazard issues in general. For example, if the government covers most of the credit risks in agriculture finance through credit guarantees and other measures, and if financial institutions can achieve high profits from agriculture finance without their own efforts, moral hazard issues can arise. Currently, such moral hazard issues are not considered to be very serious in Japan.

2.4.4 Credit Information System

(1) The development of Credit Risk Database under the initiative of the government

One of the possible solutions to address the information asymmetry issue in SME finance is to reduce the transaction costs by efficient credit appraisals at financial institutions. The development of credit information system, such as the Credit Risk Database (CRD) is one of the possible measures to achieve efficient credit appraisals.

The CRD is a credit information system developed under the initiative of the Japanese government (Ministry of Economy, Trade and Industry) in 2001, which stores financial data (e.g. financial statements of borrowers) and non-financial data (e.g. default data and industry data) of SMEs and estimates the credit risks of SMEs by its statistical scoring model. In order to construct the scoring model, the CRD utilized the financial and non-financial data provided by credit guarantee corporations whose major shareholders are prefecture governments.

After the construction of the database and statistical models, the number of members significantly increased. The number of members was 20 in 2001, which reached to 185 in 2012. The number of data stored in the CRD also increased from 600,000 datasets in 2001 to 3.0 million datasets in 2012.

The membership fee of the CRD is cheaper than similar private based credit information systems. Annual membership fee is JPY 4.0 million (IDR 400 million) and initiation fee is JPY 2.0 million (IDR 200 million), while the annual membership fee of a private credit information system (The Risk Data Bank of Japan) is JPY 9.24million and initiation fee is JPY 2.1 million

As mentioned above, the CRD is a credit information system developed under the initiatives of Ministry of Economy, Trade and Industry, which is aiming at promoting SME financing but not at supervising financial institutions. One of the major advantages of the arrangement of the CRD development is that financial institutions are not concerned about the possible tighter interventions or monitoring of the banking supervising bodies.

In general, if the government takes strong initiatives in setting up such credit information systems which store financial and non-financial data submitted by financial institutions, the financial institutions would assume that the government will use such information to enhance monitoring and supervisions on financial institutions. Financial institutions would therefore be reluctant to provide financial and non-financial data of their borrowers to the credit information system. When the government or banking supervising bodies bind financial institutions to submit financial and non-financial data of borrowers, financial institutions would disregard the quality of the data. In this case, it would not be easy to secure sufficient quality of the credit information system.

(2) The existence of several credit information systems

In Japan, financial institutions can have access to several credit information systems besides the CRD above. Such credit information systems include (i) Risk Databank of Japan (RDB), (ii) Credit Risk Information Total System (CRITS), and (iii) Shinikin Data Bank. Some financial institutions are the members of either one of such credit information systems, and are not members of the CRD.

One of the major reasons why there are several credit information systems is that the services and data storage by the CRD is not necessarily in line with the credit management operations at financial institutions. Therefore, alliances of financial institutions set up their own credit information system.

One of the advantages of the existence of several credit information systems is that financial institutions can select most suitable credit information for the enhancement of their credit appraisals and credit risk management. Financial institutions, which might be afraid of possible interventions or tighter monitoring of banking supervision agencies, would appreciate such available options of credit information systems.

However, it should be noted that the construction of such private credit information system is not always easy. One of such reasons is that setting up alliance of financial institutions, through which sufficient amount of data can be collected, might take considerable coordination works and efforts among financial institutions. If a credit information system cannot have enough members, the system could not be operated sustainably, and it cannot collect sufficient membership fees and data either.

3. Financial Systems for Small and Medium Enterprises in Indonesia and Various Issues

This chapter examines the roles of micro, small and medium enterprises (MSMEs) in Indonesia, and then overviews the MSME financing from the perspectives of policy, finance mechanism, loan products, credit guarantee system and basic infrastructure, to identify the underlying issues in the MSME finance in Indonesia.

3.1 Roles of Micro, Small and Medium Enterprises in the Indonesian Economy

In Indonesia MSMEs are defined under Law Number 20 of 2008 on Micro, Small and Medium Enterprises by their amount of net assets and annual net sales as shown in the table below, but not by industrial categories.

Meanwhile, in accordance with this definition, in the PBI No. 7/39/PBI/2005 concerning Technical Assistance for the development of MSMEs of 2005, the Bank Indonesia has separately defined micro enterprises as having a maximum of IDR 100 million in annual net sales, small enterprises as having maximum net assets (excluding land and buildings) of IDR 200 million and maximum annual net sales of IDR 1 billion, and medium-sized enterprises, in accordance with the Presidential Decree No. 10 of 1999 as having net assets (excluding land and buildings) from IDR 200 million to IDR 10 billion.

Furthermore, in the Decision of the Minister of Industry No.257/MPP/Kep/7/1997 of 1997 the Ministry of Industry defines medium-sized and small industries as having maximum net assets of IDR 5 billion, including investments in land and buildings. Statistics Indonesia uses definitions based on the number of employees, defining micro enterprises as less than five employees (including unpaid laborers), small enterprises as five to nineteen employees, and medium-sized enterprises as 20 to 99 employees.

Table 28: Legal Definition of Micro, Small and Medium Enterprises in Indonesia

Category	Amount of net assets (excluding land and buildings)	Annual net sales	Other
Micro enterprises	Less than IDR 50 million	Less than IDR 300 million	Traditional industries based on sole proprietorship
Small enterprises	IDR 50 million to less than IDR 500 million	IDR 300 million to less than IDR 2,500 million	Managed by an individual or corporation, and an independent enterprise

			which is not a subsidiary or branch of a medium-sized or large company
Medium-sized enterprises	IDR 500 million to IDR 10 billion	IDR 2,500 million to IDR 50 billion	-

(Remarks) The standard for the amount of net assets and annual net sales in these definitions may be changed by presidential decree when necessary.
(Source) Prepared by the study team using Law Number 20 of 2008 on Micro, Small and Medium Enterprises

According to the business statistics, there are 53.8 million MSMEs in Indonesia as of 2010. They account for 99.9% of the total number of business owners, 97.2% of the total number of workers, and 57.1% of GDP. The distribution of MSMEs by industry is as follows;

Table 29: Distribution of Micro, Small and Medium Enterprises in Indonesia by Industry Type (2010)

Industry	Number of enterprises	Number of workers (proportion)	GDP (proportion)
Agriculture, forestry and fisheries	26,685,711	41.84%	n.a
Mining	276,861	1.09%	n.a
Manufacturing industry	3,423,078	11.21%	n.a
Electricity, gas and water supply	12,853	0.14%	n.a
Construction	570,639	4.52%	n.a
Trade, hotels and restaurants	15,910,965	22.28%	n.a
Transport and communications	3,487,691	5.99%	n.a
Finance and real estate	1,115,742	1.52%	n.a
Service industry	2,340,194	8.64%	n.a
Total	53,823,734	97.22%	57.1%

(Remarks) The number of MSMEs in Indonesia, 53,823,734, accounts for 99.9% of the total number of enterprises.
(Source) Prepared by the study team using the report of USAID and material by Ministry of Cooperatives and SMEs

Almost half of the MSMEs are in the agricultural sector, while the MEMEs in the manufacturing sector accounts for only 6.4% in terms of the number of enterprises and 11.2% of the workers. Therefore, the development of the agricultural sector as the major sector and MSMEs in the manufacturing sector is the priority policy issue, and it is necessary to consider how to provide financial assistance in addition to technical and managerial supports to achieve this policy goal.

Generally, funding of MSMEs can be categorized into (i) direct financing (e.g. equities, corporate bonds or commercial papers), (ii) indirect finance (bank loans), (iii) business-to-business credit (credit sales or deferred payments), and (iv) finance leases.

In Indonesia, (ii) indirect finance or bank loan is the most important among them, as bank loans account for 78.07% of total financial assets in Indonesia (as of September 2011), according to the Bank Indonesia (2012). For MSMEs in Indonesia, it would not be easy to get funding through the capital market, as only 440 companies are listed in the stock market, and the total stock values of the listed companies are USD 390.1 billion (46.1% of GDP) as of 2011. Issuing corporate bonds is not a realistic option for MSMEs either. (iv) Finance leases are more realistic options for MSMEs, especially in the financing for capital investment and for the purchases of vehicles and motor cycles. The total amount of finance leases in Indonesia is IDR 52.9 trillion, which is equivalent to 0.8% of nominal GDP (IDR 6,422.9 trillion in 2010)

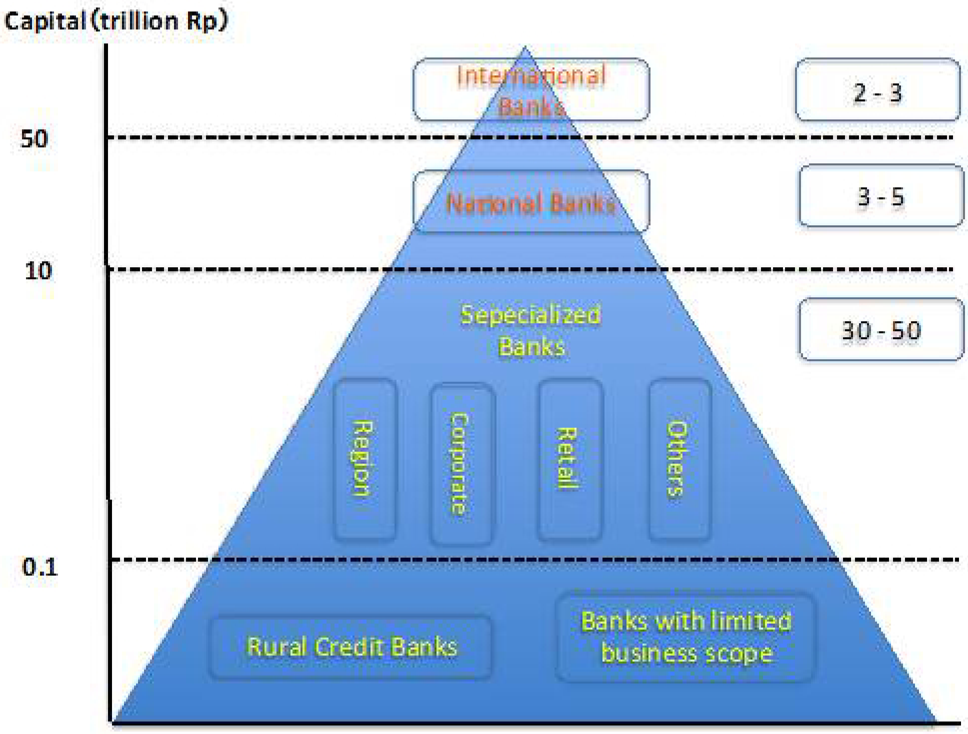
3.2 Financial Policies on MSMEs in Indonesia

3.2.1 Banking supervisions and regulations

(1) Details of the reforms in the banking sector following the Asian currency crisis
In general, MSME financing is largely subject to the supervisions and regulations on financial institutions. Since the Asian currency crisis in late 1990s, Indonesia has a record of stabilizing its banking sector and it can be assumed that the financial policies after the currency crisis have affected MSME financing in Indonesia.

After the Asian currency crisis, through the revised banking act (Act No.10/ 1998 on Banking) and the revised central bank act (Act No.23/ 1999 on Bank Indonesia), full deposit protection system was introduced. Then, following the establishment of the Indonesia Bank Restructuring Agency (IBRA), banking sector reforms made progress, and the number of banks had decreased from 240 (before the currency crisis) to 136 banks by October 2004.

In January 2004, the Central Bank published Indonesia Banking Architecture (API), which is composed of six pillars; (i) healthy banking structure, (ii) effective regulation system, (iii) effective and independent supervisory System, (iv) strong banking industry, (v) adequate infrastructure, and (vi) robust consumer protection. Indonesia Banking Architecture suggests the optimum banking-system structure to be constructed in the next 10 to 15 years, and it also emphasizes the importance of capital reinforcement in commercial banks.



(Materials; Bank of Indonesia (January 2004); the Structure of the Indonesian Banking System Envisaged in API
(Source) Japan Economic Research Institute (September, 2012); Survey of the Banking Industry in Indonesia

Figure 25: The structure of the Indonesian banking system of the future suggested by API

In 2006, the Central Bank published a policy package "PAKTO 2006", and introduced a policy to promote bank mergers and integrations. PAKTO 2006 also suggested reducing the number of banks to 80. However, reorganizations of banks have not progressed as suggested by PAKTO 2006, as there are still 120 banks as of March 2013.

The total assets of the entire banking sector has increased by four times from IDR 1,100 trillion in December 2001 to IDR 4,200 trillion in February 2013. During this period, the loan size to consumers and MSMEs has also increased. Although the bank supervisory authorities had tightened the controls over the banking sector during this period, following the Asian currency crisis, quantitative sufficiency of MSME financing has not been negatively affected.

(2) The MSME financing model and lending regulations for MSMEs

Looking at total assets in the banking sector according to the type of bank as of February 2012, the share of four state-owned banks is 35%, while that of the top ten major banks is 62%. This clearly suggests that most of the assets in the banking sector are concentrated in a small number of major banks.

On the other hand, there are 1,837 BPRs (bank perkreditan rakyat, rural credit banks) and 26 regional development banks in Indonesia, which provide financing to the MSMEs in regions. However, their share of total assets remains at a very low level (BPRs 2% and rural development banks 9%).

Because most of the small-scale financial institutions including BPRs are underdeveloped and their presence in the financial market is minimal, it is possible to say that MSME financing in general is dominated by major banks. This suggests that major banks might use the lending to MSMEs as adjustment rooms to secure a stable fund supply for large companies. Therefore MSME financing could be vulnerable to the lending strategies of major banks.

In this circumstance, the Bank Indonesia re-issued a regulation on the lending ratio of MSMEs, by which banks are legally obligated to gradually increase their lending ratios to MSMEs up to 20% by 2018. This regulation had been abolished in 2001, but it was once again brought into effect in 2012.

Because major banks would have relatively strong bargaining powers on MSMEs, it is questionable whether or not the conditions for MSMEs financing are appropriately determined. However, there does not seem to be any institutional frameworks that carry out detailed surveys and supervisions on financing conditions for MSMEs. Therefore, regular surveys to create basic statistics for MSME finance would be necessary in order to formulate appropriate MSME finance policy.

(3) Financial regulations imposed by the Bank Indonesia and their effect on MSME financing[40]

The revised banking act (Act No. 10/ 1998 on Banking) is aiming at strengthening the supervisions and regulations on banks, in particular, the prudential regulation. The Act also refers to the concentrations of bank supervisory powers into the Bank Indonesia, enactment of a

[40] Source: Bank Indonesia (February 2013), "Indonesia Banking Statistics – Vol.11, No.3"

deposit insurance system, increase of the strictness of the legal-loans limit, and strengthening punishments for illegal acts.

The current banking regulations by the Bank Indonesia include (i) regulations on the establishment of new banks, (ii) regulations on the increase of paid-up capital of banks (iii) regulations on new branches and sub-branches, (iv) regulations on the operational regions, (v) regulations on banking activities and business types (vi) regulations on bank mergers and acquisitions, (vii) policies on single share holdings, and (viii) prudential regulation.

In October 2011, the Indonesian Parliament passed a bill to establish the Indonesian financial services agency (OJK), and the powers of the capital markets supervisory agency (BAPEPAM-LK) and the powers of the Bank Indonesia on banking supervision are scheduled to be transferred to OJK the end of 2012 and the end of 2013 respectively.

Mergers and acquisitions of banks are regulated by the Government Regulation No.28/1999 on Mergers, Consolidations and Acquisitions in the Banking Industry. Based on this regulation, merger and acquisitions of banks must go through prior approvals by the Bank Indonesia. Banks also must maintain sufficient level of capital adequacy ratio, and the asset of a merged bank cannot not exceed 20% of total bank assets in Indonesia, after mergers.

PAKTO 2006 offered various incentives to encourage mergers and acquisitions of banks. Such incentives include;
(i) Conditions for becoming a foreign currency bank are eased.
(ii) The reserve requirements at the Bank Indonesia are reduced.
(iii) The time limit for achieving single borrower's limit is extended.
(iv) Conditions on the establishment of new branches are eased.
(v) Part of costs for due diligence in the M&A process are refunded[41].

Under the Banking Act in 1998, when opening branches and sub-branches, banks are required to go through the approvals of the Bank Indonesia. The Bank Indonesia then examines several points before approval, including the business capabilities of banks, and fair competition among banks. However, because the "number" of new branches and sub-branches to be opened is not regulated by the Act and other regulations, banks increased their branch network significantly, as the total number of branches of commercial banks increased by 1.7 times from 9,680 in

[41] Source: Minori Hamada (February 2007) "Long-term reorganization plan for the Indonesian banking sector-toward 2010," Ajiken World Trend, No.137

December 2007 to 17,089 in March 2013.

BPRs or people's credit bank are subject to the regulation on operational regions, and they are allowed to open branches only in the same province where their head offices are located. However, regional development banks, which are not subject to this regulation, are establishing branches in Jakarta and other urban areas out of their provinces.

The major laws related to security rights in Indonesia are as follows;
(i) Law No.4/ 1996 on Mortgage
(ii) Law No.42/ 1999 on Trusted Security/ Fiduciary
(iii) Civil law (Law No.23,1847):

(i) Mortgage Law defines mortgage rights (Hak Tanggungan) for real estate, while (ii) Trust collateral law defines trust security interest (Fiducia) and the rights for moveable assets. (iii) Civil Law also defines mortgage rights (Hipotik), which is applied for ships, vessels and aircrafts[42].

In Indonesia, one of the major issues in collateral is that collateral registration process is not simple and practical for financial institutions. One of the issues in collateral is that the owners of real estate do not always have land certificate. Because the owners do not have certificates, they cannot use their real estate as collateral.

Another issue is the actual collateral processes in Indonesia. In general, when Indonesian banks hold real estates as collaterals, they keep the land certificates. This business practice is disadvantageous to a borrower, because this practice has negative psychological impacts on a borrower. Furthermore, because of this practice, borrowers cannot access to other financial institutions, when their land certificates are held physically by a financial institution.

Mortgage law stipulates that mortgage security certificates have to be submitted to registry offices for mortgage registration within 7 business days (Mortgage Law Article 13.2). Then, mortgage security shall come into effect on the day that the certificates are registered.

Recently, the loan balance of the banking sector as a whole has rapidly increased, but no particular deterioration in the quality of assets has been observed. The number of banks

[42] Source: Nobukatsu Fukui (August 2012) , "Civil Preservation and Implementation and Exercise of Security Interests in Indonesia," (JMC Japan Machinery Center for Trade and Investment)

exceeding the upper limit for NPL (Non Performing Loans) ratio, which was set by the Bank Indonesia as 5%, was decreased from 22 banks in 2007 to 7 banks in 2011.

In addition, the capital adequacy ratio of all commercial banks exceeded 19% (as of the end of February 2013), which is significantly above the lower limit set by the Bank Indonesia of 8%. All types of commercial banks show generally high capital adequacy ratio, including state -owned banks (18.47%), foreign exchange commercial banks (16.88%), non-foreign exchange commercial banks (21.11%), regional development banks (20.45%), joint investment banks (20.25%), and foreign banks (32.74%).

In general, when capital adequacy ratio is low, banks are not willing to expand their loans and assets, in order to make the capital adequacy ratio above the minimum level. However, because the capital adequacy ratios of most banks are exceeding the benchmark ratio of 8%, banks are expected to remain active in extending loans.

As mentioned above, loan balance of banks, including loans to individuals and MSMEs, recently increased, and underlying credit risks might not be appropriately captured, as most of the financial institutions are not equipped with sufficient credit information systems to capture such risks. If such credit risks increase in the future, financial institutions would become cautious in lending to MSMEs, particularly to the manufacturing sector that is assumed to have a relatively higher NPL ratio.

Banks' loan-deposit ratio (as of February 2012) is at an appropriate level, standing at approximately 80% for commercial banks as a whole. The ratio for regional development banks, who are the providers of lending to regional MSMEs, is 67.6%, which is the lowest level when compared to the other types of banks. This would suggest that finding potential borrowers is the one of the most significant issues for regional development banks.

Loan-debt ratio of regional development banks (BPDs) significantly vary among them. For example the ratio of BDP Papun was 48%, and but the ratio of BDP Sulawesie Utra was 99.8% in 2011. This suggests that the regional financial markets differ considerably according to the economic conditions of the region.

The microfinance industry has achieved rapid growth in recent years, and in January 2013, the Law No.1/2013 on Microfinance Institutions was enacted to create a legal framework for the business activities of microfinance institutions and the supervision of these activities. The Act was designed to benefit citizens, especially the poorest segment of the population and the low-income class. The target of the act is (i) expand microfinance, (ii) achieve economic development and increase productivity, and (iii) improve and advance income and welfare (Article 3 of this same act). This act also specifies the organizational form of microfinance institutions, official approval, scope of their business, deposit protection, confidentiality of information, integration, information disclosure, supervision, and penalty regulations.

Microfinance institution can be either a cooperative or limited company (as provided for by Article 5.1 of the Law No.1/ 2013 on Microfinance Institutions). In the case of a limited company, a minimum of 60% of its shares must be owned by the local government or a village-managed company (Article 5.2).

Leasing companies or multi-finance companies are playing certain roles in the capital investments of MSMEs, although the presence of leasing companies in Indonesia is not significant.

Regulation of President No. 9/ 2009 on Financing Institutions Article 1.6 defines leasing as "financing activities in the form of the procurement of capital goods for use for a fixed period of time through payments from the borrower, based on installment payments, and through finance leasing or operating leasing." As of February 2012, the share of lease assets in the financial sector as a whole was about 2%. From the perspective of the diversifications of funding channels for medium-sized enterprises, the development of leasing sector would be essential. The institution that grants the official business license is OJK (having the supervisory powers of the former BAPEPAM-LK).

3.3 Financial Systems for Micro, Small and Medium Enterprises

3.3.1 Financial mechanisms and financial products

The table below shows ratio of domestic credit to private sector to GDP. This ratio indicates the extent to which bank loans are used in the economic activities of private sectors and tends to rise with economic growth. Indonesia's ratio has been increasing gradually since 2000 (after Asian crisis), and is 31.8% in 2011, but it is much lower compared to those of other Asian countries.

Table 30: Domestic credit to private sector (% of GDP)

Country Name	1960	1970	1980	1990	2000	2001	2008	2009	2010	2011
World	51.5	67.3	73.6	103.1	128.8	129.3	129.0	137.4	133.6	128.8
East Asia & Pacific		88.5	96.1	154.9	171.9	151.1	127.6	139.8	136.8	135.0
Bangladesh			5.8	16.7	24.7	27.8	39.2	41.5	47.1	48.8
China			53.1	87.1	112.3	111.3	103.7	127.2	129.9	127.0
Hong Kong SAR, China				160.5	150.4	149.0	140.3	155.4	185.4	202.2
Indonesia			9.0	48.1	19.9	20.3	26.5	27.6	29.1	31.8
Japan	56.3	110.1	129.4	191.9	219.7	190.0	171.6	179.8	172.6	172.8
Korea, Rep.	5.8	33.3	41.4	54.5	77.5	81.5	109.1	107.0	100.6	100.2
Malaysia	7.0	19.2	49.0	69.4	135.0	129.1	96.7	111.6	110.7	112.2
Myanmar	6.2	4.7	5.5	4.7	9.5	11.0				
Philippines	12.0	20.4	31.4	19.3	36.8	37.5	29.1	29.2	29.6	31.8
Singapore		45.3	69.1	79.3	97.9	117.8	106.7	109.9	100.0	112.6
Thailand	10.1	19.3	40.8	83.4	108.3	96.9	113.0	116.4	123.9	140.4
Vietnam					35.3	39.3	90.2	112.8	125.2	111.6

(Source) The World Bank

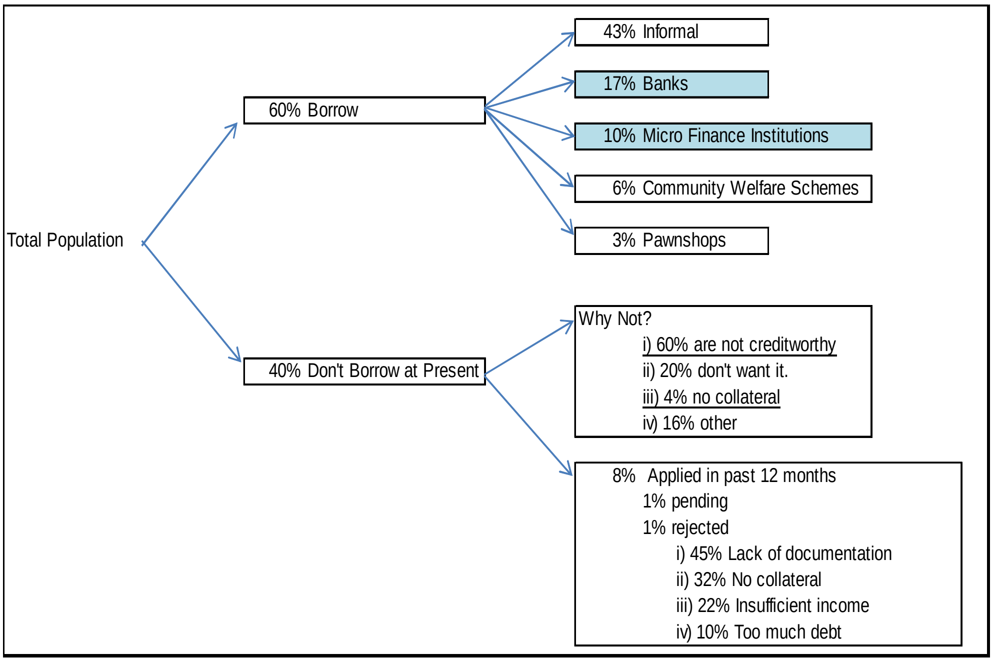
The table below shows financial inclusion index in the World Bank Enterprise Surveys for the manufacturing companies. As illustrated in the highlighted parts, percentages of the firms with bank account and percentages of firms with bank loan / credit line in Indonesia is much lower compared with those of East Asia & Pacific and the World, especially for small firms with 5 – 19 employees. The percentage of Indonesia would be also much lower for micro firms, although the Survey does not cover micro enterprises. Percentage of firms using banks to finance investments is also much lower in Indonesia than those of East Asia & Pacific and the World, especially for small and medium firms.

Table 31: Financial inclusion index by the World Bank

		Indonesia	East Asia & Pacific	World
Percent of firms with a checking or savings account		51.5	86.9	87.7
	Small (5-19)	46.3	85.6	85.5
	Medium (20-99)	89.1	91.3	92.6
	Large (100+)	92.5	89.8	95.7
Percent of firms with a bank loan/line of credit		18.2	38.7	35.5
	Small (5-19)	16.5	32.2	29.4
	Medium (20-99)	27.6	48.8	44.4
	Large (100+)	47.1	46.3	55.2
Proportion of loans requiring collateral (%)		83.6	76.5	77.9
	Small (5-19)	81.1	80.0	76.6
	Medium (20-99)	94.6	86.4	81.4
	Large (100+)	91.7	87.3	82.1
Percent of firms using banks to finance investments		11.7	24.7	26.3
	Small (5-19)	10.3	21.2	22.4
	Medium (20-99)	12.9	26.2	28.4
	Large (100+)	29.5	29.3	35.4
Proportion of investments financed internally (%)		85.8	70.1	69.4
	Small (5-19)	86.2	72.2	71.3
	Medium (20-99)	85.0	72.6	68.5
	Large (100+)	81.9	75.7	66.0

(Source) The World Bank

According to the World Bank surveys on funding status and routes, no more than 27% of total population in Indonesia is borrowing from formal financial institutions such as banks and microfinance institutions, and 43% are borrowing using informal finance. Furthermore, it is confirmed that there are a significant number of people / businesses who "want to borrow but cannot borrow funds" for reasons such as a lack of creditworthiness, and a lack of collateral, flaws in their documentation.

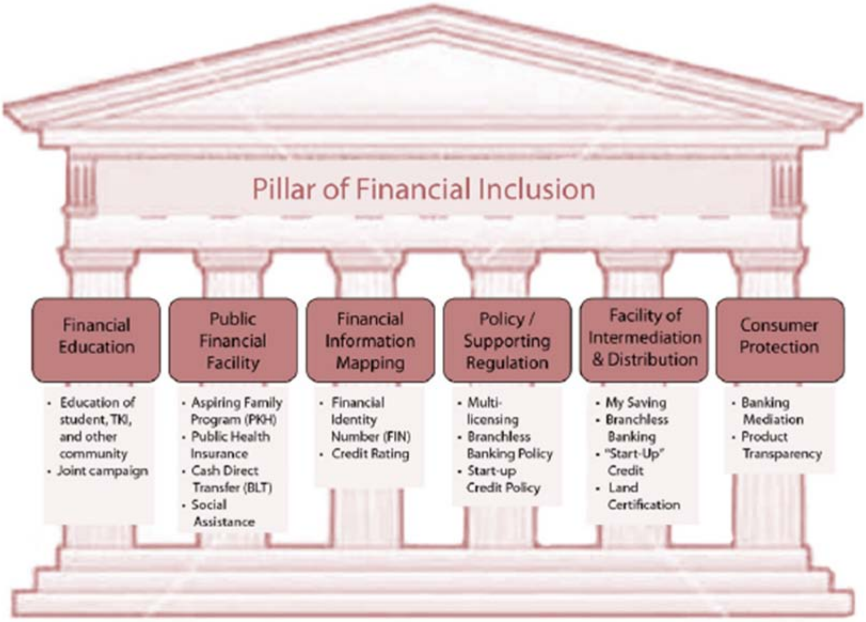


(Source) The World Bank, "Improving Access to Financial Services in Indonesia" (2010)

Figure 26: Summary of Survey Results for Borrowers

Based on the circumstances described above, financial inclusion in Indonesia is not at a satisfactory level and further improvement is necessary.

The Bank Indonesia is trying to solve this issue, issuing the National Strategy of Financial Inclusion in Indonesia, in which 6 pillars of policy are formed as illustrated in Figure 27. 6 pillars are (1) financial education, (2) public financial facility, (3) financial information mapping, (4) policy/supporting regulation, (5) facility of intermediation & distribution and (6) consumer protection.



(Source) Bank Indonesia

Figure 27: Pillar of Financial Inclusion

In order to facilitate MSME financing, the Bank Indonesia "will lead to implement the policy to bridge the gap in information (asymmetric information) between MSMEs and the banking in order to increase financial access of MSMEs to banking."

The policies of the Bank Indonesia are divided into policies on demand side that aims to enhance feasibility and capability of MSMEs, and policies on supply side that aims to encourage and provide incentives for banking to distribute credit to MSMEs.

The activities of the Bank Indonesia in demand side policy include (but is not limited to) research in financing pattern of small enterprises, training for Bank Partner Financial Consultant (KKMB), provision of MSMEs information in the form of "Info UMKM[43]", and coordination among the government including participation in policy committee of the KUR program and cooperation with National Land Body (BPN) to increase the land ownership right status of MSMEs.

As part of the supply side policies, the Bank Indonesia supports establishment of Regional Credit Guarantee Companies (PPKD), and plans to introduce MSMEs rating system which is still under progress.

43 http://www.bi.go.id/web/id/UMKMBI/Tentang/

The Bank Indonesia also issued new regulations on MSMEs financing in December 2012, which regulate commercial banks to make the loans to MSMEs more than 20% gradually before 2018. The banks which do not achieve 20% “will be sanctioned in accordance with the applicable regulations”. Banks are also required to submit credit distribution plans, including MSMEs credits by economic sector, type of use and province, as well as progress reports.

In May 2013, the Bank Indonesia has issued guidelines on the branchless banking system, in which certain banking services will be provided to communities through third parties (agents), in order to supply banking services for areas with a lack of or low access to banks.

These efforts and regulations by the Bank Indonesia will probably contribute to better financial inclusions in the near future, but progress should be monitored carefully, and regulations should be adjusted when necessary.

In order to improve financial inclusion for the MSMEs in Indonesia, it is important for the Indonesian banks to broaden their branch network, because physical accessibility to banks will be indispensable for MSMEs to start banking transactions. This is also critical for the banks to conduct “Know Your Customer (KYC)” in credit appraisals process and appropriate monitoring throughout loan period.

The table below illustrates the number of commercial banks and their number of offices including small scale sub-branches. Since the year end of 2007, although the number of commercial banks has decreased from 130 to 120, the number of bank offices has increased dramatically by more than 7,000 from 9,680 to 17,089 offices.

Table 32: Number of banks and bank offices by category of banks

	2007	2008	2009	2010	2011	2012	2013 Mar	2013 Mar - 2007
State Owned Banks								
Total Banks	5	5	4	4	4	4	4	-1
Total Bank Offices	2,765	3,134	3,854	4,189	4,362	5,363	5,538	2,773
Foreign Exchange Commercial Banks								
Total Banks	35	32	34	36	36	36	36	1
Total Bank Offices	4,694	5,196	6,181	6,608	7,209	7,647	7,764	3,070
Non-Foreign Exchange Commercial Banks								
Total Banks	36	36	31	31	30	30	30	-6
Total Bank Offices	778	875	976	1,131	1,288	1,447	1,481	703
Regional Development Banks								
Total Banks	26	26	26	26	26	26	26	0
Total Bank Offices	1,205	1,310	1,358	1,413	1,472	1,712	1,847	642
Joint Venture Banks								
Total Banks	17	15	16	15	14	14	14	-3
Total Bank Offices	96	168	238	263	260	263	264	168
Foreign Owned Bank								
Total Banks	11	10	10	10	10	10	10	-1
Total Bank Offices	142	185	230	233	206	193	195	53
Total								
Total Banks	**130**	**124**	**121**	**122**	**120**	**120**	**120**	**-10**
Total Bank Offices	**9,680**	**10,868**	**12,837**	**13,837**	**14,797**	**16,625**	**17,089**	**7,409**

(Source) Bank Indonesia

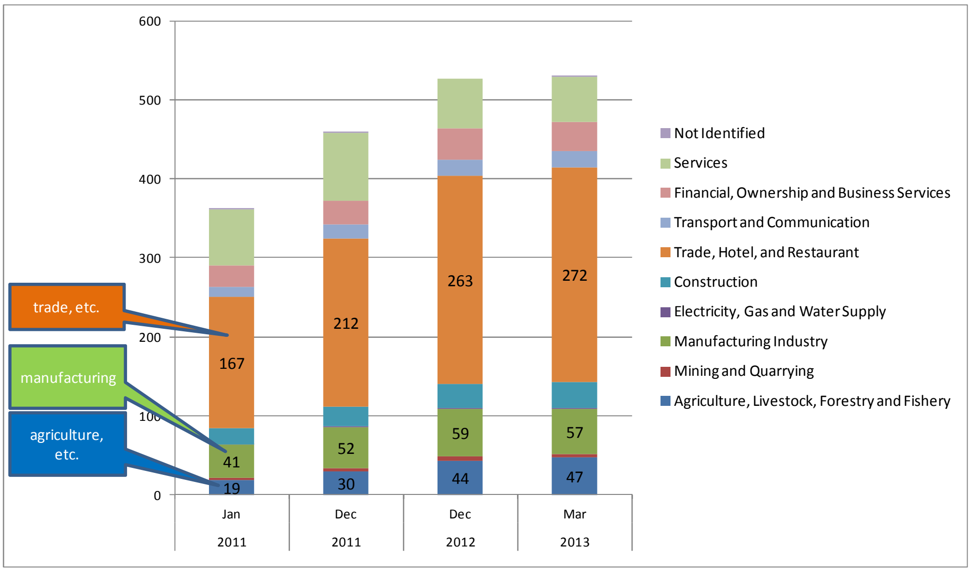
The next table shows the number of branch offices in Jakarta, the Jawa Island and non-Jakarta. Apparently, the banks has been broadening their nationwide networks rather than just focusing on Jakarta area in this period, although the Jawa Island still occupies more than half of the total branches. In general, the Indonesian banks are making their effort to enlarge their customer base including MSMEs by strengthening their domestic network.

Table 33: Number of branches of commercial bank by area

	2007	2008	2009	2010	2011	2012	2013 Mar
Jakarta (A)	442	464	506	513	535	564	573
Jawa (B)	1,462	1,514	1,596	1,610	1,734	1,815	1,840
non-Jakarta	2,247	2,352	2,476	2,491	2,763	2,897	2,936
Total	**2,689**	**2,816**	**2,982**	**3,004**	**3,298**	**3,461**	**3,509**
% of (A)	16.4%	16.5%	17.0%	17.1%	16.2%	16.3%	16.3%
% of (B)	54.4%	53.8%	53.5%	53.6%	52.6%	52.4%	52.4%

(Source) Bank Indonesia

Figure 28 shows the MSME loans outstanding by commercial banks. MSME loans have been increasing from IDR 361 trillion in January 2011 to IDR 529 trillion in March 2013, with the average annual growth rate of 16.3%, much higher than the GDP growth rate in this period. Sector-wise, "trade, hotel and restaurant", which comprises more than 50% of the total MSME loans outstanding, has been leading the growth. On the other hand, although the outstanding loans to the productive sector including agriculture and manufacturing increased by 50.3%, they still have small share in the total MSME loans outstanding.



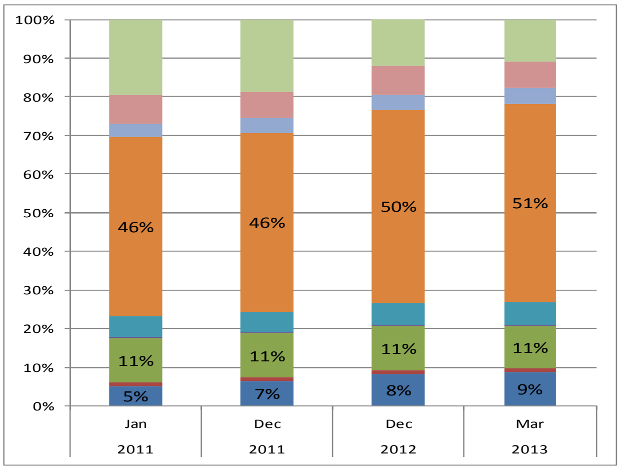


Figure 28: Composition of MSME loans outstanding by industry

Figure 29 is a breakdown of MSME loans outstanding by category of banks. State-owned banks have the largest amount, followed by foreign exchange commercial banks, and regional development banks. Taking into account that the number of state-owned banks is four, while that of foreign exchange banks and regional development banks is 36 and 26 respectively, four state-owned banks have very large presence in the MSME financing market. In addition, as shown in the table below, percentage of MSME loans outstanding to total assets is the highest at state-owned banks (16.9% in March 2013).

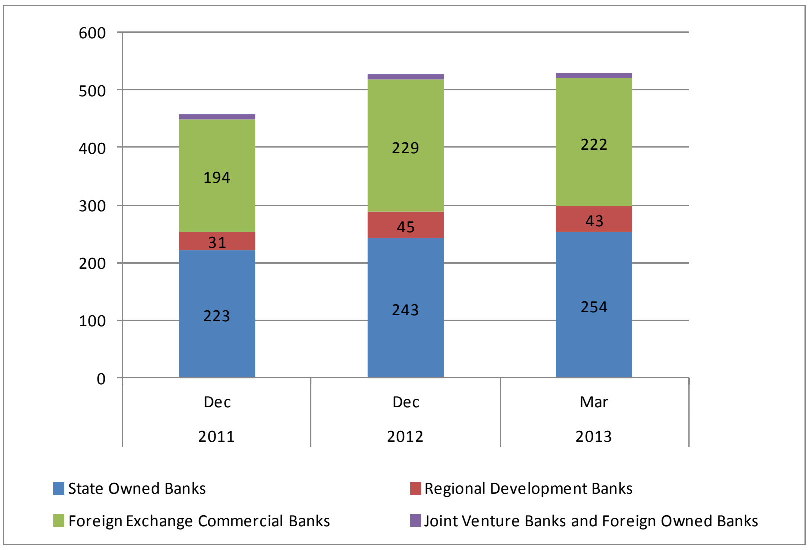


Figure 29: Breakdown of MSME loans outstanding by category of bank

Table 34: MSME loans outstanding to total assets by category of banks

	2011	2012	2013 Mar
State Owned Banks	16.8%	15.8%	16.9%
Foreign Exchange Commercial Banks	13.3%	13.4%	12.8%
Regional Development Banks	10.3%	12.3%	11.1%
Joint Venture Banks and Foreign Owned Banks	2.2%	1.8%	1.9%

In Indonesia, there are more than 1,800 BPRs (bank perkreditan rakyat, people's credit bank) which are much smaller in size than commercial banks and are limited in their scope of banking businesses. Figure 30 shows the credit balance (not limited to MSMEs) of BPRs and their NPL ratio. The credit outstanding of BPRs has increased from IDR 21 trillion in 2007 to IDR 53 trillion in March 2013. NPL ratio has decreased, but is still higher than that of commercial banks. Through “Linkage Program”, BPRs receive funds from commercial banks to extend credit to rural customers including MSMEs.

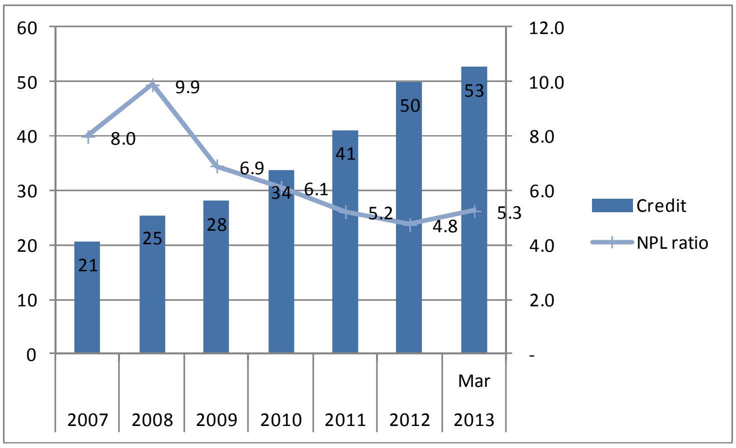


Figure 30: Credit outstanding and NPL ratio of BPRs

As illustrated in the table below, interest rates of BPRs are much higher than those of commercial banks. This indicates higher funding costs, higher NPL ratios and higher operating costs of BPRs compared to commercial banks. However, the current interest rates of BPRs, for example, almost 35% for the agriculture sector and 28% for the processing sector, should be lowered to some extent for regional MSMEs to maintain sustainable growth in the future.

Table 35: Average of credit interest rates of commercial banks (left) and BPRs (right)

	2011	2012	2013
	Dec	Dec	Mar
Agricultures, hunting and forestry	11.46	11.32	11.34
Fisheries	13.95	13.37	13.34
Mining and Quarrying	12.03	11.29	11.52
Procesing industry	10.68	9.98	10.00
Electricity, gas and water	9.77	8.93	8.67
Construction	12.05	11.49	11.31
Big and retail trade	13.32	12.67	12.56
Provision of accomodation and	13.06	12.05	11.94
Transportation, warehousing and communications	10.76	10.54	10.50
Transitional Finance	10.50	9.69	9.58
Real estate, Rental Business, and services company	12.84	12.12	12.02
Government administration, the defense and compulsory social	10.68	11.95	12.04
Education services	14.28	14.06	14.16
Health and social services	12.62	12.18	12.14
Community, Sociocultural,Entertainment and	13.72	12.67	12.94
Individual services which serve households	16.46	16.18	15.60
Extra agency international agency and other international	13.44	9.50	9.43
Business Activities which are not clearly defined	13.84	11.51	12.31

	2010	2011	2012	2013
	Dec	Dec	Dec	Mar
Agriculture, hunting, and forestry	38.29	36.58	35.51	34.89
Fisheries	33.39	32.10	31.32	30.56
Mining and quarrying	28.29	26.58	26.60	26.34
Processing industry	30.67	29.14	28.44	28.30
Electricity, gas and water	34.43	30.33	29.08	27.73
Construction	31.41	29.72	28.59	28.90
Big and retail trade	33.14	31.97	30.41	30.00
Provision of accommodation and food supply drinking	27.99	28.53	28.53	28.12
Transportation, warehousing and communications	30.12	28.11	27.89	27.85
Transitional finance	25.28	24.20	23.52	22.93
Real estate, rental business, and services company	27.26	22.77	21.50	22.41
Government administration, the defense and compulsory social	35.78	26.38	27.60	25.39
Education services	31.61	28.84	28.20	27.96
Health and social services	30.51	30.86	28.89	28.52
Community,	29.05	28.23	27.98	27.66
Individual services serving the household	31.07	32.82	31.15	30.37
International Agency and Other Extra Agency International	29.35	29.11	28.00	28.38
Business Activities which are not clearly defined	28.12	27.39	26.19	25.84
Not the business field - other	27.71	26.88	25.90	25.77

Figure 31 shows the breakdown of MSME loans by company size from 2011 to 2013. All of Medium, Small and Micro sectors have increased MSME loan balances during this period. In terms of proportions of the total MSME loans, Medium has now more than 50%, followed by

Small (30%) and Micro (19%). As being discussed later in detail, the credit guarantee scheme has contributed to better financial access for the Micro and Small enterprises, indicated by an increase in percentage of credit with specific guarantee scheme.

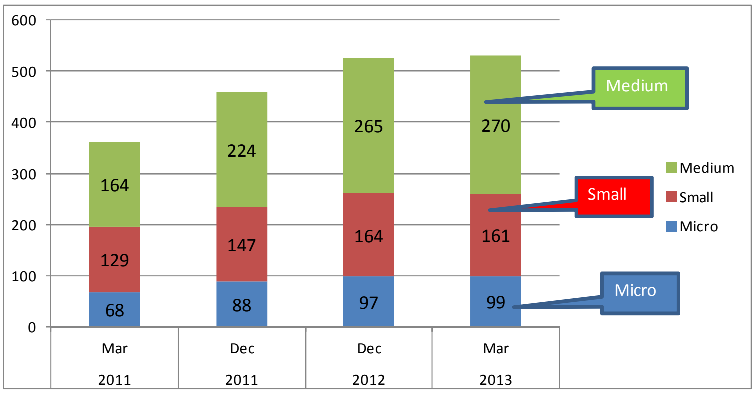


Figure 31: Breakdown of the MSME loans (in IDR trillion) by company size

Table 36: Percentage of credit with specific guarantee scheme

	2011 Jan	2011 Dec	2012 Dec	2013 Mar
Micro	11%	14%	18%	19%
Small	5%	10%	12%	12%
Medium	0%	1%	1%	1%

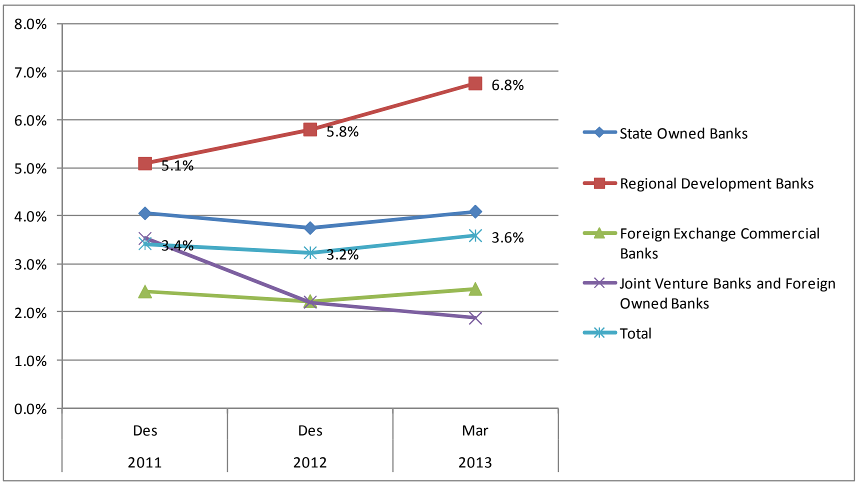
The next table illustrates compositions of MSME loans to the total loans outstanding by industrial origin in the commercial banks. Share of MSME loans has decreased from 30.5% in January 2011 to 20.3% in March 2013, without exception of the productive sector including agriculture and manufacturing. This implicates that the commercial banks has allocated more funds to loans to large corporations or State-Owned Enterprises during this period.

Table 37: Share of MSME loans outstanding to the total loans by industrial origin

	2011 Jan	2011 Dec	2012 Dec	2013 Mar
Loans by Industrial Origin	30.5%	24.3%	20.7%	20.3%
Agriculture, Livestock, Forestry & Fishery	20.8%	16.8%	14.1%	13.2%
Mining and Quarrying	5.3%	3.8%	3.5%	3.3%
Manufacturing Industry	15.3%	12.3%	10.0%	9.9%
Electricity, Gas and Water Supply	3.4%	2.6%	1.8%	1.6%
Construction	31.7%	26.8%	21.8%	22.1%
Trade, Hotel, and Restaurant	53.2%	42.1%	33.0%	31.0%
Transport and Communication	17.0%	13.4%	11.3%	10.9%
Financial, Ownership & Business Services	20.7%	15.1%	12.7%	12.4%
Services	47.0%	40.9%	49.7%	54.6%

(Source) Bank Indonesia statistics

One of the major challenges of MSME financing banks are facing is how to control NPLs. Generally, MSMEs are weaker in management, financial base, and human capital and hence, loans to MSME involve higher credit risk inherently. Figure 32 illustrates the recent NPL ratio of MSME loans by commercial banks. Although state-owned banks and foreign exchange commercial banks have been controlling their NPL ratios around 4% or lower for the past two years, that of regional development banks has been rising gradually and reaches almost 7% in March 2012. Although regional development banks are expected to play important roles to develop regional economies by providing financial supports to MSMEs in their regions, it seems that they are facing difficulties in expanding their MSME financing.

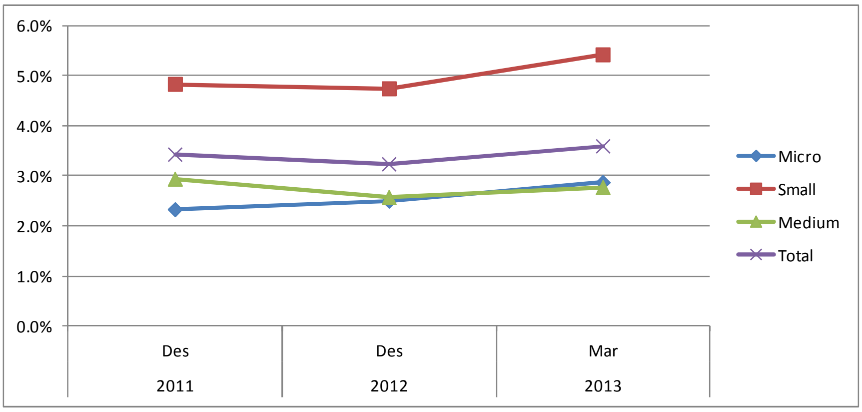


(Source) Bank Indonesia statistics

Figure 32: NPL ratio of MSME loans by commercial banks

Figure 33 shows NPL ratio by company size. It is surprising to find that NPL ratio of loans to

Micro enterprises is the lowest among MSMEs. This would be mainly due to successful micro finance operations by BRI (Bank Rakyat Indonesia or People's Bank of Indonesia).



(Source) Bank Indonesia statistics

Figure 33: NPL ratio by company size

BRI has been the dominant player in MSME financing in Indonesia. BRI is one of the four state-owned commercial banks in Indonesia, and it is now the second largest bank in the country by asset size. BRI, as the state-owned bank, has been specialized in MSME financing historically[44], and now has more than 9,000 outlets[45] all over the country, which is more than 4 times of that of Bank Mandiri[46], the largest bank in Indonesia. As shown in the table below, BRI's loans outstanding to MSMEs are IDR 199 trillion as of the end of 2012[47], 16% increase from the previous year, and MSME loans account for almost 60% of its total loans balance. NPL ratio of BRI's Micro loans is just over 1% as of the year-end of 2012, and this is the lowest among MSME loans. BRI's success in its micro finance is pointed out to be based on its broad network and strong relations with local communities all over the country and the accumulated know-how in monitoring and loan collection. BRI aims to maintain its strong presence in MSME finance in Indonesia through capacity improvement by adding more outlets as well as hiring more loan officers.

44 BRI had been a governmental bank specializing in agricultural financing until early 1980s, but since then, the bank started expanding its micro finance business in rural areas.

45 BRI has 9,052 outlets (Head Offices, Regional Offices, Branches, Sub-Branches, BRI Units, Cash Offices, and TerasBRI) in 2012, based on its Annual Report 2012.

46 Bank Mandiri's network in 2012 is 502 branches, 928 units and 760 kiosks, based on its IR presentation material.

47 BRI's share in MSME loans by commercial banks is estimated to be around 37-38%, using BI's statistics.

Table 38: BRI's performance in MSME finance

	2011	2012
Total Assets	457	535
Total Loans	284	348
Micro	90	107
(KUR Micro)	11	15
(KUR Micro %)	12.4%	14.1%
(number of borrowers, 000)	5,295	5,509
Small	68	76
Medium	14	17
MSME in total	172	199
% of MSME	60.5%	57.1%
NPL (gross)	2.30%	1.78%
Micro	1.19%	1.09%
Small	4.53%	3.75%
Medium	7.11%	5.09%

(Source) BRI's IR presentation

Besides BRI, state-owned banks and private commercial banks are getting more active in MSME financing. Such banks include Bank Mandiri (the state commercial banks with the biggest asset size), Bank Negara Indonesia (4th biggest), Bank Central Asia (3rd), Bank Danamon (6th), Bank Internasional Indonesia (9th), and BTPN.

Strategies and approaches to enhance MSME businesses are somewhat different among banks, but there are common approaches including expanding branch networks, introducing branchless banking, and strengthening linkage with local financial institutions.

BTPN, medium-scale private commercial bank of which the Japanese SMBC (Sumitomo Mitsui Banking Corporation) recently announced to purchase up to 40% ownership, received loans of USD 100 million equivalent in Rupiah from IFC (International Finance Corporation), in order to improve its capacity in MSME financing.

Bank Internasional Indonesia (BII) positions SME businesses as one of the three strategic business areas, and have three initiatives: (1) to create liabilities focused frontline teams to target cash rich industries, (2) to increase cross-selling of products, and (3) to build on existing success in Supply Chain Finance.

There is another kind of rural financial institutions specific in Bali Province, which are called village credit institutions (Lembaga Perkreditan Desa, LPD). LPDs are community based financial institutions for mutual supports, which deal with deposits and micro lending. LPD system was established in Bali Province in 1984, and currently, there are 1,418 LPDs in Bali Province since its commencement in 1984. The average NPL ratio of all LPDs is as low as 5%. It is pointed out that the low NPL ratio is based on the relational background in Bali Province and close human communications.

Another issue of MSME businesses by banks is that most of MSMEs in Indonesia, especially micro enterprises, do not have financial statements and tax reports, and it is difficult for banks to conduct credit appraisal without financial information. Generally speaking, banks consider five Cs (Capacity, Capital, Collateral, Conditions, Character) of a borrower as important factors for their credit appraisals. In case of a MSME borrower who does not have financial statements and collateral, Character tends to be the most important point in their credit decisions.

3.3.2 Credit guarantee system

There are mainly two credit guarantee systems for MSMEs in Indonesia, the existing credit guarantee system and the KUR (Kredit Usaha Rakyat), or the special credit guarantee system.

The existing credit guarantees are provided by state-owned companies, Jamkrindo and Askrindo. The credit guarantees of the KUR, which has started since November 2007 for the purpose of improving financial access of MSMEs and supporting continuous growth of MSMEs, are also provided mainly by Jamkrindo and Askrindo, but the guarantee fees are paid by the government.

This section summarizes the KUR and points out its underlying issues.

(1) Overview of the KUR

Overview of the KUR is as shown as below.

Table 39: Overview of the KUR

Item	Outline
Related Ministries	Coordinating Ministry for Economic Affairs (as the central body responsible for the KUR), Ministry of Finance, Ministry of Agriculture, Ministry of Forestry, Ministry of fishery, Ministry of Industry, Ministry of cooperatives and SME
Executing Banks	State-owned banks(7): Bank Rakyat Indonesia(BRI)、Bank Mandiri、Bank Negara Indonesia(BNI)、Savings Bank Negara、Bukopin、Bank Syariah Mandiri、BNI Syariah Regional Development Banks (26)

<table>
<tr><td>Guarantee coverage ratio</td><td>80%: Agricultural, fishery, forestry sector and micro company
70%: Other sectors</td></tr>
<tr><td>Guarantee corporation</td><td>Stated-owned credit guarantee corporations: Askrindo, Jamkrindo
Local credit guarantee corporations: Jamkrida Jatime, Jamkrida Bali Mandara</td></tr>
<tr><td>Target company</td><td>Target companies are MSMEs, cooperatives, business groups and linkage institutions. Classification of MSMEs is shown as bellow.
<table>
<tr><td></td><td>Micro</td><td>Small</td><td>Medium</td></tr>
<tr><td>Net Assets</td><td>Less than 50 million IDR</td><td>50million IDR to less than 500 million IDR</td><td>500 million IDR to less than 10 billion IDR</td></tr>
<tr><td>Annual Sales</td><td>Less than 300 million IDR</td><td>3 million IDR to less than 2.5 billion IDR</td><td>2.5 billion IDR to less than 50 billion IDR</td></tr>
</table>
Basically, Target MSMEs are “Feasible”, but “Not bankable”. “Feasible” means that track records are stable. “Not Bankable” means that companies cannot get finance due to lack of collateral.</td></tr>
<tr><td>Guarantee fee</td><td>3.25% (Guarantee fee was 1.5% before 2010) is paid by the Government to CGCs every year.
Guarantee fee is decided such as below.
- Working Capital: Loan amount multiplied by 3.25%
- Capital investment: Outstanding multiplied by 3.25%</td></tr>
<tr><td>Guarantee contract</td><td>Conditional automatic coverage by comprehensive guarantee contract: Credit appraisal is executed by only banks (CGCs only check the format) and then guarantee is approved automatically by the CGCs
In case of existing (non-KUR) guarantee: Credit appraisals are executed by both banks and CGCs.</td></tr>
<tr><td>Purpose</td><td>Working capital, capital investment</td></tr>
<tr><td>Maturity</td><td>Working capital: 3 years, capital investment: 5 years. However, depending on needs of borrowers, loan maturity can be extended shown as below.
Working capital: 6 years, capital investment: 10 years
Loan maturity for plantation companies is maximum 10 years and extension is impossible.</td></tr>
<tr><td>Loan ceiling</td><td>KUR Micro: Less than IDR 20 million (Less than IDR 5 million before 2010)
KUR Retail: from IDR 20 million to less than IDR 50 billion</td></tr>
<tr><td>Interest ceiling</td><td>KUR Micro: 22% (24% before 2010)
KUR Retail: 13% (14% before 2011)</td></tr>
<tr><td>Collateral</td><td>Although banks are prohibited to require collaterals on KUR Micro, some banks require collaterals from companies in reality. However, these conducts are warned</td></tr>
</table>

	by the Bank Indonesia.
Subrogation	Banks can apply subrogation under conditions shown as below. ✓ In the case that a debtor does not implement the obligation of payment ✓ In the case that claim is classified in forth stage, in which delinquent days are more than 120 days to 180 days. ✓ In the case that a debtor is declared bankrupt.
Debt collection	By CGCs and/or financial institutions (an executor of debt collection is not clearly regulated by law). However, banks mainly collect non performing loans (NPL) due to the lack of capacities of CGCs.

(Source) Prepared by the study team using materials provided by EKUIN

(2) The mechanism of KUR

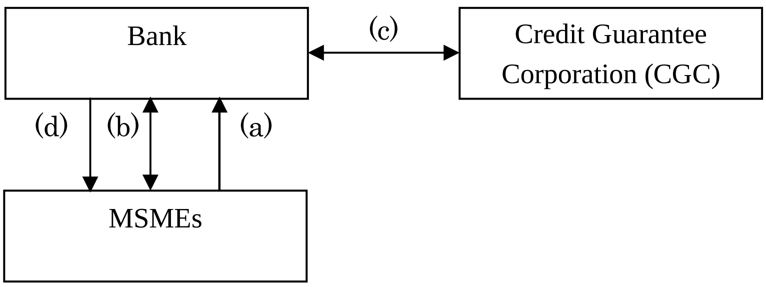
Under the KUR mechanism, basically a bank provides a loan directly to a MSME, and the loan is backed by a guarantee. This is called as a “Direct Method”.

Another method is called as an “Indirect Method”. In this case, a bank provides a loan to a linkage institution first, and then the linkage institution provides a loan to a MSME.

This section explains the mechanisms of the KUR.

1) Direct Method: Direct loan from a financial institution to a MSME

The mechanism of the direct method is depicted as follows;



In case of direct method, loans and gurantees are provided in the following sequences;

(a) A MSME applies loan to a bank.

(b) After the credit appraisal by the bank, the MSME signs a credit agreement of KUR with the bank.

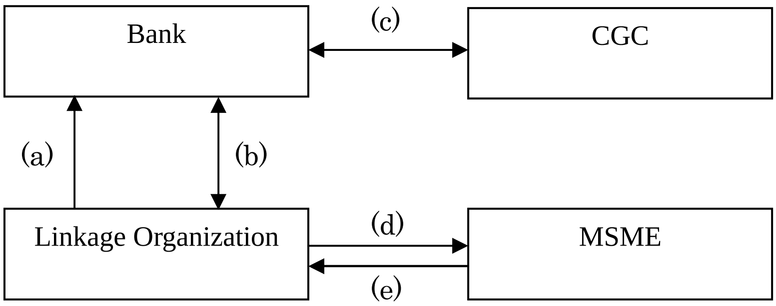
(c) After checking credit guarantee application form, a CGC issues a guarantee certification to the bank.

(d) The bank disburses a loan.

2) Indirect method

In case of the indirect method, linkage organization, which receives loans from a bank, is involved in the loan process. Depending on the types of the involvement of the linkage organizations, the indirect method is divided into (i) executing and (ii) channeling.

(i) Linkage Program (Executing)

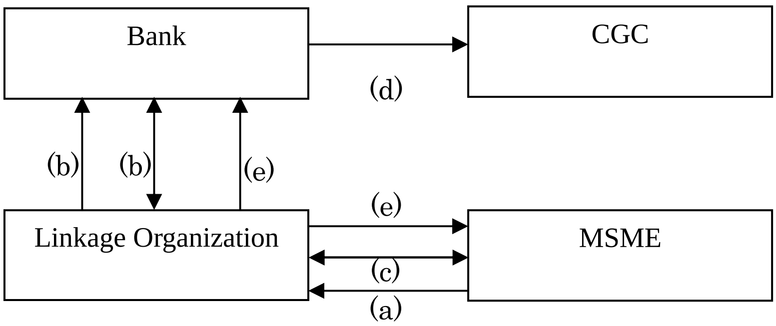


(a) A linkage organization asks for credit to a bank.
(b) The bank checks financial situation of a MSME through DIS. If the MSME is bankable, the bank exchanges the MOU with the linkage organization.
(c) The bank asks for guarantee to a CGC and the CGC issues the guarantee certificate in the name of the linkage organization.
(d) The linkage organization provides loan to the MSME.
(e) The MSME repays to the linkage organization.

Maximum loan amount is IDR 2 billion per a linkage organization and maximum interest rate is 13% on providing money from the bank to the linkage organization. Maximum loan amount is IDR 100 million and maximum interest rate is 22 % on providing money from the linkage organization to the MSME.

The linkage organization bears obligation of repayment to the bank. On the other hand, the linkage organization has the right to obtain interest income from the MSME. In other words, the bank does not take credit risk of the MSME and the linkage organization does.

(ii) Linkage program (Channeling)



(a) The MSME trusts to the linkage organization to ask credit to bank.

(b) The linkage organization represents the MSME and then asks for credit to the bank.

(c) The bank makes credit appraisal through DIS and then the linkage organization signs credit agreement with the MSME and the bank.

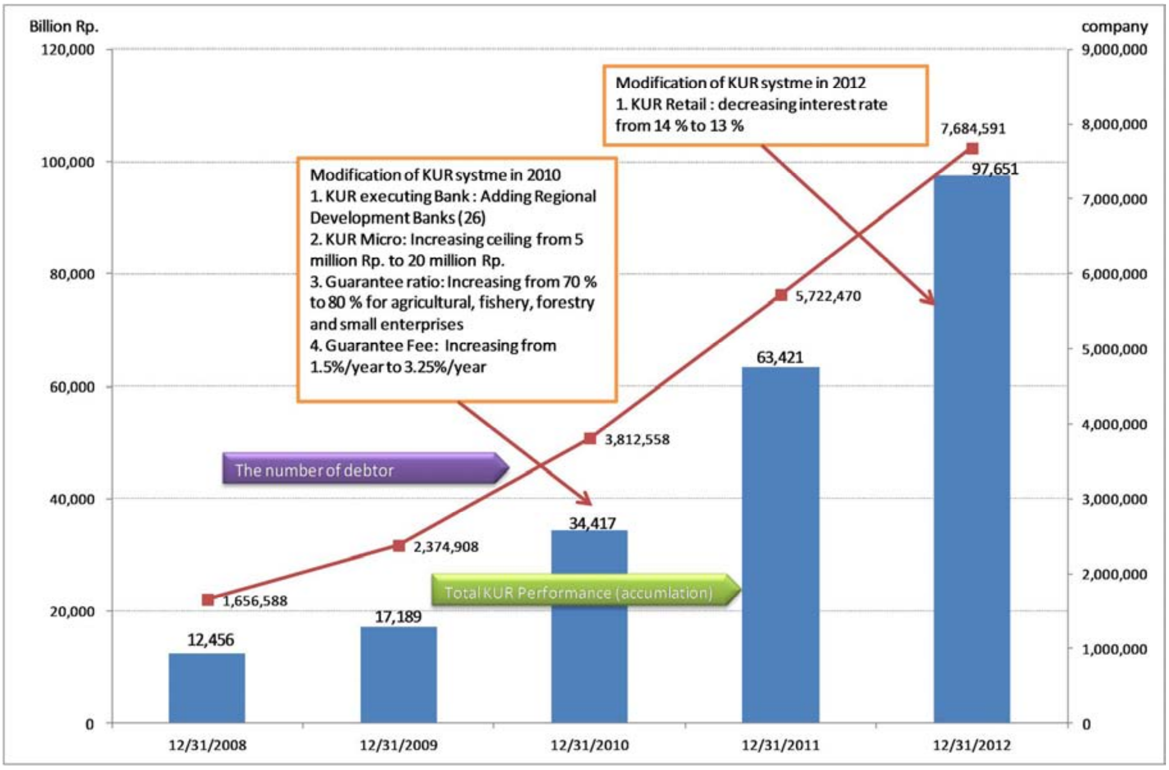
(d) The bank asks a CGC for a credit guarantee for the name of MSME.

(e) The linkage organization provides funds to the MSME. The MSME repays to the bank through the linkage organization.

Additionally, the bank bears credit risk and obtains interest income but the bank has to pay fees to the linkage organization.

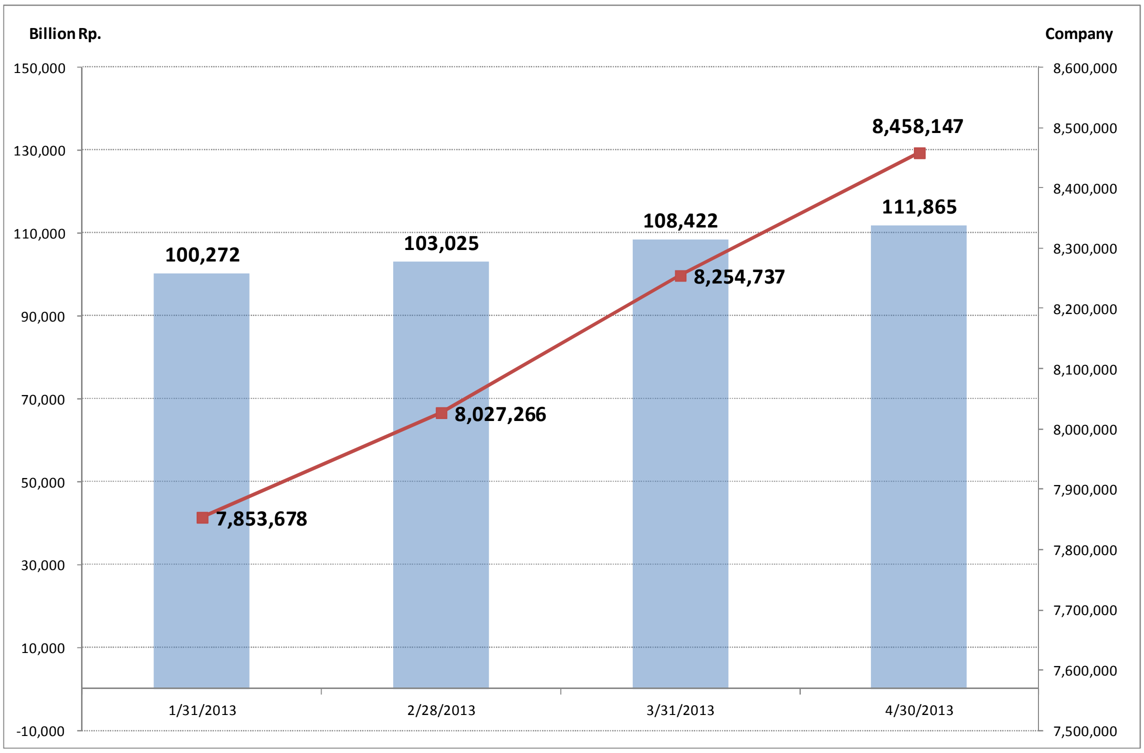
(3) Credit guarantee issued in the KUR

The credit guarantee issued in the KUR is shown as the figures below.



(Source) Prepared by the study team using materials provided by EKUIN

Figure 34: The credit guarantee issued in the KUR (Year 2008 to 2012)



(Source) Prepared by the study team using materials provided by EKUIN

Figure 35: The credit guarantee issued in the KUR (January 2013 to April 2013)

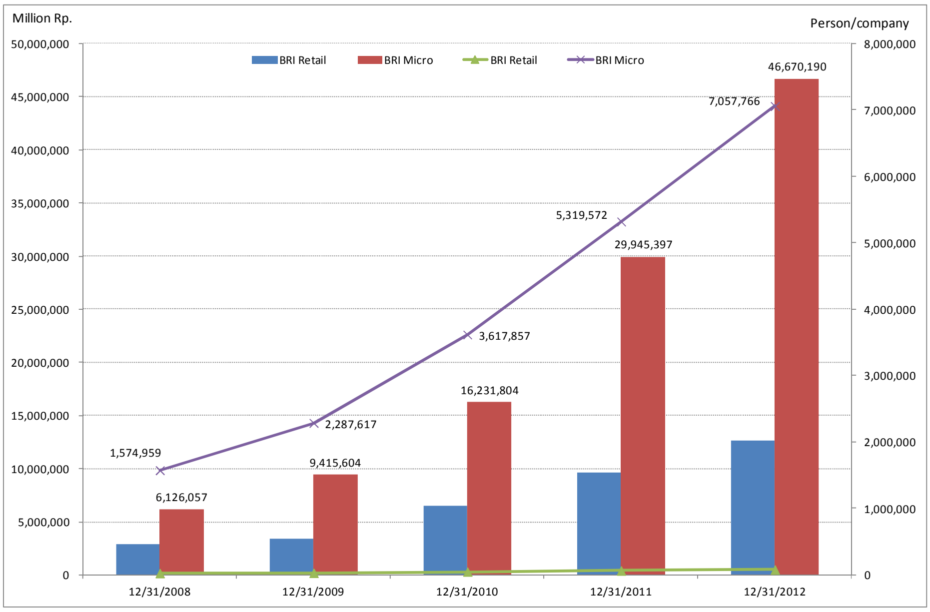
Figure 34, shows the trend of credit guarantees issued in the KUR. The credit guarantees issued in the KUR have steadily increased since its start in 2007. The amount of credit guarantee issued, which was IDR 12.5 trillion in 2008, reached to IDR 97.7 trillion in 2012. The number of the borrowers who received credit guarantees also increased from 1.7 million to 7.7 million during the same period. The same trend is continuing in 2013 as shown in Figure 35.

As depicted in Figure 34, the credit guarantee issued in the KUR expanded rapidly from 2010 to 2012. The rapid expansion of the KUR during this period was resulted from the modification of the KUR system, such as increase of executing banks and ease of usage conditions. Modifications made in the KUR are shown in the following table.

Table 40: Modifications in KUR system

	Before	After
Executing banks	State-owned banks	State-owned banks and regional development banks (26)
Ceiling (KUR Micro)	Less than IDR 5 million	Less than IDR 20 million
Increase of guarantee ratio	70%	80%: Agriculture, fishery and small company (for other sectors, guarantee ratio remains at 70%)
Increase of guarantee fee	1.5%	3.25%
Maximum interest rate (KUR Retail)	14%	13%

It is difficult to conduct accurate analysis of performance of KUR Micro and KUR Retail, because data for both programs are not separately publicized. On the other hand, based on the data of BRI which is the market leader of KUR and collects data separately for KUR Micro and KUR Retail, the amount and the number of the borrowers under the KUR have increased to a large extent. Therefore it is possible to say that these modifications after 2010 contributed to the expansions of the credit guarantees in the KUR and expansion of loans to MSMEs.



(Source) Prepared by the study team using materials provided by EKUIN

Figure 36: The credit guarantees in the KUR by BRI (by KUR Micro / KUR Retail)

<u>KUR credit guarantees by banks</u>

Looking at KUR credit guarantees issued by banks, the share of BRI is extremely high. The credit guarantee issued by BRI accounts for 60% of the total amount (BRI Retail 12.5%, BRI Micro 48.1%) as of April 2013. The share of BRI decreased largely from 72.5% as of the end of December 2008 (BRI Retail 23.3%, BRI Micro 49.2%) to the current level. It is inferred that this decrease is due to the increase in the share of 26 regional development banks.

The credit guarantee issued by BRI currently accounts for 92% of the total number of borrowers. Similarly with the KUR amount, the share of BRI in the number of borrowers has gradually decreased. However, it is possible to say that the performance of KUR highly depends on BRI.

Table 41: KUR credit guarantee shares by banks (amount)

	2008/12/31	2009/12/31	2010/12/31	2011/12/31	2011/11/30	2012/12/31	2013/1/31	2013/2/28	2013/3/31	2013/4/30
BNI	9.3%	8.9%	9.2%	10.3%	10.2%	10.9%	10.9%	10.8%	12.3%	12.1%
BRI Retail	23.3%	19.9%	18.9%	15.1%	13.1%	12.9%	12.8%	12.8%	12.5%	12.5%
BRI Micro	49.2%	54.8%	47.2%	47.2%	48.2%	47.8%	48.1%	48.5%	47.7%	48.1%
Mandiri	9.2%	8.8%	10.5%	11.0%	11.1%	11.1%	10.8%	10.7%	10.3%	10.3%
BTN	1.3%	1.5%	2.8%	3.0%	3.4%	3.4%	3.3%	3.3%	3.3%	3.2%
Bukopin	5.0%	3.9%	2.7%	1.7%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
BSM	2.6%	2.2%	2.4%	2.4%	2.8%	2.8%	2.8%	2.7%	2.8%	2.8%
BNI S	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
BPD	0.0%	0.0%	6.4%	9.3%	9.7%	9.5%	9.6%	9.5%	9.4%	9.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(Source) Prepared by the study team using materials provided by EKUIN

Table 42: KUR Credit guarantee shares by banks (number of borrowers)

	2008/12/31	2009/12/31	2010/12/31	2011/12/31	2011/11/30	2012/12/31	2013/1/31	2013/2/28	2013/3/31	2013/4/30
BNI	0.5%	0.5%	0.7%	1.3%	1.7%	2.0%	2.1%	2.0%	2.5%	2.5%
BRI Retail	1.6%	1.2%	1.3%	1.1%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
BRI Micro	95.1%	96.3%	94.9%	93.0%	92.1%	91.8%	91.8%	91.9%	91.3%	91.4%
Mandiri	2.2%	1.5%	1.9%	2.6%	2.8%	2.7%	2.7%	2.7%	2.7%	2.7%
BTN	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Bukopin	0.2%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
BSM	0.3%	0.2%	0.2%	0.3%	0.4%	0.5%	0.5%	0.5%	0.5%	0.5%
BNI S	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BPD	0.0%	0.0%	0.7%	1.3%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(Source) Prepared by the study team using materials provided by EKUIN

KUR credit guarantee by industry

Trade, hotel and restaurant sector (hereinafter, "trade sector") accounts for 57% of the KUR credit guarantee, which is followed by the agriculture and fishery sector (17%). Therefore, it is possible to say that KUR has not fully contributed to the expansion of finance in the agriculture and fishery sector which is considered as the priority sector by the Indonesia government. As for the manufacturing sector, its share has remained at low level, being at around 2%..

Table 43: Performance of the KUR by industry (accumulated amount base)

	2009/12/31	2010/12/31	2011/12/31	2012/12/31	2013/1/31	2013/2/28	2013/3/31	2013/4/30
Agriculture	15.3%	17.1%	15.9%	16.3%	16.2%	16.2%	16.1%	16.2%
Fishery			1.1%	0.7%	0.7%	0.7%	0.7%	0.7%
Mining	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Processing industry	2.3%	2.3%	2.5%	2.7%	2.6%	2.7%	2.7%	2.7%
Electricity, gas and water	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Construction	1.7%	2.1%	1.9%	1.8%	1.7%	1.7%	1.7%	1.6%
Trade	70.3%	63.7%	60.5%	57.3%	56.6%	56.6%	56.6%	56.6%
Hotel, Restarunt			0.5%	0.6%	0.6%	0.6%	0.7%	0.7%
Transportation	0.6%	0.9%	1.0%	1.2%	1.2%	1.3%	1.4%	1.4%
Financial intermediaries	2.3%	4.5%	0.9%	0.8%	0.8%	0.7%	0.8%	0.8%
rental business			2.9%	3.5%	3.5%	3.6%	3.9%	4.0%
Adm. Government			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Education services			0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Health services			0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Social service	0.6%	1.9%	2.0%	2.4%	2.4%	2.4%	2.5%	2.5%
Individual services			0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
International agencies			0.0%	0.0%	0.0%	0.0%	0.0%	11.7%
Others	7.0%	7.6%	10.4%	12.2%	13.1%	13.0%	12.7%	0.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(Source) Prepared by the study team using materials provided by EKUIN

Table 44: KUR credit guarantee for agriculture and fishery sector by banks (amount)

(Unit：Milion Rp.）

	2009/12/31	2010/12/31	2011/12/31	2012/12/31
Agriculture	2,631,876	5,879,187	10,067,759	15,953,484
Fishery			725,638	708,235
Agriculture + Fishery	2,631,876	5,879,187	10,793,397	16,661,719
BRI Micro	800,553	1,841,599	3,688,088	6,270,349
BRI Retail	32,202	501,930	729,121	941,112
BNI	333,811	943,084	2,097,464	3,203,343
Mandiri	940,015	1,815,266	2,581,929	3,504,006
Trade	12,089,866	21,908,942	38,376,623	55,978,368
Accommodation			317,923	597,687
Trade + Addomocation	12,089,866	21,908,942	38,694,546	56,576,055
BRI Micro	7,862,744	13,059,955	21,065,111	29,828,922
BRI Retail	2,338,479	3,850,395	5,782,492	7,359,894
BNI	1,013,507	1,534,006	3,463,813	5,660,610
Mandiri	448,562	1,404,935	3,543,823	5,890,296

	2009/12/31	2010/12/31	2011/12/31	2012/12/31
Agriculture				
Fishery				
Agriculture + Fishery	100.0%	100.0%	100.0%	100.0%
BRI Micro	30.4%	31.3%	34.2%	37.6%
BRI Retail	1.2%	8.5%	6.8%	5.6%
BNI	12.7%	16.0%	19.4%	19.2%
Mandiri	35.7%	30.9%	23.9%	21.0%
Trade				
Provision of accommodation				
Trade + Addomocation	100.0%	100.0%	100.0%	100.0%
BRI Micro	65.0%	59.6%	54.4%	52.7%
BRI Retail	19.3%	17.6%	14.9%	13.0%
BNI	8.4%	7.0%	9.0%	10.0%
Mandiri	3.7%	6.4%	9.2%	10.4%

Table 45: KUR credit guarantee for agriculture and fishery sector by banks (borrowes base)

	2009/12/31	2010/12/31	2011/12/31	2012/12/31
Agriculture	238,365	484,773	766,244	1,086,346
Fishery			6,029	6,644
Agriculture + Fishery	238,365	484,773	772,273	1,092,990
BRI Micro	196,398	416,228	672,863	964,379
BRI Retail	2,436	3,490	4,595	5,461
BNI	2,646	8,308	12,380	19,514
Mandiri	34,664	49,374	65,322	75,692
Trade	1,939,755	2,997,280	4,123,892	5,179,188
Accommodation			15,221	24,525
Trade + Addomocation	1,939,755	2,997,280	4,139,113	5,203,713
BRI Micro	1,908,349	2,911,578	3,904,888	4,809,341
BRI Retail	20,465	28,992	38,278	43,973
BNI	7,537	13,513	56,061	121,254
Mandiri	1,642	22,135	77,898	123,471

	2009/12/31	2010/12/31	2011/12/31	2012/12/31
Agriculture				
Fishery				
Agriculture + Fishery	100.0%	100.0%	100.0%	100.0%
BRI Micro	82.4%	85.9%	87.1%	88.2%
BRI Retail	1.0%	0.7%	0.6%	0.5%
BNI	1.1%	1.7%	1.6%	1.8%
Mandiri	14.5%	10.2%	8.5%	6.9%
Trade				
Provision of accommodation				
Trade + Addomocation	100.0%	100.0%	100.0%	100.0%
BRI Micro	98.4%	97.1%	94.3%	92.4%
BRI Retail	1.1%	1.0%	0.9%	0.8%
BNI	0.4%	0.5%	1.4%	2.3%
Mandiri	0.1%	0.7%	1.9%	2.4%

(Source) Prepared by the study team using materials provided by EKUIN

As for KUR for the agricultural sector, the share of BRI is the largest in amount, having around 43% share most recently. This is followed by BNI and Bank Mandiri, which accounts for around 20% respectively. This indicates that these two banks also have certain presence in this sector.

BRI is the market leader even for the trade sector. Looking at the data of BRI, the share of BRI in the trade sector (66%) is higher than the share in the agriculture sector (43%). These data implicates that BRI is more aggressive to provide KUR loans in the trade sector than in the agriculture sector.

The utilization ratio (penetration ratio)

The utilization ratio of the KUR, which shows the percentage of the KUR users to the total

MSMEs in the country, is 15.3%. Looking at utilization ratios by industry, MSMEs in the trade sector are the largest user in Indonesia. 35% of MSMEs in the trade sector utilize KUR, while only 4.4% of those in the agriculture sector utilize KUR. The utilization ratio of the manufacturing sector is 4.1% and remains as low as the agriculture sector.

The penetration ratio of the KUR, which shows the percentage of the KUR credit guarantee amounts to the total outstanding loan balance, is 8.03%. Looking at the data by industry, the penetration ratio in amount in the agriculture sector has reached 17.4% and this ratio is the highest in all sectors. Therefore, it can be said that KUR has contributed to the improvement of access to finance of farmers to some extent.

Table 46: The utilization and penetration ratio of KUR

Sector	The number of company			Loan outstanding (billion Rp)			KUR
	①Total	②KUR	②／①	①SME	②KUR	②／①	Outstanding/company
Agriculture, Fishery	26,685,711	1,183,619	4.4%	46,951	8,164	17.4%	6.9
Mining	276,861	1,803	0.7%	4,966	49	1.0%	27.2
Processing industry	3,423,078	139,568	4.1%	57,836	1,446	2.5%	10.4
Electricity, gas and water	12,853	1,115	8.7%	1,644	30	1.8%	26.9
Construction	570,639	8,938	1.6%	32,116	724	2.3%	81.0
Trade, Hotel, Restaurant	15,910,965	5,549,372	34.9%	271,546	23,768	8.8%	4.3
Transportation	3,487,691	30,231	0.9%	21,337	963	4.5%	31.9
Total	53,823,734	8,254,733	15.3%	529,452	42,494	8.0%	5.1

* The total company number in Indonesia : as of 2010
* the user number of KUR: as of March 2013

(Source) Prepared by the study team using materials from EKUIN, the Bank Indonesia, Ministry of cooperative and SMEs and USAID

The penetration ratio of the credit guarantee system in Japan is much higher than that of Indonesia. Utilization ratio (number of borrowers) in Japan is 36.8% and penetration ratio (amount) is 14.0% in 2011. One of the main reasons for this is that that Japan has over 70 years' history in the credit guarantee system since the first credit guarantee corporation was established in 1930s, while KUR in Indonesia has just started since 2007. Nevertheless, KUR has already been widely utilized and penetrated in Indonesia to some extent. One of possible reasons why KUR has expanded rapidly would be that guarantee fee is borne not by the borrower but by the Indonesia Government.

<u>The KUR performance by location</u>

Looking at the spread of KUR by location, Java accounts for 60% of total borrowers and 50% in the accumulated amount base. Then, it is possible to say that KUR is not necessarily concentrated in Java, because the population in Java accounts for 60 % of the total population in Indonesia.

As for the ratio of KUR credit guarantee outstanding balance to the total MSME loan balance, the average ratio in the country is 7.7%. The KUR seems to have widely spread in Indonesia, as the ratio of 26 provinces out of 33 provinces is larger than 7.7%. Particularly in some rural areas except Java, the proportion of KUR loans in total MSMEs loans is high although the amount of MSMEs loan is small. For example, MSMEs loan in central Karimantan only accounts for 0.8% of total MSMEs loan in Indonesia, but the ratio of KUR guarantees to the MSME loan balance in central Karimantan reaches 19%. This indicates that the KUR plays important role in access to finance in some rural areas.

Table 47: The spread of KUR by location

Location		Population('000) (2010)		KUR						MSMEs Loan (Billion Rp.)		KUR Outstanding/MSME
				Debtor (Company)		Accumulation (Billion Rp)		Outstanding(Billion Rp)				
JAWA TIMUR	東ジャワ州	37,476	15.8%	1,328,439	17.3%	14,775	15.1%	5,946	14.6%	65,980	12.5%	9.0%
JAWA TENGAH	中部ジャワ州	32,382	13.6%	1,784,123	23.2%	14,805	15.2%	5,307	13.0%	51,576	9.8%	10.3%
JAWA BARAT	西ジャワ州	43,053	18.1%	1,090,436	14.2%	12,447	12.7%	4,811	11.8%	67,636	12.8%	7.1%
DKI JAKARTA	ジャカルタ州	9,607	4.0%	182,436	2.4%	4,647	4.8%	2,265	5.6%	93,051	17.7%	2.4%
BANTEN	バンテン州	10,632	4.5%	117,793	1.5%	2,035	2.1%	797	2.0%	18,863	3.6%	4.2%
D.I. YOGYAKARTA	ジョグジャカルタ州	3,457	1.5%	198,338	2.6%	1,835	1.9%	768	1.9%	6,549	1.2%	11.7%
Java Subtotal		136,607	57.5%	4,701,565	61.2%	50,544	51.8%	19,895	48.9%	303,655	57.7%	6.6%
SULAWESI SELATAN	南スラウェシ州	8,034	3.4%	428,429	5.6%	5,552	5.7%	2,286	5.6%	19,460	3.7%	11.7%
SUMATERA UTARA	北スマトラ州	12,982	5.5%	317,365	4.1%	5,029	5.2%	2,189	5.4%	31,470	6.0%	7.0%
RIAU	リアウ州	5,538	2.3%	127,970	1.7%	3,083	3.2%	1,678	4.1%	16,096	3.1%	10.4%
SUMATERA BARAT	西スマトラ州	4,846	2.0%	177,016	2.3%	2,964	3.0%	1,372	3.4%	10,663	2.0%	12.9%
SUMATERA SELATAN	南スマトラ州	7,450	3.1%	140,552	1.8%	3,067	3.1%	1,315	3.2%	14,807	2.8%	8.9%
KALIMANTAN TIMUR	東カリマンタン州	3,553	1.5%	132,801	1.7%	2,621	2.7%	1,222	3.0%	17,295	3.3%	7.1%
KALIMANTAN SELATAN	南カリマンタン州	3,626	1.5%	143,839	1.9%	2,351	2.4%	1,136	2.8%	8,086	1.5%	14.1%
KALIMANTAN BARAT	西カリマンタン州	4,395	1.8%	90,932	1.2%	2,346	2.4%	1,052	2.6%	8,350	1.6%	12.6%
BALI	バリ州	3,890	1.6%	182,752	2.4%	2,182	2.2%	962	2.4%	16,356	3.1%	5.9%
LAMPUNG	ランプン州	7,608	3.2%	178,057	2.3%	2,075	2.1%	919	2.3%	10,276	2.0%	8.9%
JAMBI	ジャンビ州	3,092	1.3%	111,177	1.4%	1,824	1.9%	900	2.2%	7,809	1.5%	11.5%
KALIMANTAN TENGAH	中部カリマンタン州	2,212	0.9%	73,133	1.0%	1,570	1.6%	830	2.0%	4,433	0.8%	18.7%
NANGGROE ACEH DARUSSALAM	アチェ州	4,494	1.9%	132,261	1.7%	1,760	1.8%	530	1.3%	6,395	1.2%	8.3%
SULAWESI TENGAH	中部スラウェシ州	2,635	1.1%	97,728	1.3%	1,167	1.2%	508	1.2%	5,559	1.1%	9.1%
NTB	西ヌサ・テンガラ州	4,500	1.9%	115,579	1.5%	1,185	1.2%	474	1.2%	5,175	1.0%	9.2%
SULAWESI UTARA	北スラウェシ州	2,270	1.0%	73,818	1.0%	1,024	1.0%	458	1.1%	5,861	1.1%	7.8%
PAPUA	パプア州	2,833	1.2%	46,379	0.6%	943	1.0%	436	1.1%	5,477	1.0%	8.0%
SULAWESI TENGGARA	東南スラウェシ州	2,232	0.9%	71,299	0.9%	848	0.9%	381	0.9%	3,715	0.7%	10.3%
NTT	東ヌサ・テンガラ州	4,683	2.0%	78,769	1.0%	1,030	1.1%	374	0.9%	3,297	0.6%	11.3%
KEPULAUAN RIAU	リアウ諸島	1,679	0.7%	24,513	0.3%	697	0.7%	295	0.7%	5,514	1.0%	5.4%
MALUKU	マルク州	1,533	0.6%	38,850	0.5%	774	0.8%	287	0.7%	1,808	0.3%	15.9%
BENGKULU	ブンクル州	1,715	0.7%	55,293	0.7%	695	0.7%	284	0.7%	3,598	0.7%	7.9%
IRIAN JAYA BARAT	西イリアンジャヤ州	760	0.3%	16,806	0.2%	547	0.6%	247	0.6%	2,523	0.5%	9.8%
SULAWESI BARAT	西スラウェシ州	1,158	0.5%	39,681	0.5%	539	0.6%	223	0.5%	1,567	0.3%	14.2%
GORONTALO	ゴロンタロ州	1,040	0.4%	50,872	0.7%	519	0.5%	154	0.4%	1,820	0.3%	8.5%
MALUKU UTARA	北マルク州	1,038	0.4%	19,072	0.2%	401	0.4%	149	0.4%	1,327	0.3%	11.3%
BANGKA BELITUNG	バンカ・ブリトゥン州	1,223	0.5%	18,083	0.2%	296	0.3%	128	0.3%	2,604	0.5%	4.9%
TOTAL		**237,641**	**100.0%**	**7,684,591**	**100.0%**	**97,633**	**100.0%**	**40,686**	**100.0%**	**526,397**	**100.0%**	**7.7%**

(Source) Prepared by the study team using materials EKUIN, the Bank Indonesia and Statistic office of Indonesia

Nonperforming loan

As shown in the table below, non performing loans in the KUR program have increased gradually. NPL ratio increased from 2.5% as of 2010 to 3.6% as of 2012, and finally reached to 4.4% as of March 2013. However, the statistic of the Bank Indonesia does not show similar increase in the NPL ratio in MSMEs loans. NPL ratio of MSME loans, which is 3.6% as of

March 2013, has remained at the same level during the same period. Judging from different tendency in both ratios, it is possible to say that moral hazard by both banks and borrowers is occurring in the KUR.

Table 48: Non performing ratio by bank

(Unit: %)

	Dec-09	Dec-10	Dec-11	Dec-12	Jan-13	Feb-13	Mar-13
BNI	3.7	1.5	1.4	7.3	8.1	8.0	10.3
BPD	-	-	2.9	6.3	7.2	7.1	7.3
BTN	2.8	3.9	3.2	5.8	7.1	6.9	6.7
BSM	4.7	4.2	3.5	4.9	5.0	5.0	6.2
Bukopin	8.7	8.3	9.5	6.3	5.9	5.4	4.8
BRI Retail	-	3.3	2.4	3.1	3.4	3.5	3.5
Mandiri	1.7	0.7	1.0	2.0	2.7	3.0	2.8
BRI Micro	6.0	2.3	1.8	1.7	2.0	2.0	2.0
Total(All SME loan)			3.4	3.2	3.6	3.7	3.6
Total(KUR)	-	2.5	2.1	3.6	4.1	4.2	4.4

	2011/12/31	2012/12/31	2013/1/31	2013/2/28	2013/3/31
Bank Jatime	4.2	11.2	13.5	14.5	14.8
Bank Sulut	-	10.5	10.5	10.5	10.5
Bank Jabar Banten	2.7	6.6	8.1	8.1	8.2
BPD DIY	3.9	3.6	3.9	4.5	5.9
Bank DKI	1.1	5.1	5.1	4.2	4.2

(Source) Prepared by the study team using materials provided by EKUIN

NPL ratio of BRI, the market leader of the KUR, is the lowest level, while NPL ratios of BNI, BTN, BSM and BPDs are quite high and have increased rapidly.

In particular, the NPL ratio of BNI has reached over 10%. As shown in the table below, the NPL ratio of KUR in BNI had been lower than the bank's total NPL ratio until the end of 2011. However, the NPL ratio of KUR has jumped in 2012 and reached over 10% most recently.

Table 49: The NPL trend in BNI

	December 2009	December 2010	December 2011	December 2012
Total	3.3%	2.6%	2.2%	1.9%
KUR	3.7%	1.5%	1.4%	8.1%

(Source) Prepared by the study team using materials provide by EKUIN and AR of BNI

As for the BPDs, the NPL ratio of BPDs has reached 7.3% as of April 2013. In particular, the NPL ratios of BPD Jatim, Bank Jabar Bantern and BPD Sulut are extremely high as shown below.

Table 50: The trend of NPL ratio in BPDs

	2011/12/31	2012/11/30	2012/12/31	2013/1/31	2013/2/28	2013/3/31	2013/4/30
Bank Jabar Banten	2.7	10.0	6.6	8.1	8.1	8.2	8.2
BPD DIY	3.9	3.8	3.6	3.9	4.5	5.9	5.1
Bank Jatime	4.2	9.7	11.2	13.5	14.5	14.8	15.0
Bank DKI	1.1	5.1	5.1	5.1	4.2	4.2	4.3
Bank Sulut	-	10.5	10.5	10.5	10.5	10.5	10.5

(Source) Prepared by the study team using materials provide by EKUIN and AR of BNI

The target of NPL ratio set by the Bank Indonesia is 5.0%. However, taking the recent trends into consideration, controlling NPL ratio below 5% could be very difficult unless some countermeasures are introduced.

There is possibility that rapid increase in the NPL is due to the moral hazards at banks, which would have been also caused by targets on the KUR credit guarantee amounts set on banks by the government. Although banks have tried to increase the loans to MSMEs using KUR, it is not always easy for banks to provide loans to MSMEs, most of which do not make financial statements.

On the other hand, it is also pointed out that the moral hazard issues of borrowers are more serious than that by banks. MSMEs in Indonesia tend to regard the KUR loan as grant provided under the governmental program.

(4) Credit Guarantee Corporation (CGC)

CGCs are fundamental organizations for the credit guarantee system. CGCs in Indonesia are classified into two types, namely national credit guarantee corporations and local credit guarantee corporations

1) National Credit Guarantee Corporations

National Credit Guarantee Corporations (National CGCs) are state-owned corporations. There are two National CGCs, Jamkrindo and Askrindo, in Indonesia.

Jamkrindo : PERUM Jamnian Kridit Indonesia

Jamkrindo is the credit guarantee corporation established in 1981. Total capital is IDR 5 trillion and the number of staff is around 500. Jamkrindo has several guarantee products except the KUR, and maximum guarantee ratio is 75% and credit guarantee fee is 1.5% in non-KUR programs.

The KUR credit guarantee issued by Jamkrindo has grown stably. Total number of borrowers is 346 million that accounts for 41% in the total KUR as of April 2013.

Table 51 : KUR credit guarantee issued by Jamkrindo

	2008	2009	2010	2011	2012	April 2013
Guarantee Volume (trillion)	2.5	1.4	6.7	20.2	22.8	The number of accumulated borrowers
The number of borrowers (thousand)	184	174	686	1,119	1,148	3,460

(Source) Prepared by the study team using materials provided by Jamkrindo

Non Performing Guarantee (NPG) ratio of KUR loan by Jamkrindo is 2.67% as of January 2013, while the net guarantee income ratio on KUR is 2.275%*. This indicates that it might be difficult to cover costs of the KUR by the net guarantee income. With income from fund management, mainly by term deposit interests, Jamkrido is making profits from KUR operations.

* 3.25% (Guarantee fee ratio) x 70% (Guarantee coverage) = 2.275%

Askrindo: PT. Asuransi Kredit Indonesia

Askrindo is a state-owned insurance company established in 1971. Main products are surety bond, and trade insurance. The KUR is the only credit guarantee product provided by Askrindo. Askrindo has been executing the KUR program since 2007.

Table 52: Performance of the KUR by Askrindo

	2008	2009	2010	2011	2012	May 2013
Guarantee Volume (trillion)	8.5	4.1	3.2	6.7	12.1	The number of Accumulated borrower
Borrower (thousand)	1,147	703	444	623	799	4,230

(Source) Prepared by the study team using materials provided by Askrindo

NPG ratio in the KUR is 2.3% as of the end of 2012, which is lower than that of Jamkrindo. Taking into consideration net guarantee income ratio (2.275%), the profitability of the KUR at Askrindo is considered to be almost break-even.

2) Local credit guarantee corporations

There are several local credit guarantee corporations (Local CGCs) already established (or under preparation) in some of the 26 provinces. Examples of such local CGCs are Jamkrida Jatim and Jamkrida Bali Mandara. The shareholders of such local CGCs are mainly provincial governments and municipal governments.

Jamkrida Jatim
Jamkrida Jatim was established in January 2010 as the first local CGC. The purpose of Jamkrida Jatim is to execute credit guarantee operation for micro and small enterprises. The number of staff is currently around 10, paid up capital is IDR 150 billion (local government made a 90% of investment), and the accumulated guarantee amount is IDR 800 billion. The KUR loans guaranteed by Jamkrinda Jatim are IDR 25 billion for 277 borrowers in total. Jamkrida Jatim mainly guarantees MSMEs loans provided by the Bank Jatim and BPRs in East Java. As for the KUR program, Jamkrida Jatim only provides guarantees to loans by Bank Jatim.

Jamkrida Bali Mandara
Jamkrida Bali was established in February 2010. Paid up capital is IDR 53 billion, contributed by province and cities. Credit guarantee operation of Jamkrida Bali (accumulated) is still very small. - Accumulated guarantee amount : IDR 671 billion (out of which, KUR: IDR 1.5 billion) - The number of borrowers: 5,963 (out of which, KUR: 16) as of 2013 Jamkrida Bali Mandara mainly guarantees MSMEs loans by BPD Bali and BPRs in Bali.

There is no regulation about division of roles between national CGCs and local CGCs. Credit officers of banks choose CGCs depending on personal relationships or other reasons.

There is a large difference on underwriting capability between national CGCs and local CGCs. As maximum guarantee amount to capital is regulated to be within 10 times (gearing ratio must be within 10 times), national CGCs, which are financially supported by the central government, can provide more guarantees than local CGCs.

In addition, the risk weight of loan guarantee by local CGCs is set at 80%, while that of national CGCs is set much lower at 20%. Therefore, there are advantages in terms of capital adequacy measure for banks to use national CGCs rather than local CGCs

Therefore, banks tend to use the credit guarantees by the national CGCs rather than the local CGCs.

3.3.3 Basic financial infrastructure

(1) Information System operated by the Bank Indonesia

Debtor Information System (DIS), which is managed by the Bank Indonesia, is the most widely accepted credit database by the financial sector in Indonesia. DIS stores loan data submitted by financial institutions. Financial institutions can use DIS to check the outstanding loan balances of borrowers at all financial institution. When financial institutions receive application for KUR, they check the outstanding loan balances backed by KUR guarantee using DIS. An applicant who has outstanding balance of KUR loans at any bank cannot receive new KUR loans.

Although DIS stores general non-financial information of companies, it does not store their financial data (financial statement data and financial indicators). Then, it is not possible to carry out statistical analysis using the data stored in DIS or to construct a credit scoring model.

(2) Private Credit Bureau

Recently, the Bank Indonesia approved the establishment of a private credit bureau. The first approval was made on the JV of Pefindo, a state-owned rating company in Indonesia, and CIC, a Japanese credit information company. Bank of Indonesia is expected to issue more licenses to the applicants. As CIC is strong in credit information in credit card business, this credit bureau is expected to focus on credit information of individuals which are used for the appraisal processes in auto financing, consumer financing and credit cards. They would store information such as individual default data or payment status of public bills, which can be used to analyze the credit worthiness of individual applicants.

(3) Data storage by financial institutions and credit guarantee corporations

1) Data storage by financial institutions

Generally, larger sized SMEs prepare their financial statement, while MSMEs in general do not. BRI or BPRs, which provide loans to MSMEs, examine incomes or profits of MEMEs through direct interviews. It is pointed out that such MSMEs do not have clear distinctions between business spending and household spending.

On the other hand, according to one of large private financial institutions, their minimum condition to provide loans is that applicants submit financial statements. It is possible to say that they are targeting on larger sized SMEs.

Large private commercial banks and state-owned banks seem to have their own credit information system which can store financial statement data, by which they can carry out financial analysis or credit scoring of loan applicants. Major commercial banks are carrying out credit risk management using their own information system.

According to regional development banks (BPDs), they carry out periodical monitoring on the financial status of the borrowers, by receiving financial statement every year from the borrowers. However, they do not have any database to store fanatical statement, and they do not have any credit scoring system either.

When BPDs carry out credit appraisal and financial analysis of borrowers, they examine financial status of borrowers, focusing on several financial indicators. They set thresholds on several financial indicators, such as liquidity ratio or capital adequacy ratio, but their threshold on financial indicators is being set at the same level for all the sectors. Similarly, they do not have any reference books for credit appraisal, which provide the characteristics or overall trends of each industry.

All financial institutions are carrying out internal rating based on Basel II. However, as most of the financial institutions except large sized financial institutions do not have credit information system or credit scoring model, they would be conducting internal rating mainly based on repayment status of borrowers, rather than financial status.

2) Data storage by credit guarantee corporations

A credit guarantee corporation, Jamkrindo is currently constructing database for financial statement. Jamkrindo receives financial statements from applicants for non-KUR guarantee, while they do not receive any financial statements for borrowers in the KUR guarantee. This is because the KUR guarantee is automatically issued by CGCs. According to Jamkrindo, their database does not have any information of industry to which the borrowers belong.

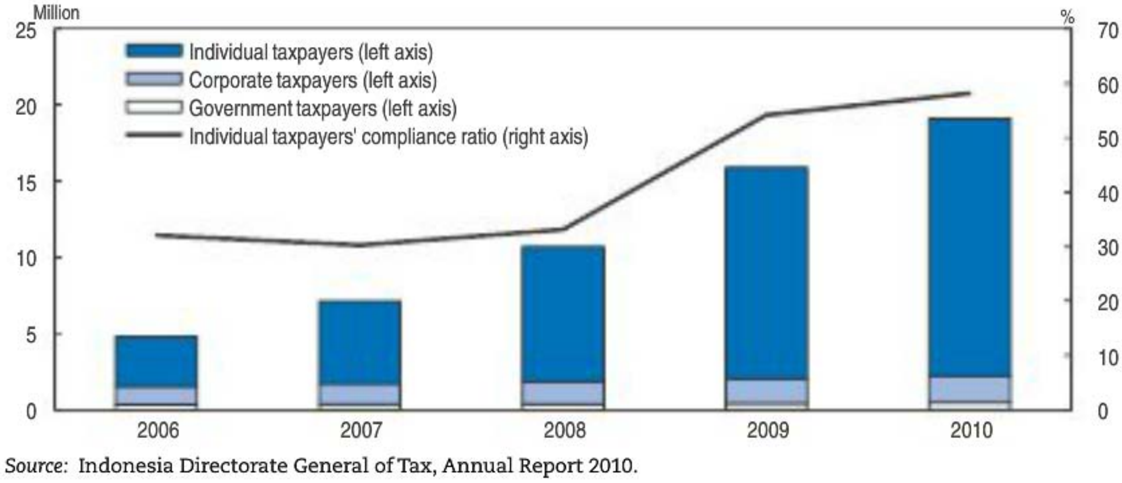
3) Financial information of MSMEs

As mentioned above, most MSMEs do not prepare financial statements. BRIs and BPRs examine their financial status based on the oral information provided by them. Therefore, no matter if financial institutions establish financial information database, it is not possible to carry out quantitative analysis on the MSMEs. Therefore, such financial information database or credit database would not necessarily enhance the financial access of MSMEs in the short term. Naturally, the credit appraisal of financial institutions on MSMEs would therefore depend on collaterals or credit records of the loan applicants. MSMEs do not seem to be motivated to prepare such financial statements either.

In Indonesia, any tax incentives are not given to companies and individual business owners, even though they carry out sufficient book-keeping. Even if there are such tax incentives for book keeping, many MSMEs would not still enjoy such tax incentives, as most of them have not reported their income to tax offices.

As Figure 37 shows, although the number of individual tax payers are significantly increasing, the number of corporate tax payers remain at 1.8 million out of 50 million corporations in the whole Indonesia[48].

[48] In Japan, 2.76million corporations out of total 2.98 million are registered as tax payers.



(Source) OECD Economic Surveys: Indonesia 2012

Figure 37: Number of the taxpayers in Indonesia

The fact that most MSMEs do not report income to tax offices can be one of the reasons why they cannot access to finance, because the minimal condition of loan applications at many financial institutions is that applicants submit the tax identification numbers. Therefore, if MSMEs do not report their incomes to tax offices, it is not possible for MSMEs to access to finance. It order to enhance the access to the finance of MSMEs, it would be necessary to provide business development supports to them especially to prepare financial statements.

4) Collaterals

It is generally pointed out that financial institutions in Indonesia provide loans heavily based on collaterals. However, according to financial institutions and the Bank Indonesia, one of main problems in the collaterals is that land certificates are not always issued to the owners. When financial institutions take fixed assets as collateral, they normally keep the ownership certificates (e.g. land certificate) with them. Therefore, if certificates are not issued, owners cannot use their assets as collateral.

In rural villages, land ownerships can be proved by the letters issued by village leaders, and land owners do not always feel it necessary to register their assets in the governmental land offices. The owners would also feel reluctant to do so, because they have to pay fixed asset tax after they registered assets. In order to address this issue, the government has carried out projects to accelerate land registration, with the supports of donor agencies including the World Bank.

BPRs, regional development banks (BPDs) and multi-finance companies provide small loans to

MSMEs taking automobile or motor cycles as collateral. Financial institutions keep the ownership certificates with them in such cases.

5) Access to banking transitions

Another issue in the access to finance is that MSMEs do not have experiences in banking transaction, including deposit transactions. If they are not familiar with banking transactions, they are not willing to have loans from banks.

In Indonesia, only 20% of the population (50-60 million people out of total 250 million) has bank accounts. International Financial Corporation (IFC) points out that mobile banking would be efficient tools to enhance the banking transactions as 38-45% (96-114 million people) of the total population are using mobile phones[49].

3.4 Financial Systems for the Agriculture, Forestry and Fisheries Industries

3.4.1 Financial mechanisms and financial products

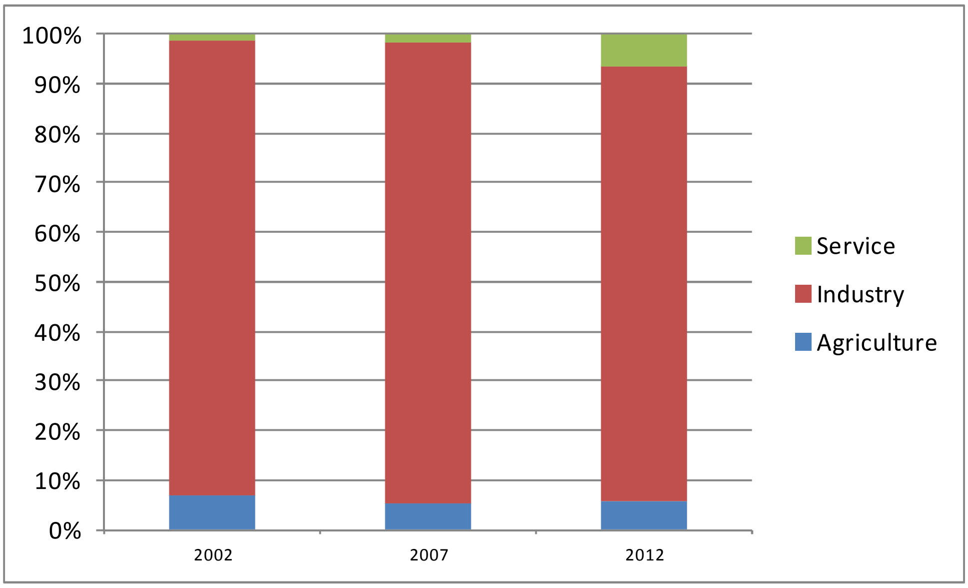
(1) Summary of Agricultural financing in Indonesia

According to several financial institutions, there are not any clear distinctions between agricultural finance and rural finance in Indonesia. The characteristics of the agriculture finance in Indonesia are (i) loan amount is small, (ii) it is not possible to separate consumer loans from business loans in agriculture finance, and (iii) it is not easy to identify the loan purposes.

Another characteristic of agriculture finance is that most financial institutions cannot actively provide loans to the sector, as they tend to think that agriculture sector contains higher risks. Such risks include (i) fluctuation of income due to the natural conditions, (ii) fluctuations in the market prices, and (iii) low profitability.

The outstanding loan amount to the agriculture sector has slightly increased recently in nominal terms, but the proportion of the agriculture sector among all sectors shows slight decline. The share of the loans to agriculture sector was 7.00% in 2002, and it is 5.72% in 2012. This is a similar trend with the share of the agriculture sector in the GDP, which also declined from 15.5% to 14.3% during the same period.

[49] Mobile Banking in Indonesia, IFC (2010)



(Source) Bank Indonesia, Indonesia Financial Statics

Figure 38: Proportion of agriculture finance

BRI, which was initially established as a special bank for agriculture sector, is the most experienced bank in agriculture finance. However, since 1980's, BRI has been allowed to expand its business to all sectors, and thus the loan portfolio of BRI to agriculture sector is very small now.

According to BRI and the experts in agriculture finance, farmers involved in NES (Nucleus Estate and Smallholder), which is a kind of contract farming with core promoter and smallholders, can have access to finance more easily, while non-NES smallholders cannot in most cases. The structure of the NES is depicted as in Figure 39.

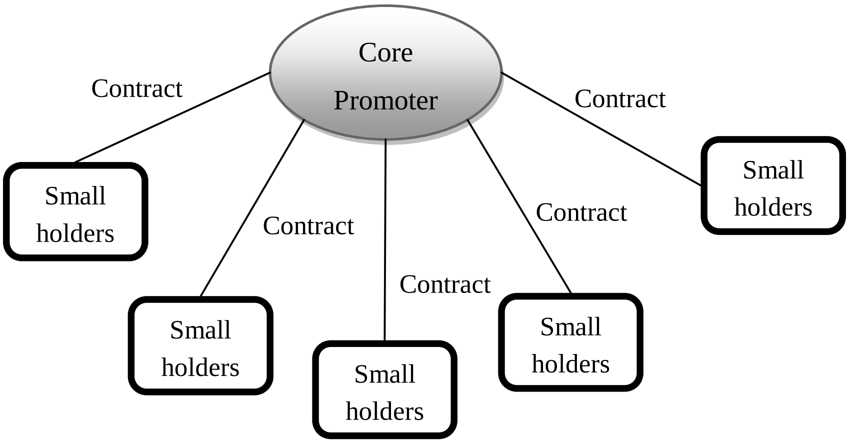


Figure 39: Structure of NES

When smallholders have their own farmlands, they sell crops to the core promoter. If smallholders do not own farmland, they would be hired by the promoter. In NES, core promoter and smallholders mainly deal with tree crops, including palm, coffee and cacao, and hence, NES can be seen in such regions as Java and Sumatra islands. When BRI provides loans to smallholders in NES, they sometimes request core promoters to provide guarantees.

Some private banks also started participating in this field, with different approaches. The private banks do not provide loans to individual farmers, but to the cooperatives of the farmers. The loans to the cooperatives of farmers are also backed by the guarantee of the core promoters.

It is widely acknowledged that agriculture financing is possible only when farmers are involved in stable supply chains. However, such supply chain can be identified only in NES, currently in Indonesia. In 1980's, a number of KUD (Koperasi Unit Desa, Village Cooperative System) were created, mainly to be establish the supply chain of rice as in the case of JAs in Japan. As most of the KUDs were already bankrupted, and they have been criticized to have increased the corruption in villages, it is now not possible to provide loans to farmers through such KUDs.

When farmers are not involved in NES, they might borrow from their relatives or family members. An alternative to this is the credits by wholesalers or suppliers. Wholesalers or suppliers sell fertilizers or seeds to farmers on credit. Upon harvest, wholesalers collect the crops as a part of the repayments to their credits and interests. It is pointed out that wholesalers buys the crops at low prices, because farmers are obliged to sell their crops to the wholesalers for repayments. If calculated, the interest rate that the farmers pay to the wholesalers might be too high.

However, it is not possible to say that farmers do not always have any bargaining powers to such wholesalers. Farmers can select better condition, when they have access to more than one wholesaler.

(2) Interest subsidy scheme by Ministry of Agriculture

Ministry of Agriculture in Indonesia provides interest subsidies to farmers through the following schemes.

- KKPE (Food Security and Energy Credit)
- KUPS (Business Credit Cattle Breeding)
- KPEN-RP (Development and Plantation Revitalization Credit)

Loan under KKPE (Food Security and Energy Credit) can be used for many purposes including working capital for crops, horticulture, grains and fisheries. It can be used for capital investments for equipment, including agricultural machineries, refrigerating facilities, fishery equipment, or aquaculture facilities. Individual farmers, cooperatives and business entities can use KKPE under several conditions. These conditions are indicated as follows;

Farmers

- Become members of farmer groups.
- At least 21 years or married
- Willing to follow the instructions of technical or agricultural extension services
- Have land ownership certificate or power of attorney for tenant farmers by the village head
- Does not have any outstanding loans

Cooperative

- Has a legal status
- Established for more than 2 years
- Member meetings are held annually
- Does not have any outstanding loans

Loan limit for a farmer is IDR 50 million, while the limit for a cooperative and a farmer group is IDR 500 million. Loans are provided by banks, while interest subsidies are provided by Ministry of Agriculture.

The issues of KKPE pointed out by the Bank Indonesia are as follows[50];

- It is difficult to identify appropriate borrowers.
- Borrowers do not have sufficient assets as collateral.
- KKPE loan can be channeled only through farmer groups and cooperatives.
- KKPE cannot be used to finance equipment or machinery for fishery and aquaculture.

A borrower cannot use the interest subsidies under KKPE and other schemes, when the loans are backed by the guarantee of KUR. This is restricted by the Ministry of Finance, because the guarantee fee for KUR is subsidized by the government too.

According to Ministry of Agriculture, the interest subsidy schemes are available only for the farmers who have enough assets for collaterals. Therefore, the borrowers would be limited to those who have sufficient assets and are running large sized farms.

Although the loans with interest subsidies under KKPE cannot be guaranteed by KUR, it is possible to have it backed by non-KUR guarantees of Jamkrindo, Askrindo and other local credit guarantee corporations. It is not clear if such credit guarantee corporations can be active in providing guarantee to agriculture finance.

The government is considering subsidizing the guarantee fees for farmers, but it is rather difficult to find out the rational. The guarantee fee (1.5%) is marginal compared to the interest rates (22% for KUR Mikro and 13% for KUR Ritel).

(3) Ministry of Agriculture Strategic Policy

Ministry of Agriculture Strategic Policy for 2010 – 2014 (RENCANA STRATEGIS KEMENTERIAN PERTANIAN TAHUN 2010 – 2014) identifies the main targets as follows;

i) Realize sustainable superior industrial agriculture system based on local resources.
ii) Promote and strengthen sustainable self-sufficiency.
iii) Develop food and nutrition security, including diversification.
iv) Increase the added value, competitiveness and exports of agricultural products.
v) Increase income and welfare of farmers.

"i) Realize sustainable superior industrial agriculture system based on local resources" is

[50] http://www.bi.go.id/web/id/UMKMBI/Kredit+Perbankan/Skim+Kredit/

focusing on the export of several crops including palm oil, rubber, cocoa, coffee, pepper, clove, tobacco, tea, jatropha, and patchouli. It is also emphasizing the domestic market (mango, mangosteen) and import subsidization (orange, dairy milk and cotton).

"v) Increase income and welfare of farmers" seems to be focusing on smallholders. The strategic plan mentions that the government supports smallholders to increase their incomes and welfare through fertilizer and seed subsidies and interest subsidies.

The interest subsidy scheme, including KKPE, can be both applicable to large sized farmers (including NES) and smallholders. However, because the KKPE and other loans require collaterals, the supports are more addressed to large sized farmers. Therefore, it is possible to say that the interest subsidy schemes are used for the tools to achieve the targets i), ii), iii) and iv) mentioned above.

3.4.2 Credit guarantee system

The Credit Guarantee System including KUR for agriculture in Indonesia is different from the Japanese system. One of such differences is that the agriculture guarantee system in Indonesia is executed in the same framework as the credit guarantee for MSMEs

3.4.3 Basic financial infrastructure

The most well known basic financial infrastructure in Indonesia is DIS (Debtor Information System), which provides credit information of borrowers, including borrowers of agriculture sector, to financial institutions. There is not any dedicated credit database for agriculture sector.

As discussed earlier, DIS does not store financial data (e.g. financial statements or financial indicators), and it cannot be used for credit scoring. Besides, most of the farmers do not prepare financial statements and financial institutions, such as BRI, examine the incomes and profits of farmers through interviews.

3.5 Issues in MSME Financing in Indonesia

One of the most important issues in facilitating MSME financing is "information asymmetry", which make the MSME finance more difficult by increasing the transaction costs of MSME financing. As discussed earlier, three possible solutions to address this issue are;

(i) The government or the whole society bears the costs of information asymmetry,
(ii) Costs of information asymmetry are reduced from efficient loan appraisal processes, and
(iii) Costs of information asymmetry are passed to borrowers.

This section discusses the issues in MSME financing from the three viewpoints mentioned above.

3.5.1 The government or the whole society bears the costs of information asymmetry

In Indonesia, the government has borne the costs to overcome information asymmetry, providing credit guarantees through state owned credit guarantee corporations and KUR.

There are two main guarantee institutions in Indonesia, both of which are government owned, namely Askrindo (established in 1971) and Jamkrindo (established in 1981). In addition, several other local credit guarantee corporations (CGCs) were established recently by local governments.

In November 2007, KUR (Kredit Usaha Rakyat, Credit for people's Business) or the special credit guarantee system was established, in which CGCs provide credit guarantees for MSMEs while the government pays the credit guarantee fees. As of 2012, KUR has covered 8.0% of loan balances and 15.7% of borrowers in Indonesia. Besides the guarantee fees, the government has provided IDR 2.0 trillion in total into Askrindo and Jamkrindo as equity contribution every year recently. Since 2012, two local CGCs, Jamkrida Jatim, which was establish mainly by East Java Provincial Government in 2010, and Jamkrida Bali Mandara, establish by Bali Provincial Government, have participated in the KUR.

In spite of the achievements, the sustainability of the KUR is rather questionable mainly due to the large financial costs of the government. One of the reasons for the cost increase is a moral hazard issue, including the increase in NPLs.

3.5.2 Costs of information asymmetry are reduced from efficient loan appraisal processes

Information asymmetry can be overcome by reducing the transaction costs of credit appraisals. Reduction in the transaction costs can be achieved by 1) securing loans by collateral, 2) improving the efficiency of screenings, and 3) specialization.

1) Securing loans by collateral

In order to reduce loan appraisal costs, banks cover the loans by collateral. However, because of some difficulties in collateral procedures, banks cannot necessarily reduce their transaction costs by this. One of the reasons for this is that collateral disposals through auction sales or other methods are not very simple, and they tend to take long time.

In addition, it is not always easy for the bank to take assets for collateral, no matter if borrowers have assets. Especially in rural area, real estates are not registered in many cases, and the owners do not have ownership certificates. Due to these reasons, banks cannot easily take assets as collateral, and transaction costs cannot be reduced.

2) Increasing appraisal efficiency

Efficiency in loan appraisals can be also achieved by IT based credit information system which accumulate financial and non-financial data of borrowers and support the credit risk analysis.

However, in Indonesian, not many MSMEs can provide sufficient information for such purposes, as they do not either conduct double-entry bookkeeping or prepare financial statements. Therefore, banks depend on information provided through interviews with loan applicants, and also on personal connections, and thus bank cannot reduce their transaction costs.

Major banks in Indonesia are improving their operational efficiency through utilizing internal credit information system to estimate default probability and loss amounts (credit risk) by inputting financial data and non-financial data. On the other hand, the operational efficiency in the loan appraisals at small and medium sized banks is expected to be rather low. Most of them do not analyze credit risks by such internal credit information system. They have accesses to DIS (Debtor Information System), which is operated by the Bank Indonesia, but they can obtain only the loan information of borrowers.

3) Specialization

In Indonesia, because the government has supported MSME finance through credit guarantees and also because there have not been any policy-based financial institutions specialized in MSMEs, experiences and expertise have not been accumulated in specific institutions. Level of the expertise of major banks in MSME varies among them, due to their strategies in MSME finance.

Regional development banks and BPRs, which are major players in regional MSME financing, have build up strong relationships with MSMEs. However, they do not necessarily have sufficient human resources, appraisal know-how and credit risk management system.

Similarly, there are not any financial institutions specialized in agricultural sector, whose risk profiles are much different from other industries. Because of this differences and higher risks, financial institutions, including major banks, are generally reluctant to provide loans to this sector.

3.5.3 Costs of information asymmetry are passed to borrowers

Cost of information asymmetry can be also passed to borrowers. In other words, loan interest rates are set high enough to cover the costs and higher credit risks.

Currently, the average lending rate for commercial banks as a whole (March 2013) varies from 9% to 13%, while the average interest rate of BPRs varies from 28% to 38%. In Indonesia, because caps on deposits and lending rates of state-owned banks have been abolished since 1983, increasing interest rates to cover credit risks is legally possible.

In case of KUR loans, banks cannot increase the interest rates more than the upper limits set by the government. Because the credit risks of the loans backed by KUR are limited, the banks do not set the interest rates too high. In case the credit risk of a MSME is too high and it cannot be covered by the KUR credit guarantee and interest, banks would not provide loans to such a MSME.

4. Policy Recommendations

This chapter makes policy recommendations for the enhancement of financial access of MSMEs and expansion of the KUR for the productive sector in Indonesia, by comparing the financial mechanisms for MSMEs and small-scale farmers in Japan and Indonesia.

4.1 Fundamental Viewpoints for Making Policy Recommendations

We make recommendations from the following fundamental viewpoints.

Firstly, in order to create appropriate policies of MSMEs, it is essential for the government to understand the business conditions and funding needs of MSMEs in a timely manner. Consolidation of such information in the government is also important for the efficient and effective policy decision-making and implementations.

Secondly, economic and financial policies and social policies should be clearly separated in considering financial supports for MSMEs, as the approaches to address economic and social issues are significantly different.

From the perspective of social policy, the protection of micro enterprises (including small farmers) is important. On the other hand, from the perspective of economic and financial policies, fostering small and medium-sized enterprises (particularly manufacturers) that will create employment and be the driving force of economic growth in Indonesia is more important. Therefore, from the economic and financial viewpoints, providing supports to MSMEs to upgrade their businesses and to speed up their growth would be one of the strategic targets of the government, and thus financial supports combined with business development supports should be considered. The roles of financial institutions in providing such supports would be significant.

Therefore, the development of basic financial infrastructure including credit information systems, the enhancement of the capacity of financial institutions in the MSME financing, and the enhancement of the credit-guarantee system would be necessary in order to increase operational efficiency of financial institutions. By achieving operational efficiency at banks, it is possible to reduce the costs to overcome “information asymmetry” in the MSME financing.

Financial supports to micro enterprises and small-scale farmers are provided in the respect of social developments. Except microfinance institutions and BRI, most commercial banks cannot be active in providing loans to such micro enterprises and small farmers. Therefore, credit guarantee is important in enhancing the financial access of such micro enterprises and small farmers.

However, borrowers tend to regard the policy-based credits, including credit guarantees, as government subsidies that they do not have to repay. Therefore, the KUR system and its management need to incorporate measures against such moral hazard issues. The KUR system can be enhanced through (i) accepting private banks as participating banks, (ii) establishing a dedicated guarantee program for the agriculture sector, (iii) introducing moral hazard countermeasures, and (iv) establishing and promoting regional credit guarantee institutions.

In order to enhance agricultural finance, which commercial banks tend to avoid because of its special characteristics and higher risks, “specialization” or consolidation of the expertise in agricultural finance in financial institutions is essential. Therefore, it would be worth considering such measures as introducing agricultural finance training programs for financial institutions, establishing an agricultural financing advisor system, setting up a government-affiliated financial institution that specializes in agricultural finance, and developing financial products for farmers.

Based on the viewpoints mentioned above, this study makes policy on financial regulations, financial mechanisms and products, credit guarantee system and basic financial infrastructure, in the short term and medium and long term.

In making recommendations, the study team would like to emphasize that the enhancement of financial inclusion can be achieved only in a long term by the combinations of various policies and steady development of basic financial infrastructure. It cannot be achieved by a single policy measure in a short term. Therefore, it is important to accelerate the collaborations among ministries and dialogues among government, banks and credit guarantee corporations.

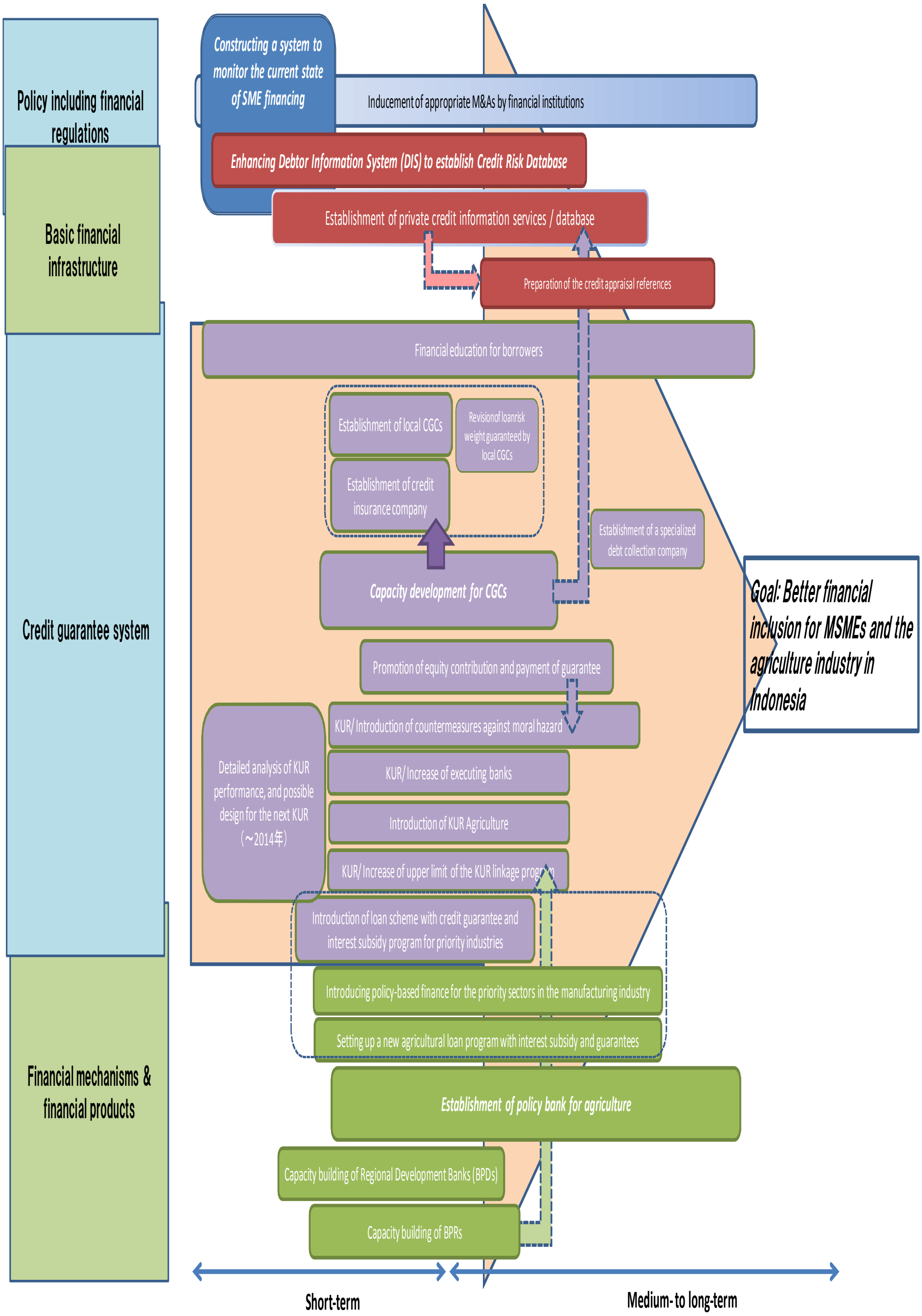


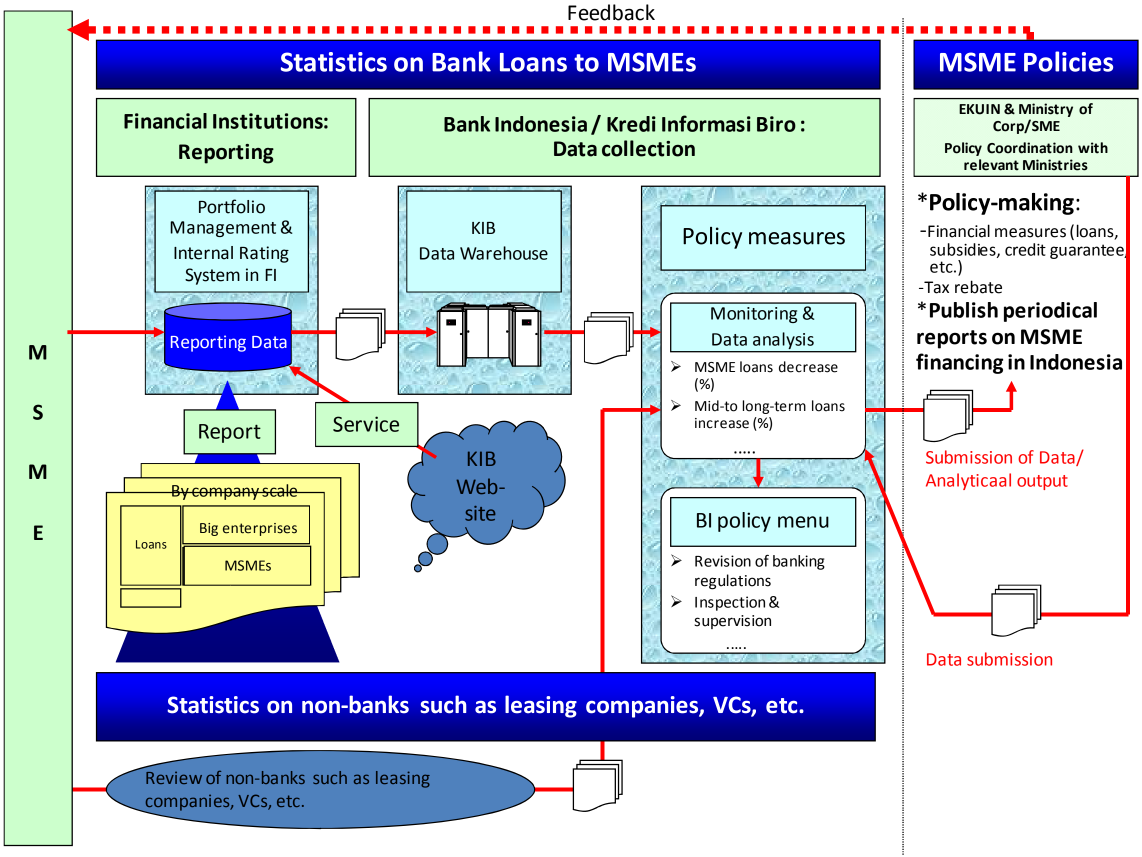
Figure 40: Summery of Policy Recommendations (Source) Prepared by the study team (June 2013)

4.2 Policies, including Regulations Pertaining to Finance

4.2.1 Constructing a system to monitor the current state of MSME financing

In order for the Bank Indonesia to continuously monitor the current conditions relating to MSME financing, it is recommended to publish a "Financing Annual Report for MSMEs in Indonesia" regularly. The report should update various indicators on the MSMEs, including MSME business conditions DI (diffusion index), and cash flow DI, and fund raising status of MSMEs, which are to be periodically updated through interview surveys. Such reports should be published every quarter. Issuing quarterly flash reports should be also considered.

Information flow to publish such reports can be depicted as in the figure below. This will be implemented jointly by the Coordinating Ministry for Economic Affair, Ministry of SME and Cooperatives and the Bank Indonesia.



(Source) Prepared by the study team (June 2013)

Figure 401: Propopsed information flow of MSME financial conditions in Indonesia

4.2.2 Inducement of appropriate mergers and acquisitions by financial institutions

One of the reasons why the transaction costs of MSME financing are relatively high is that the operations of small-scale banks are generally inefficient. In order to increase operational efficiencies of small banks through accumulating the expertise (specialization) in MSME financing, it is recommended for the government to accelerate the integrations of such small sized financial institutions that carry out MSME financing,

Integrated banks are also expected to enhance their operations by expanding their branch networks in regions. As a result, such integrated banks would facilitate MSME financing in Indonesia as a whole.

Therefore, it is important that the Bank Indonesia and OJK facilitate MSME financing by providing inducements for appropriate M&As, within the existing framework of regulations for bank mergers and acquisitions.

4.3 Financing Mechanisms and Financial Products

4.3.1 Policy-based finance in priority sectors in the manufacturing industry

There is no doubt about the important role by the government to select priority sectors for the long-term industrial development in a developing country. In the national industrial policy in 2008, the Indonesian government (the Ministry of Industry) selected the following 35 sectors for "Priority Industrial Cluster Development", namely:

1. Agro industry: (1)palm oil processing industry, (2)manufacture of rubber and rubber goods, (3)cocoa industry, (4)coconut processing industry, (5)the coffee processing industry, (6)sugar industry; (7)tobacco processing Industry; (8)fruit processing industry; (9)furniture industry; (10)fish processing industry; (11)paper industry; (12)Milk processing industry
2. Transportation equipment industry: (13)automotive industry; (14)shipping industry; (15)aerospace industry; (16)train industry
3. Electronics and ICT Industry: (17)electronics industry; (18)telecommunications industry; (19)computer and its equipment Industry
4. Manufacturing:
   - Industrial materials manufacturing: (20)iron and steel industry; (21)cement industry; (22)petrochemical industry; (23)ceramic industry

- Machine industry: (24)electrical equipment and electrical machinery industry; (25)machinery and general equipment Industry.
- Labor-intensive manufacturing: (26)textiles and textile products industry; (27)footwear industry;

5. Supporting industries of creative and specific creative industries: (28)software and multimedia content industry; (29)fashion industry; (30)craft and art industry.
6. Specific small and medium industry: (31)precious stones and jewelry industry; (32)public salt industry; (33)pottery and decorative ceramics industry; (34)essential oils industry; (35)food industry.

In the national industrial policy, the government is targeting on achieving 9.34% annual growth of the whole industry during the period from 2010 to 2020. The targeted growth rates on small, medium and large industries are 10.00%, 17.47%, and 6.34% respectively. The fact that the government set higher targets on the small and medium industries than large industries suggests the government's strong emphasis on the development of MSMEs in the future.

The Ministry of Industry is supporting the capital investments of MSMEs through its subsidy program called as "Machinery Restructuring Program". The ministry provides subsidies to cover up to 30% of the costs of machineries or equipments purchased by the small and medium industries indicated in the number 6 (Specific small and medium industry) above. Maximum amount of the subsidy per company is IDR 500 million. The ministry expects the number of companies using this subsidy program will increase from 130 in 2012 to about 400 in 2014.

From the experiences in Japan, these priority industries can be enhanced through developing their supporting industries, typically consisted of SMEs. Therefore, it is important for the SMEs in supporting industries to carry out effective capital investments to increase their production capacity and efficiency.

However, SMEs tend to face difficulties in carrying out such capital investments without financing support by banks and policy support by the government, especially in the early stage of development. Considering that such investments tend to be large-scale (compared to size of SMEs) and need longer payout periods, we believe that introducing interest subsidies for the priority industries with combination of credit guarantee program will be one of possible solutions to promote such capital investments by SMEs and hence to strengthen the supporting industries in Indonesia. In the longer term, launching stable long-term low-interest financing program should be considered, possibly by receiving funds from international financial institutions.

4.3.2 Setting up a new agricultural loan program with interest subsidy and guarantees

Currently, the government provides interest subsidies to farmers under KKPE and other programs. However, it has been pointed out that farmers cannot have sufficient accesses to the interest subsidies, because the loans have to be fully covered by collaterals. Although the subsidized loans can be backed by non-KUR guarantees, such guarantees cannot be easily provided because;

- Not all banks can use the non-KUR guarantee,
- Credit guarantee corporations do not have much experiences in agricultural sector, and
- Farmers cannot submit sufficient information for the credit appraisals.

Therefore, it is recommended to set up an agricultural loan program with interest subsidy and credit guarantee. The first step for this would be (i) to examine the feasibility of the program and (ii) to consider the implementing structure, and (iii) to start a pilot project.

The loans will be directed to the priority area in agriculture sector, including (but not limited to) (i) expansion of farmland for estate crops / tree crops for exports, and (ii) capital investment for agricultural machineries to increase the productivities. Lease contract for agricultural machineries should be also covered by this program.

The guarantee fees are to be paid by the borrower to credit guarantee corporations through financial institutions. As the guarantee fees are very small compared to the interest rates, the government would not have to subsidize the guarantee fees. The guarantee fees paid by borrowers and financial institutions can be used for a tool to prevent moral hazard issues (guarantee fees can be increased for the banks with higher NPL ratio, for example).

Financial institutions would take the procured machineries or equipment as collateral, and remaining part is covered by the guarantee. If borrowers wish to reduce their guarantee fee costs, they can provide other fixed assets as collaterals.

Credit appraisals are basically carried out by financial institutions, and credit guarantee corporations issue guarantee automatically based on comprehensive agreements. However, for large-sized loans, credit guarantee corporations should also carry out their own credit appraisals for double checking purposes.

Upon application, borrowers (farmers) prepare business plans for the following five years, and then submit simple financial reports every year, so that banks can easily monitor the financial status of the borrowers.

As there are a large number of farmers in Indonesia, consisting 40% of total populations, many farmers would wish to apply for this program. Therefore, this program should not be very selective, although the loans under this program should be limited for the capital investment of farmers (such as agricultural machineries) of priority crops. Therefore, the Indonesian government would not have to consider starting "certified farmer" system, under which the government provide financial and managerial supports only to very small number of selected farmers.

Smallholders cannot be the beneficiaries for this program, as it is not realistic for smallholders to improve their farm production by capital investment in machineries. Therefore, loans to smallholders would be covered by other programs including KUR Mikro or proposed KUR Agriculture. Smallholders can also benefit from the technical supports on the formulation of farmer groups or management improvement. Financial education for opening banks accounts or book keeping would be equally beneficial.

4.3.3 Establishment of policy-base bank for agriculture

Most of the financial institutions in Indonesia do not have many experiences in agriculture finance, and thus they cannot be active in providing loans to agriculture sector, no matter if loans are guaranteed or subsidized. One of the possible reasons for this is that they overestimate the underlying risks of agriculture sector.

Therefore, it is recommended to consider setting up a policy-based bank for agriculture in the long-run which can accumulate the experiences in agriculture finance. However, as the establishment of the policy bank for the agriculture sector would cost large amount of state budgets, the feasibility should be carefully examined in advance.

The agriculture policy-based bank mainly focuses on the capital investment of farmers and farm enterprises, which are willing to expand their productions and enhance productivities. Financial supports to smallholders should be carried out by BPRs and BRI, using guarantees of KUR Mikro or proposed KUR Agriculture.

The agriculture policy-based bank should not be established as a state commercial bank, which takes deposits. If a policy-based bank is capitalized or takes deposit, the bank would seek for profits with short term and would not be able to provide long-term loans, and thus it tries to move out of agricultural sector. When a bank covers the agriculture sector and other sectors at the same time, it is quite natural that the bank would be less active in agriculture sectors. Therefore, the agricultural policy-based bank should obtain funding from long-term bonds backed by the government guarantee.

At the initial stage, it is recommended for the policy-base bank to start its operation only in selected regions where demands for agriculture finance is large and more feasible. Then, after examining the feasibility, it can expand its branch network to other regions.

When it accumulated technical know-how, it can start providing technical assistances to commercial banks too. Linkage loans through commercial banks or rural banks to the agriculture sector would be also possible. Then, it is recommended that the policy-based bank generates professional financial advisor for the agriculture sector, who provides technical assistance to other banks.

4.3.4 Capacity building for Regional Development Banks (BPDs)

BPDs are currently accounting for 9% of the total assets in the banking industry. The Bank Indonesia, expecting larger role of BPDs as the agent of regional development, launched BPD Regional Champion (BRC) program in 2010. Agenda in the BRC program are (1)capital strengthening (minimum target of core capital of IDR 1 trillion), (2)expansion of public financial access (penetration of bank offices network), (3)funding structure strengthening (more diversified funding including increasing retail customer base), (4)quality enhancement (increasing credits in the productive sector, cooperation with BPRs), (5)governance implementation enhancement, and (6)role enhancement in creative industry development.

As shown in Figure 32, NPLs in MSME loans of BPDs has been increasing recently despite of the declining trend of the whole banks. As for KUR loans, NPL ratios of some BPDs exceed 10%. For BPDs, whose core businesses have been to provide consumer financing mainly to local government officials, capacity development in the field of MSME financing is an urgent issue. Based on our discussion with Asbanda (Association of Regional Development Bank), German Sparkassenstiftung (Savings Banks Foundation for International Cooperation) has been providing supports to Asbanda including strengthening MSME financing since 2010, but we believe that further technical assistance to Asbanda and BPDs will be required for BPDs to develop their MSME financing successfully.

4.3.5 Enhancement of the capacity of BPRs

Generally, BPRs have closer relationships with MSMEs, and some BPRs can deliver loans to MSMEs with lower NPL ratio. Therefore, they can be potential partners for commercial banks to increase MSME financing using linkage program.

However, because the total KUR linkage program amount for one BPR is regulated not to be more than IDR2 billion, a BPR cannot expand their disbursement of linkage programs, no matter if they have sufficient financial capacity and funding needs from MSMEs. If such ceiling is lifted or determined according to the financial capacity of BPRs, it would be possible for banks to expand their loans to MSMEs through BPRs.

Although the NPL of some BPRs are lower than average, it is generally pointed out that the managerial capacities of BPRs are not necessarily sufficient. For example, the periodical reports by BPRs are not submitted to supervising agencies on time.

Therefore, it is recommended to enhance the managerial capacities of BPRs, and also to carry out closer monitoring of them, and then to increase the upper limits of the linkage programs for such BPRs.

Specific recommendations for enhancement of the capacity of BPRs are as follows;

i) The government develops a software package for the deposit transactions and loan transactions to be used in BPRs. The software should be equipped with tools for the periodical reporting to the supervising agencies and for monitoring of their own financial status.

ii) The BPRs with better financial status are given incentives, including the increase of the upper limit on the linkage program amounts. The upper limit should be set based on some financial indicators including capital adequacy ratio or the amount of net worth.

iii) Moral hazard prevention measures should be also incorporated. For example, BPRs with higher NPLs or default rate are not allowed to use linkage programs or KUR until they can improve their performances.

It is also recommended that OJK is given the responsibility of the monitoring of financial cooperatives, which essentially have the same characteristics with BPRs but are currently supervised by Ministry of Cooperatives and SMEs. Such financial cooperatives should be also equipped with the software package to enhance their managerial capacities.

The government might have to consider mergers among BPRs and financial cooperatives, especially if they are not financially sustainable. OJK should be given authority to take lead in such mergers.

4.4 Credit Guarantee System

Although the KUR has contributed to better financial access for MSMEs in Indonesia to a certain degree, there are certain rooms for further expansions. However, the KUR is facing some difficulties, including moral hazard issues, in the course of its expansions. In this regard, the Indonesia government set mainly two targets on the KUR.

Target 1: Further expansion of KUR (Target volume in 2013: IDR 36 trillion)
Target 2: Control of NPL (NPL Ratio: below 5%)

In order to achieve these targets, the improvement of the KUR system and its executing organizations and enhancement of the credit guarantee system as a whole are both essential. Therefore, this study proposes (1) enhancement of credit guarantee system in Indonesia, and (2) enhancement of the KUR.

(1) Enhancement of credit guarantee system in Indonesia

1) Establishment of local CGCs in each province and an apex organization for local CGCs
This study recommends establishing local CGCs in each province and also an apex organization for local CGCs. Establishment of local CGCs are recommended because it is still difficult for MSMEs to get finance in local area and also because MSMEs in local area generally lack creditworthiness and collaterals. Therefore, the establishment of local credit guarantee corporations and enhancement of these organizations would facilitate MSME finance through supplementing the creditworthiness and collateral of MSMEs in rural area.

An apex organization for local CGCs is also recommended to be established, so that it can share the credit risks of local CGCs through credit insurance (re-guarantee) and provide technical supports to them. This is because the operating base of local CGCs including Jamkrida Jatim and Jamkrida Bali Mandar which have already been established by local governments, is still vulnerable and their profitability is very low compared to national CGCs (Jamkrindo and Askrindo). Moreover, financial institutions would have lower motivations to use the credit guarantee of such local CGCs, because the risk weight of loan with credit guarantee by local CGCs is 80%, while that of national CGCs is 20%.

In Japan, local CGCs in prefectures cannot make sufficient profits if there is not any risk sharing schemes through credit insurance. In other words, the combination of the credit guarantee system and credit insurance (re-guarantee) system has contributed to the sustainability of the credit guarantee system in Japan.

Accordingly, this study proposes (a) establishment of credit insurance company for local CGCs, and (b) making revisions in the risk weight of loans guaranteed by local CGCs for the purpose of enhancing their business bases and sustainability.

2) Introduction of credit guarantee with interest subsidy program for priority policy areas

Generally, MSMEs bear heavy interest burdens because interest rates for MSMEs are high due to the lack of creditworthiness and collaterals. Therefore this study proposes to introduce credit guarantees with interest subsidy program only for priority areas which are determined by the Indonesia government.

3) Promotion of equity contributions by stakeholders including banks participating in credit guarantee system

Maximum guarantee amount issued by a CGC in Indonesia is 10 times of the paid-up capital of the CGC, which is defined as a “gearing ratio”. As capital of local CGCs in Indonesia is much smaller than capital of state-owned CGCs, the total amount of credit guarantee issued by local CGCs is very limited. Therefore, it is recommended for financial institutions to provide equity contributions to local CGCs, so that capital stability and guarantee amount of local CGCs increase. Equity contributions by banks are also recommended because banks would not cause moral hazard issues if they are the shareholders of CGCs.

4) Capacity development for CGCs

Enhancement of the capacity of the CGCs who provide guarantee to MSMEs is very important to improve efficiency of credit guarantee operations and financial soundness of CGCs. The operational capacities of CGCs in credit appraisal, monitoring and debt collection are not necessarily sufficient, based on our observation. Sound operational capacities of CGCs would be essential to facilitate MSME financing in Indonesia.

Capacity development of the newly established local CGCs is also important to improve the financial accesses in such regions.

5) Establishment of a specialized debt collection company

Debt collection after subrogation is executed by banks mainly because CGCs do not have sufficient human resources and expertise. However, banks would not have any incentives to make effort to recover loans after default, as banks can receive 70-80 percent of defaulted loan amounts from CGCs.

Debt collection generally requires a lot of human resources, expertise and experience. Therefore, it is recommended to establish a specialized debt collection company for CGCs, so that CGCs can entrust debt collection to this company. The debt collection company would contribute to the improvement in the effectiveness of debt collections and accumulation of technical know-how.

6) Introduction of countermeasures against moral hazard

Credit guarantee system sometimes faces moral hazard issues, as observed from the recent increase of NPL ratio of KUR. Such moral hazard issues can happen, especially when banks can easily provide loans to risky borrowers, and also when banks can make profits from such loans.

Therefore, the study proposes to introduce the countermeasures on such moral hazard issues, especially on banks whose NPL ratios are higher than other banks. Such countermeasures include;

- The banks are required to bear guarantee fees.
- The guarantee coverage ratio for the banks are reduced, and
- The banks are not allowed to use CGCs.

(2) Enhancement of the KUR

As mentioned above, the government set two kinds of targets on the KUR.

Target 1: Further expansion of KUR (Target volume in 2013: IDR 36 trillion)

Target 2: Control of NPL (NPL Ratio: below 5%)

This study proposes measures to achieve these targets as follows;

<u>Target 1: Further expansion of KUR (Target volume in 2013: IDR 36 trillion)</u>

1) Increasing participating banks: including private banks which focus on MSMEs and agricultural financing

Currently, the participation in the KUR is limited to state-owned banks and regional development banks. In order to expand the KUR, it is recommended to increase the participating banks, in particular, private banks that have experience and know-how in MSMEs finance and agriculture finance.

Incentives for newly participating banks in the KUR will include that they will now be able to give credits to borrowers without collateral since 70-80% of their loan will be guaranteed or that risk weight of such loans with credit guarantee by state-owned CGCs will be decreased to 20% and hence make the amount of risk assets smaller.

2) Increase of upper limit of the KUR linkage program (as discussed earlier)

Currently, the upper limit of the KUR linkage program that a BPR can use is IDR 2.0 billion. Because BPRs have been playing important roles in providing banking services to MSMEs in their regions, lifting the upper limits on the KUR linkage program would lead to the increase in the expansions of the KUR.

For commercial banks, this would be also beneficial. As some BPRs are financially healthy and their NPL ratios are very low, collaborating with such BPRs would make it possible for commercial banks to increase loans to MSMEs without increasing their costs and NPLs.

However, all BPRs cannot be suitable for this arrangement, as they do not necessarily have sufficient capacity for loan processes and monitoring processes. Financial status of some BPRs would not be sufficient either.

Therefore, the upper limits on the KUR linkage program are recommended to be determined based on the financial status of BPRs. For example, setting the upper limits based on the level of capital is a realistic option. It is also recommended to monitor the financial status of BPRs and to exclude the unhealthy BPRs from KUR linkage program (see also 4.3.5 above).

3) Introduction of KUR Agriculture

The agricultural sector, which plays an important role in Indonesian economy, is not generally regarded as suitable for bank loans, mainly because it is subject to weather risks and market fluctuations. Another reason is that most of the farm producers are not creditworthy and do not have stable business base. Although some large sized farm produces with sufficient assets can have access to credit with interest subsidies using the assets as collateral, most farmers do not have access to finance.

To address these issues, it is recommended to introduce “KUR agriculture” which focuses on providing finance for the working capital of farmers (e.g. working capital for purchasing seeds and fertilizers). It is also recommended for KUR to cover around 90% of total credit risks, so that banks can feel more comfortable to provide loans to small farmers.

<u>Target 2: Control of NPL (NPL Ratio: below 5%)</u>

1) Introduction of countermeasures against moral hazard (discussed earlier)

As mention above, the study proposes countermeasures on moral hazard issues, such as;

- The banks are required to bear guarantee fees.
- The guarantee coverage ratio for the banks are reduced, and
- The banks are not allowed to use CGCs.

2) Promotion of financial education to borrower

In some cases, borrowers regard the KUR loan as grants by the government that they do not have to repay. This would be partly because they do not have any knowledge and experiences in banking transactions.

Therefore, the study recommends that financial educations to citizens are conducted consistently by the Bank Indonesia, commercial banks, CGCs, local governments and other related organizations.

(3) Toward the design of KUR after 2014

The current KUR is supposed to be terminated in 2014 and the future scheme of next KUR is not determined yet. Many organizations involved in the current KUR hope to continue KUR and this study proposes the basic concept and design of the new KUR after 2014 based on the following conditions.

1) Full and detailed evaluation of the performance of KUR

First of all, full and detailed evaluation of the KUR performance since 2007 should be conducted.

KUR has expanded rapidly and the Indonesia government has taken some measures for expansion since it launched the program in 2007. It is also possible to say that KUR has significantly contributed to the expansion of financial access of MSMEs. However, at the same time, KUR started facing several operational issues, including the increase in the NPL ratio.

Therefore, before considering the structure of the KUR after 2014, it is recommended to carry out detailed analysis and evaluation of the KUR.

2) Detailed design of next KUR

Based on the analysis of the KUR performance mentioned above, it is possible to say that KUR have already penetrated deeply into the trade sector and that the MSMEs in the trade sector can obtain finance from several funding sources even without KUR.

Taking these situations into consideration, the KUR after 2014 is recommended to focus on priority industries or areas set by the government. Such priority areas would include high value added cash crops in the agricultural sector, or specific manufacturing subsectors of regional clusters. Another priority area might be micro enterprises in regions where the level of financial inclusion is low.

3) Setting new key performance indicators (KPIs)

When the government set banks ambitious targets on the use of credit guarantees, banks would start providing loans to risky borrowers in order to achieve such targets. As a result, the guarantee system cannot be sustainable because of increase in NPL ratio.

Therefore, it is recommended to set new and effective key performance indicators (KPI) according to purpose and design of the new KUR. For example, KPI for the KUR Ritel and KPI for KUR Micro could be separately set, due to different natures of the programs.

4) Promotion of equity contribution by stakeholders including banks benefiting from credit guarantee system (as discussed earlier)

As mentioned above, it is recommended for financial institutions to provide equity contributions to CGCs, so that capital stability and guarantee amount of local CGCs increase. Equity contributions by banks are recommended also because banks would not cause moral hazard issues if they are the shareholders of CGCs.

4.5 Basic Financial Infrastructure

4.5.1 Enhancing DIS to establish Credit Risk Database

Currently, DIS (Debtor Information System) operated by the Bank Indonesia stores credit information of borrowers submitted by banks, but it does not store financial data (the data of financial statements) and financial indicator. Therefore, the system cannot be used for the credit risk analysis or the construction of the scoring model for the credit risk management.

Regional Development Banks (BPDs) receive financial statements from borrowers and applicants, but most of them do not have the effective database or IT system to which bank officers can input financial data and to carry out financial analysis. This suggests that regional development banks and some BPRs rely their credit appraisals heavily on personal skills of credit officers, and also that regional development banks put too much importance on collateral and track records

BPRs and BRI basically do not receive financial statements from loan applicants, as most of the applicants do not prepare financial statements. Therefore, it is recommended to enhance DIS to be upgraded to Credit Risk Database, which stores financial data and non-financial data (including default data, attribute data and sector data). When such data is stored, statistical model for the credit risk can be established, which will contribute to the credit appraisals or risk management in banks.

The first step to upgrade DIS to Credit Risk Database is the feasibility study and establishment of the roadmap.

The feasibility study also has to identify how to collect the financial and non-financial data from financial institution, at the earliest stage of the development. State-owned commercial banks or regional development banks might be the candidate for member financial institutions who can provide such financial data. Private financial institutions, some of which already have their own financial database, would not be willing to provide such financial data.

At the earliest stage of the system development, it is recommended to pick up several banks as pilot members to provide trial data, in order to determine (i) format of the data, (ii) methods of data compilation, and (iii) methods of data cleansing.

Organizational structure of the database operator should be carefully examined. If the database is operated either by the Bank Indonesia or OJK, member financial institutions would be worried that the database is used for stronger supervising purposes of these institutions, then the financial institutions might not want to be paid members. Therefore, it is recommended that the operator of the database should be independent from the Bank Indonesia and OJK. Assigning private operator of the database is also recommended.

Establishment of Credit Risk Database would increase the quality and efficiency of the credit appraisals and monitoring at financial institutions. However, the major beneficiaries of such credit database would be middle sized enterprises and financial institutions which provide loans to middle sized enterprises. This is because only middle or large sized enterprises prepare financial statements, and thus the credit database cannot be applicable to micro and small sized enterprises which do not prepare financial statements.

Therefore, in order to enhance the loans to micro and small enterprises, business development services (e.g. supports for the preparation of financial statement) would be essential.

4.5.2 Establishment of private credit information services / database

As mentioned above, the credit risk database by the initiative of the supervising agencies might not be always the best choice to attract more financial institution to be members.

Private financial institutions and some state-owned banks might prefer having their own credit information system, forming alliances of several banks. Therefore, it is recommended to allow such an alliance of financial institutions to operate their own credit information system, which can also provide services (such as credit scoring) to other member financial institutions.

Recently, the Bank Indonesia started issuing licenses for setting up private credit bureaus. It would be then necessary to prepare regulations or policies to allow private financial institutions to establish such credit information system.

4.5.3 Establishment of the credit appraisal references

When credit information system is established and it stores sufficient amount of data, it is possible to deliver the average financial indicator of industries, which can be utilized in credit appraisal at financial institutions.

According to several financial institutions, they set threshold on financial indicators (e.g. current ratio and capital adequacy ratio). However, they do not set sector-wise threshold on financial indicators, although the level of average financial indicator varies among sectors due to different nature of businesses.

Therefore, after establishing such credit information system, it is recommended to provide sector-wise average financial indicators to financial institutions, which will be beneficial for them especially when they conduct credit appraisals.

In the future, credit reference books for various sectors can be prepared based on the accumulated sector-wise financial information. Such reference books will also contribute to the enhancement of the credit appraisal skills at financial institutions.

The following table summarizes our policy recommendations including possible challenges to be considered for implementation.

Table 53: Summary of Policy Recommendations (1)

	Policy recommendation	Major points	Goals to be addressed	Challenges to be considered for implementation	Implemenation term
1. Policy including regulations pertaining to finance					
1)	Constructing a system to monitor the current state of SME financing	In order to make policies efficiently and effectively by the integrated management, it is expected to monitor the current conditions relating to SME business and its financing precisely and timely.	Improvement of statistics for providing material for policy-making.	When identifying relevant information and data sources, it is assumed that the existing data is not sufficient. So, on the other hand, capacity building of CGCs (including constructing internak customer database) are likely to be significanly required.	Short-term (about 1 year)
2)	Inducement of appropriate mergers and acquisitions by financial institutions	Propoer inducement of M&A by the Central Bank and OJK for the improvement of MSME financing in Indonesia.	To improve the practical situation where small-scale banks have been lending within an inefficient operational system.	Some financial institutions (important player of MSME financing) are not likely to be interested in building a M&A deal. The important thsing is that how to make an environment where banks do the lending activity by making use of SME lending know-how.	-
2. Financial mechanisms & financial products					
1)	Introducing policy-based finance for the priority sectors in the manufacturing industry	In order to enhance supporting manufacturing industries selected as priority sectors in the government's industrial policy, interest subsidy combined with credit guarantee program and/or long-term low-interest financing program should be considered.	Enhancement of supporting manufacturing industries	- further budgetary burden by the government - long-term funds should be needed for such loan program, and credit appraisal capacity of implementing banks should be improved.	medium to long-term
2)	Setting up a new agricultural loan program with interest subsidy and guarantees	Such loan program should be directed to capital investment by farmers. Agricultural products or activities regarded as important by the government (e.g. expansion of farmland for estate crops or capex to increase productivity) should be covered in the program. Lease contract should also be covered.	Increase of loan for farmers (with medium or large scale)	- further budgetary burden by the government - not strong incentive for financial institutions	short-term (in 1 year) to conduct research on financing needs and design of such program
3)	Establishment of policy bank for agriculture	Specialized policy bank for agriculture which will accumulate know-how and expertise in the agricultural financing should be considered.	Increase of loan for farmers (with medium or large scale)	- further budgetary burden by the government - funding by such policy bank (not through deposit taking but by issuing bonds with government guarantee or government bonds) - feasibility of such financial institution	long-term (in 5 years)
4)	Capacity building of Regional Development Banks (BPDs)	Capacity development of BPDs in the field of MSME financing such as credit appraisal, monitoring and loan collection	Enhancement of BPDs in MSMEs financing, which leads to better financial access for regional MSMEs	- role sharing with German Sparkassenstiftung - how to select BPDs for technical assistance program	short-term (in 1- 2 years)
5)	Capacity building of BPRs and tighter monitoring by OJK	- To develop a package software used by BPRs to improve their operating capabilities - To increase the upper limit on the linkage program amounts of KUR for BPRs with good financial conditions - To improve OJK's supervision and to promote consolidation of smaller BPRs	Better financial access for MSMEs through BPRs	nothing particular	

Table 53: Summary of Policy Recommendations (2)

	Policy recommendation	Major points	Goals to be addressed	Challenges to be considered for implementation	Implemenation term
3. Credit Guarantee system					
1)	KUR/ Increase of executing banks	Promotion of participation of banks that have experience and know-how in MSMEs finance and agriculture finance.	Expansion of loan amount to MSMEs.	Incentive for participation (Related with design of next KUR system)	short - term
2)	KUR/ Increase of upper limit of loan amount in the KUR linkage program	The increase of the upper limit on the linkage program amount to BPRs with better financial status.	Expansion of loan amount to MSMEs.	Needs of Executing banks Needs of BPRs who execute linkage program	short - term
3)	Introduction of KUR Agriculture	Introduction of new system that focuses on agriculture with more attractive incentive than current KUR.	Improvement of financial access for farmer.	Increase of financial burden	short - term
4)	KUR/ Introduction of countermeasures against moral hazard	Introduction of countermeasures such as payment of guarantee fee by banks whose NPL ratio exceed a certain level.	Control of NPL.	Consensus with Banks Balance between expected effects and negative impact (decrease of loan amount)	short - term
5)	KUR/ Financial education to borrowers	Financial education to borrowers by Financial Institutions, CGCs and local governments.	Control of NPL.	Contents and development body cost	short to long-term
6)	Establishment of local CGCs in each province and an apex organization for local CGCs	Establishment of local CGCs in each province and an apex organization for managing local CGCs.	Expansion of loan amount to MSMEs and enhancement of credit guarantee system.	Increase of financial burden	medium-term
7)	Establishment of credit insurance company	Establishment of credit insurance company for the purpose of promoting credit guarantee by local CGCs.	Expansion of loan amount to MSMEs.	Increase of financial burden	medium-term
8)	Revision of loan risk weight with credit guarantee by local CGCs.	Revision of loan risk weight (80%) with credit guarantee by local CGCs.	Expansion of loan amount to MSMEs according to expansion of usage of local CGCs by financial institutions.	Impact to balance of payment of Bank Indonesia and banks	short-term
9)	Introduction of loan scheme with credit guarantee and interest subsidy program for priority industries	Introduction of loan scheme with credit guarantee and interest subsidy program for priority industries determined by the Indonesian government	Expansion of loan amount and reduction of interest burden to priority industries.	Increase of financial burden	short-term
10)	Promotion of equity contribution and payment of guarantee fee by financial institutions	Promotion of equity contribution by stakeholders including banks benefiting from credit guarantee system. Also, Financial institutions owe guarantee fee.	Control of moral hazard to Financial Institutions and capital adequacy to credit guarantee corporations.	Consensus with Banks and effect on loan volume	Medium to Long - term - confirmation of financial status of credit guarantee for the time being. - implementation at the time of consensus with banks
11)	Establishment of a specialized debt collection company	Establishment of servicer who operates debt collection.	Improvement of debt collection effectiveness.	Increase of financial burden	Medium to long - term Consideration after confirming establishment status of local CGCs and KUR scheme after 2014
12)	Capacity development for CGCs	Capacity development for national and local CGCs by enhancement of operating process such as credit appraisal, monitoring and debt collection.	Expansion of loan amount and control of NPL by enhancement of credit guarantee system.	Increase of financial burden	medium-term (in 3 years)
13)	Full and detailed evaluation of KUR and detailed design of next KUR (including of setting new KPI)	Full and detailed evaluation of current KUR for establishment of new KUR scheme after 2014	Formulation of more effective KUR system	Increase of financial burden	Short - term (1 year)

Table 53: Summary of Policy Recommendations (3)

	Policy recommendation	Major points	Goals to be addressed	Challenges to be considered for implementation	Implemenation term
4. Basic financial infrastructure					
1)	Enhancing Debtor Information System (DIS) to establish Credit Risk Database	To upgrade the current DIS which only includes credit status information of borrowres to Credit Risk Database with finacial information and default data of borrowers	Increase of MSME financing by financial institutions and more efficient credit analysis procedure	- Many MSMEs do not prepare financial statements, - It may be difficult to collect financial data of borrowers without cooperation by financial institutions. - It will be necessary to separate function of Credit Risk Database from the Bank Indonesia as a supervisory authority	a) short-term (in 1 year) b) medium to long-term (in 3-5 years)
2)	Establishment of private credit information services / database	To enable private sectors to start credit information services and to promote competition	Increase of MSME financing by financial institutions and more efficient credit analysis procedure	nothing particular	short-term (in 1 year)
3)	Preparation of the credit appraisal references	To deliver the average financial indicator of industries and credit reference books for various sectors in the future	more efficient credit analysis procedure for MSME financing	- Sufficient accumulation of financial information in the Credit Risk Database should be a precondition. - Financial institutions in Indonesia may not regard the industry trends and the average indicators as very important in their credit appraisal process	medium-term (in 3 years), assuming that Credit Risk Database will be established

Appendix 1: Comparative Analysis Table on Japan and Indonesia

	Financial system for micro businesses/individuals		Financial system for SMEs and Medium-sized enterprises		Financial system for agriculture, forestry and fisheries busineses	
	Japan	Indonesia	Japan	Indonesia	Japan	Indonesia
A) Policies, including regulations pertaining to finance						
Loan market model	Loan market segmentaiton model: the financial institutions sepecializing in SMEs utilize their own role as the buffer to support the finance for SMEs, while commercial banks uses SME loans as adjustment room for securing a stable funds supply to major companies	Informal finance sector as an important player	Loan market segmentaiton model: the financial institutions sepecializing in SMEs utilize their own role as the buffer to support the finance for SMEs, while commercial banks uses SME loans as adjustment room for securing a stable funds supply to major companies.	Informal finance sector as an important player	Loan market segmentaiton model: Sepecializing financial institutions concentrated on their own expertises.	Informal finance sector as an important player
	Japanese-style industry finance model, Bank-centered system (since 1950s)	Dominated market by major commecial banks, undevelopped government regional banks & credit union, micro finance companies	Japanese-style industry finance model, Bank-centered system (since 1950s)	Dominated market by major commecial banks, undevelopped government regional banks & credit union	Model of dominated by industrial union (industrial union -> Norinchukin Bank) + JA Bank	Linkage program by major commecial banks + no specializing banks expect BRI
Bank supervision and regulations	Intended low interest policies and regulations on openings of branches & sub-branches which established the loan market segmentation model by 1980s	The lending-ratio regulation for SMEs was abolished in 2001 (20% of total bank lending to be to MSMEs), but it was once again brought into effect by the Central Bank in No. 14 of the 2012 Act, and going forward, banks are legally obligated to gradually increase their lending ratios to MSMEs to 20% by 2018.	Intended low interest policies and regulations on openings of branches & sub-branches which established the loan market segmentation model by 1980s	The lending-ratio regulation for SMEs was abolished in 2001 (20% of total bank lending to be to MSMEs), but it was once again brought into effect by the Central Bank in No. 14 of the 2012 Act, and going forward, banks are legally obligated to gradually increase their lending ratios to MSMEs to 20% by 2018.		
	Corporatization of Informal finace (Mutual loans and savings bank come from "mujin"was converted into ordinary banks), conversion of credit cooperatives (industrila union act) to credit associations		Corporatization of Informal finace (Mutual loans and savings bank come from "mujin"was converted into ordinary banks), conversion of credit cooperatives (industrila union act) to credit associations			
	Law on "mujin" 1915, Mutual Loans and Savings Bank Act 1951, Act on Financial Businesses by Cooperative 1949, Industrial Union Act 1900,etc.		Law on "mujin" 1915, Mutual Loans and Savings Bank Act 1951, Act on Financial Businesses by Cooperative 1949, Industrial Union Act 1900,etc.			
Policy-based finance model	Combination of direct loans & agency loans and credit guarantee, supplementary finance/ pump-priming effect	Credit enhancement system centered on a credit guarantee system (KUR)	Combination of direct loans & agency loans and credit guarantee, supplementary finance/ pump-priming effect	Credit enhancement system centered on a credit guarantee system (KUR)	Combination of direct loans & agency loans and credit guarantee, supplementary finance/ pump-priming effect	Credit enhancement system centered on a credit guarantee system (KUR) + Interest subusidies (KKPE, KUPS, KPEU-RP）
	Introduction of Management Improvement (Marukei) Loan (micro loans by the appliance with chmber of commerce & industry)	State Development Mid-term Plan 2010-2014, Law Number 9 of 1995 on Small Enterprises, Government Regulation Number 32 of 1998 on Small Enterprises, Law Number 20 of 2008 on Micro, Small and Medium Enterprises	Financial/screening system for industrial development/industry creation	State Development Mid-term Plan 2010-2014, Law Number 9 of 1995 on Small Enterprises, Government Regulation Number 32 of 1998 on Small Enterprises, Law Number 20 of 2008 on Micro, Small and Medium Enterprises		State Development Mid-term Plan 2010-2014, Law Number 9 of 1995 on Small Enterprises, Government Regulation Number 32 of 1998 on Small Enterprises, Law Number 20 of 2008 on Micro, Small and Medium Enterprises
	High share (Governmental financial insitutions:10%, Penetration ratio of CGCs: 36.8%)	Increased rapidly, but relatively lower penetration ratio (KUR:15.3%)	High share (Governmental financial insitutions:10%, Penetration ratio of CGCs: 36.8%)	Increased rapidly, but relatively lower penetration ratio (KUR:15.3%)	Market dominated by JA Bnak and JFC	Relatively lower penetration ratio (KUR:15.3%, KUR for agriculture sector: 4.4%)
Laws on the establishment of governmental financial institutions	People's Finance Corporation Act 1949		Small Business Finance Corporation Act 1953		Agriculture, Forestry and Fisheries Finance Corporation Act 1952	
	Environmental Sanitation Business Finance Corporation Act 1967		Small and Medium-sized Enterprise Investment Business Corporation Act 1963			
	Credit Guarantee Corporation Act 1953		Shoko Chukin Bank Act 1936			
	Small and Medium-sized Enterprise Credit Insurance Act 1958					
Policy costs and budget	The amounts of the Fiscal Investment and Loan Program (FILP) in the fiscal year 2012 fiscal investment and loan plan were 2.330 trillion yen for the Micro Business and Individual Unit. The policy costs in fiscal year 2012 (subsidies from the national government + opportunity costs such as investments from the national government - the decline in the retained loss) were 144.6 billion yen for the Micro Business and Individual Unit.	The accumulated government expenditures for KUR until FY2012 is 8.3 trillion Rp. and the annual budget in FY2013 for KUR is 825 billiion Rp.	The amounts of the Fiscal Investment and Loan Program (FILP) in the fiscal year 2012 fiscal investment and loan plan were 1.8660 trillion yen for theSME Unit. The policy costs in fiscal year 2012 (subsidies from the national government + opportunity costs such as investments from the national government - the decline in the retained loss) were 105.7 billion yen for the SME Unit.	The accumulated government expenditures for KUR until FY2012 is 8.3 trillion Rp. and the annual budget in FY2013 for KUR is 825 billiion Rp.	The amounts of the Fiscal Investment and Loan Program (FILP) in the fiscal year 2012 fiscal investment and loan plan were 180 billion yen for the Agriculture, Forestry, Fisheries, and Food Business Unit. The policy costs in fiscal year 2012 (subsidies from the national government + opportunity costs such as investments from the national government - the decline in the retained loss) were 138.4 billion yen for the Agriculture, Forestry, Fisheries, and Food Business Unit.	The accumulated government expenditures for KUR until FY2012 is 8.3 trillion Rp. and the annual budget in FY2013 for KUR is 825 billiion Rp.
	The income and expenditure of financing by guarantee corporations has largely been stable. On the other hand, the income and expenditure of credit insurance (insurance income and expenditure) has continued to record large deficits, although it has fluctuated to some extent, and those deficits are being covered by government investments. In particular during the worldwide recession caused by the bankruptcy of Lehman Brothers in the autumn of 2008 approximately two trillion yen in funds was injected by the government, resulting in an enormous fiscal burden. A cumulative total of nearly 8 trillion yen has been injected into the credit insurance and related sectors since fiscal year 1998.	Guarantee fee is 3.25% after February 2010 (1.5% before that). Credit guarantee corporations, Jamkrindo and Askrindo, remain in surplus thanks to interest income. But, if NPG ratio is over 2.275% (3.25% × 70%), subrogation payment cannot be covered only by guarantee fee (except interest incomes).	The income and expenditure of financing by guarantee corporations has largely been stable. On the other hand, the income and expenditure of credit insurance (insurance income and expenditure) has continued to record large deficits, although it has fluctuated to some extent, and those deficits are being covered by government investments. In particular during the worldwide recession caused by the bankruptcy of Lehman Brothers in the autumn of 2008 approximately two trillion yen in funds was injected by the government, resulting in an enormous fiscal burden. A cumulative total of nearly 8 trillion yen has been injected into the credit insurance and related sectors since fiscal year 1998.	Guarantee fee is 3.25% after February 2010 (1.5% before that). Credit guarantee corporations, Jamkrindo and Askrindo, remain in surplus thanks to interest income. But, if NPG ratio is over 2.275% (3.25% × 70%), subrogation payment cannot be covered only by guarantee fee (except interest incomes).	Although agricultural credit insurance has not made a loss other than in fiscal year 2008, fiscal support of hundreds of billions of yen has been provided every year in order to the cover the deficits of the forestry and fisheries credit insurance.	Guarantee fee is 3.25% after February 2010 (1.5% before that). Credit guarantee corporations, Jamkrindo and Askrindo, remain in surplus thanks to interest income. But, if NPG ratio is over 2.275% (3.25% × 70%), subrogation payment cannot be covered only by guarantee fee (except interest incomes).

	Financial system for micro businesses/individuals		Financial system for SMEs and Medium-sized enterprises		Financial system for agriculture, forestry and fisheries busineses	
	Japan	**Indonesia**	**Japan**	**Indonesia**	**Japan**	**Indonesia**
B) Financing mechanisms and financial products						
Financing mechanism by financial institutions sepecilizing in SMEs (goverment)	JFC-Micro Unit		JFC-SME Unit		JFC-AFFF Unit	
Financing mechanism by financial institutions sepecilizing in SMEs (private)	Credit unions, credit associations, mutual loans & savings banks	State bank (BRI), rural credit banks, credit cooperatives, private banks, informal finace companies, micro finance companies, pawn shops	Citi banks, regional banks, non-banks	State banks (BRI, Bank Mandiri, BNI, etc.)、government regional banks、private nation banks, rural credit banks, multifinance companies	JA Bank, Norinchukin Bank, non-banks	BRI, credit cooperatives, suppliers' credit, informal finance, etc.
Loan interest subsidy system	Loan interest subsidies by local government		Loan interest subsidies by local government		Loan interest subsidies by Ministry of Agriculture, Foresty and Fisheries, and local government	Loan interest subsidies by Ministry of Agriculture and local governments
Countermeasures to reduce the relatively high costs of credit appraisal associated with SME lending	Community-based marketing, credit scoring (work-saving by IT introduction)	community-based marketing, credit scoring (work-saving by IT introduction)	Main bank system, relationshop lending	Custome of having only one bank transaction, relationship lending	Community-based marketing	Community-based marketing
Others (SME specializing banks' NPL ratio and profit margin, borrowers' incentives of loans, etc.)		NPL ratio of MSME loans by commercial banks: 3.6% in Mar. 2013 Average interest rate of BPRs: late 20% to early 30%, NPL ratio of BPRs: 5.3% in Mar. 2013		NPL ratio of MSME loans by commercial banks: 3.6% in Mar. 2013 Average interest rate of BPRs: late 20% to early 30%, NPL ratio of BPRs: 5.3% in Mar. 2013		NPL ratio of MSME loans by commercial banks: 3.6% in Mar. 2013 Average interest rate for loans to Agriculture, hunting and forestry industry is 34.89% for BPRs and 11.34% for commercial banks in Mar. 2013
Financing products by financial institutions sepecilizing in SMEs (goverment)	Policy loan programs and Marukei loan by JFC-Micro which have given policy induction and quantitative supplement effects		Policy loan programs by JFC-SME which have given policy induction and quantitative supplement effects		Policy loan programs by JFC-AFFF which have given policy induction and quantitative supplement effects	
Financing products by financial institutions sepecilizing in SMEs (private)	Unique finacial products of credit cooperatives and mutual loans & savings banks	Financial services by state bank (BRI), rural credit banks, credit cooperatives, informal finace companies, micro finance companies, pawn shops, etc.	Citi banks (MUFG-TKC Starategic Manager Loan, etc.), non-banks (financial leasing)	Financial services by state banks (BRI, Bank Mandiri, BNI, etc.), government regional banks、private nation banks, rural credit banks, multifinance companies	Financial products of JA Bank, Norinchukin Bank, non-banks, regional banks and mega banks	Financial services by BRI, informal finance, etc.
c) Credit guarantee system						
Credit guarantee	CGCs (52)	State-owned credit guarantee corporations（Askrindo, Jamkrindo）、regional credit guarantee corporations（Jamkrida Jatim, Jamkrida Bali Mandara, etc.）	CGCs (52)	State-owned credit guarantee corporations（Askrindo, Jamkrindo）、regional credit guarantee corporations（Jamkrida Jatim, Jamkrida Bali Mandara）	Agriculture Credit Guarantee Fund Association	State-owned credit guarantee corporations（Askrindo, Jamkrindo）、regional credit guarantee corporations（Jamkrida Jatim, Jamkrida Bali Mandara）
	Guarantee ratio: 80%（2007-）	Guarantee ratio: 75% (KUR: 70%-80%)	Guarantee ratio: 80%（2007-）	Guarantee ratio: 75% (KUR: 70%-80%)	Guarantee ratio: 80%	Guarantee ratio: 75% (KUR: 70%-80%)
Credit insurance	JFC (coverage ratio: 70%-90%)		JFC (coverage ratio: 70%-90%)		Agriculture, Forestry and Fisheries Credit Foundations (coverage ratio: 70%)	
d) Basic infrastructure						
Book-keeping	Book-keeping system widely spreded	Book-keeping system has not become widespread	Finance/accounting system widely spreaded	Finance/accounting has not become widespread	Book-keeping system widely spreded	Book-keeping system has not become widespread
Tax declaration system	Blue return tax system	Undeveloped tax declaration system	Developed tax declaration system	Undeveloped tax declaration system	Developed tax declaration system	Undeveloped tax declaration system
Credit appraisal information	Credit appraisal judgement by qualitataive factor analysis (scoring)	Credit appraisal judgement by qualitataive factor analysis (5C)	Guides to loan screening according to industry sector (Kinzai), SME management indexes (SME Agency)	Lack of average financial statements by industry and industry data necessary for making credit appraisal	Undeveloped financial statement	Undeveloped financial statement
Collateral and registration system	Collateral and registration system established and promoted IT introduction	Undeveloped collateral and registration system BI in cooperation with National Land Body enhancing land ownership registration BI in cooperation with IFC planning to establish removable assets registration system	Collateral and registration system established and promoted IT introduction	Undeveloped collateral and registration system BI in cooperation with National Land Body enhancing land ownership registration BI in cooperation with IFC planning to establish removable assets registration system	Collateral and registration system established and promoted IT introduction	Undeveloped collateral and registration system BI in cooperation with National Land Body enhancing land ownership registration BI in cooperation with IFC planning to establish removable assets registration system
Infrastructure of credit information (public)	CRD (177 members including credit guarantee corporations)	Bank Indonesia's Debtor Information System (SID)	CRD (177 members including credit guarantee corporations)	Bank Indonesia's Debtor Information System (SID)	ACRIS（Agricultural Credit Risk Information Service) by JFC	Bank Indonesia's Debtor Information System (SID)
Infrastructure of credit information (private)	Shinkin Data Bank (SDB), Risk Data Bank of Japan (RDB), Teikoku Databank (TDB), CIC (personal database), etc.	Japan's CIC plans to establish a credit bureau with PEFINDO (2013) as the first private credit bureau in Indonesia.	Shinkin Data Bank (SDB), Risk Data Bank of Japan (RDB), Teikoku Databank (TDB), CIC (personal database), etc.			

Appendix 2: Seminar Presentation Material

Coordinating Ministry for Economic Affairs (CMEA)
Japan International Cooperation Agency (JICA)

Seminar:

MSME Finance and Financial Inclusion

- Experiences of Japan and Possible Improvement for Indonesia -

July 3rd, 2013

Japan Economic Research Institute Inc.

Contents of Today's Presentation

I. Study Outline
II. Experiences of Japan
III. Evaluation on MSME Finance in Indonesia
IV. Possible Improvement for Indonesia

- Q&A / Discussion -

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I. Study Outline

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1. Study Objective

☆ ***Study Objective*** is

(1) to analyze the current situation of financial inclusion in Indonesia, and

(2) to make recommendations for

- ✓ Enhancement of the financial access of MSMEs (Micro, Small and Medium Enterprises), and
- ✓ Expansion of KUR for the productive sector,

based on experiences of Japan

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2. Study Items (1)

i. Policies and regulations in the financial sector
   - To examine policies and actions for enhancement of financial access of MSMEs (including KUR)

ii. Financing mechanisms / financial products
   - To identify issues in the financial accesses of MSMEs and KUR system, through interviews with financial institutions
   - To analyze availability of financial products targeting on MSMEs or the agricultural sector, and their loan / guarantee conditions

2. Study Items (2)

iii. **Credit guarantee system**
   - To examine guarantee operations, profitability and issues of the KUR system, through interviews with CGCs (Credit Guarantee Corporation) and other stakeholders including banks
   - To examine any moral hazards

iv. Basic infrastructure
   - To examine the basic infrastructure for financial sector, which ensures the trustful financial information of debtors, such as “Debtor Information System”
   - To examine the availability of other references for loan appraisals

II. Experiences of Japan

1. Financial System for SMEs in Japan

- Financial system for SMEs in Japan was established by the end of 1950s
- Major characteristics of SME finance system in Japan are:
  - ☆ Policy-based financial institutions
  - ☆ Segmentation of the SME loans market
  - ☆ Credit guarantee system
  - ☆ Credit information system

Definition of SME in Japan

Sector	Capital size (in million JPY)	Number of employees
Manufacturing and others	300 or less	300 or less
Wholesale	100 or less	100 or less
Retail	50 or less	50 or less
Services	50 or less	100 or less

(Note) JPY 1 = Rp. 104
(Source) Act No. 154 of 1963 SME Basic Act (Amended in Dec 1999)

Cf: Definition of MSME in Indonesia

Category	Number of employees	Annual Sales (in mil Rp.)	Net Assets (in mil Rp.)
Micro	< 5	< 300	< 50
Small	5 - 19	300 – 2,500	50 - 500
Medium	20 - 99	2,500 – 50,000	500 – 10,000

(Source) MSME Act No.20/2008 and others

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Historical View on Formation of Japanese-style Financial Systems

Background

- ✓ SME Sector: Financial Difficulties
- ✓ Banking Sector: NPL problems of private banks after World War II
- ✓ SME Policies: To deal with "Failure of Market"

- ➢ Two policy-based financial institutions, one for SMEs and the other for Micro, were established in 1953 and 1949 respectively.
- ➢ Two layer structure of credit guarantee system, credit guarantee corporations at prefecture level and one insurance company at national level, was established in 1950s.

Fundamentals of finance system for the SMEs was established in 1950s.

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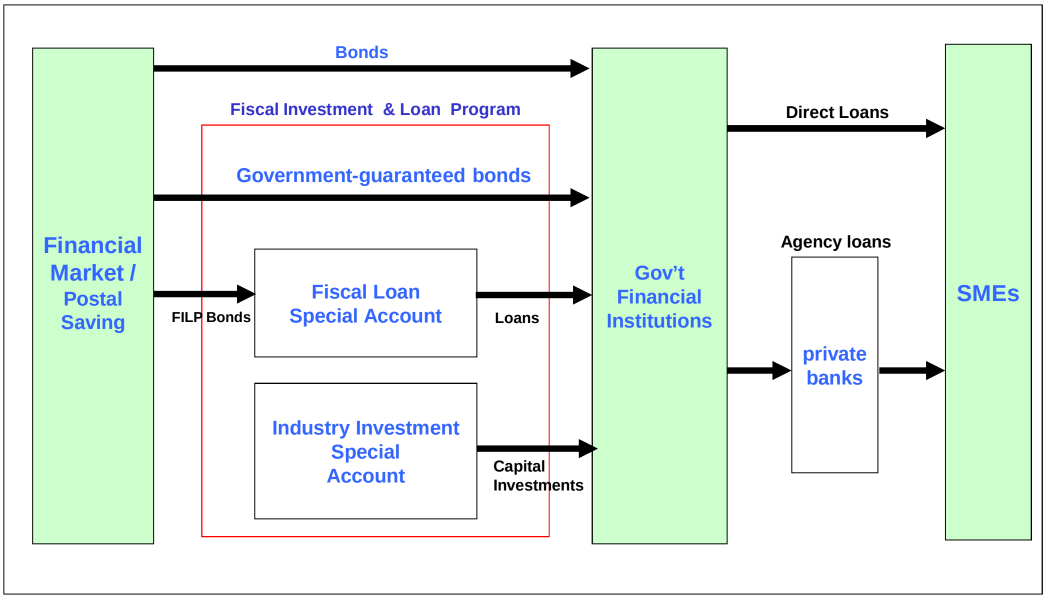
Outline of Policy-based Finance System



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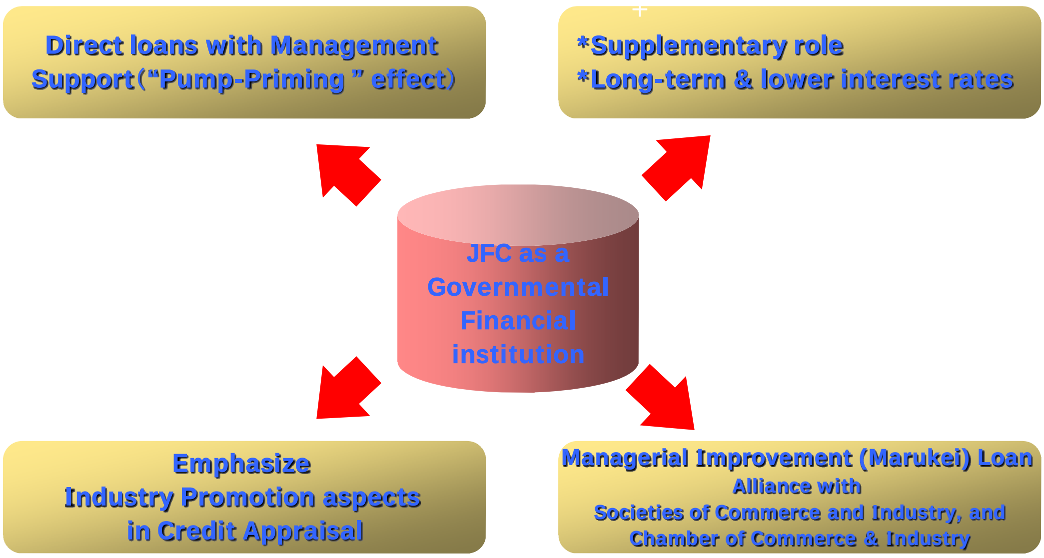
Characteristics of JFC as a Governmental Financial Institution



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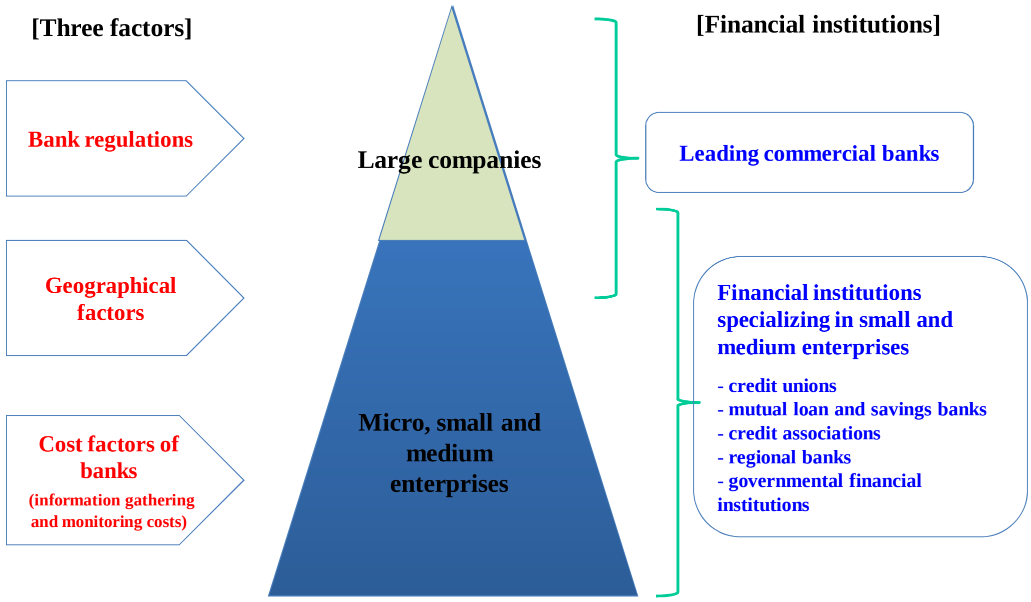
Loan Market Segmentation Model in Japan



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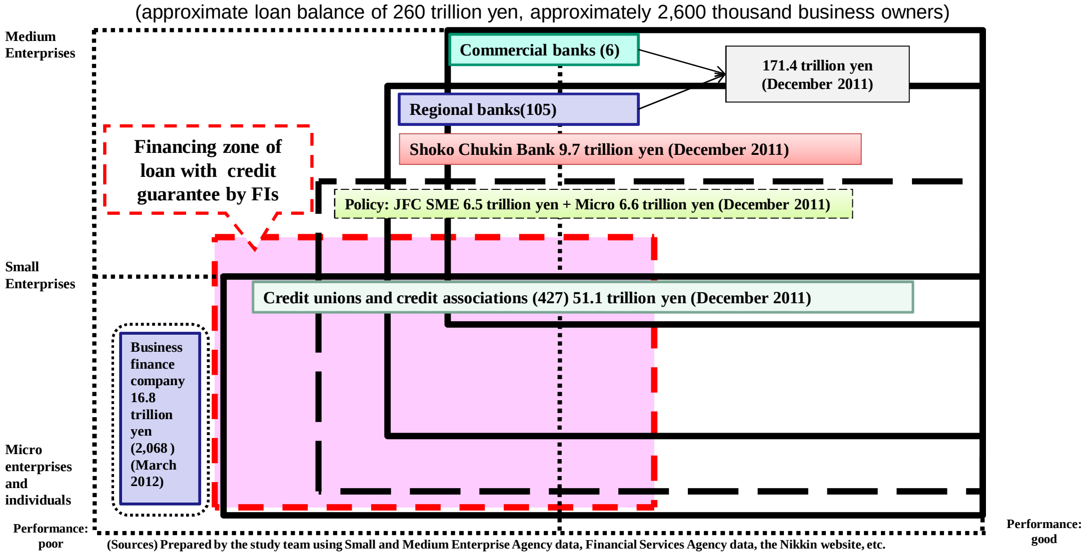
Map of Borrowings for Small and Medium Enterprises in Japan

(approximate loan balance of 260 trillion yen, approximately 2,600 thousand business owners)



(Sources) Prepared by the study team using Small and Medium Enterprise Agency data, Financial Services Agency data, the Nikkin website, etc.

- There are many players from commercial banks to business finance companies on SME finance sector in Japan.
- However, over 80% of loans with credit guarantee is executed by financial institutions (FI) except commercial banks.
- Regional FIs (Regional Bank, Credit unions & associations) and government - affiliated FIs play important roles in SME finance.

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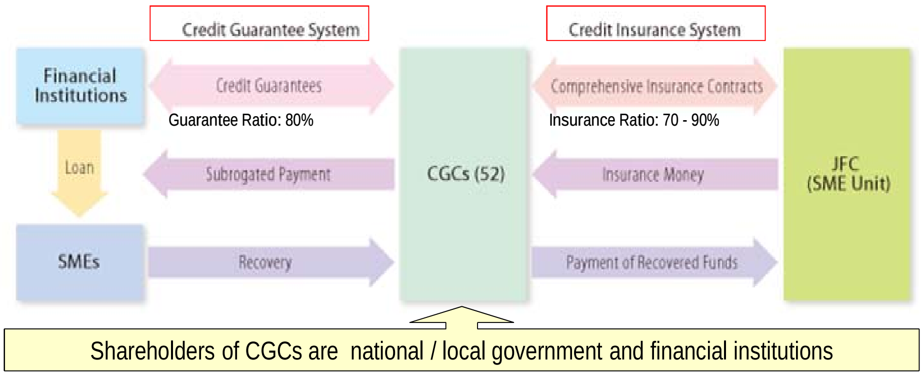
Credit Supplementation System in Japan

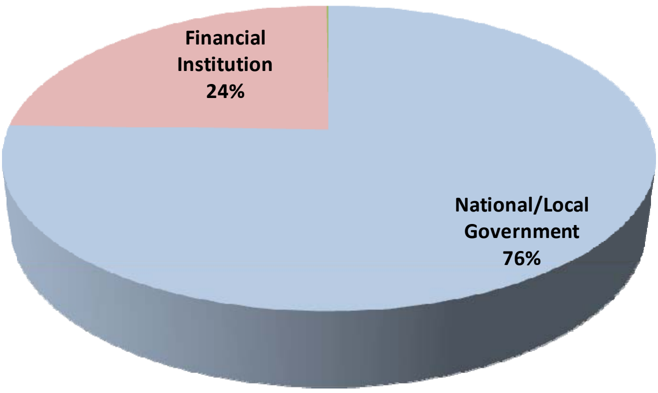
- Credit Guarantee Corporations
  - Established at all 47 provinces (prefectures)
  - Shareholders of a CGC at a province are the provincial government and financial institutions
- "Two Layer" Credit Guarantee
  - CGCs are backed by the "credit insurance" by JFC (see details for next slide)
- Credit guarantees
  - Cover the business loans (not consumer loans or housing loans)
  - Issued individually for each loan application (not automatic / comprehensive guarantee)
- Guarantee fees
  - Paid by borrowers (not subsided)

Credit Guarantee System in Japan



- The Characteristic of Credit Guarantee System in Japan is Two - Layer system.
- Two - Layer system is structured by both Credit Guarantee System & Credit Insurance System.

Capital Contribution to CGCs by Financial Institutions



- Mainly local governments and financial institutions contribute financially to CGCs.
- The effect of suppressing the moral hazard can be expected by financial sharing of FIs who benefit from credit guarantee system.

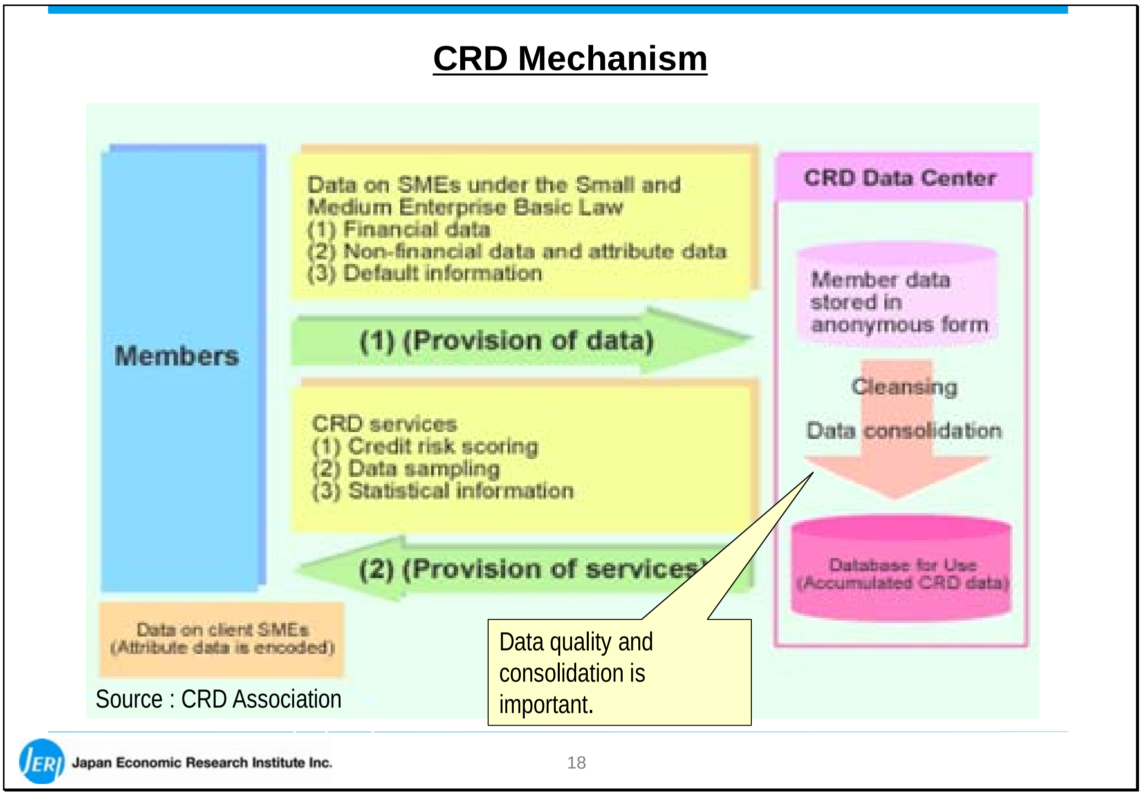
Characteristics of Credit Guarantee System in Japan

- Guarantee Limit (General Guarantee) on a borrower

  Total : JPY 280 Million (Rp 29.1 billion)
  - ✓ Guarantee with collateral: JPY 200 Million (Rp 20.8 billion)
  - ✓ Guarantee without collateral: JPY 80 Million (Rp 8.3 billion)

- Credit guarantee fee rate
  - ✓ Credit guarantee fee is paid by a borrower .
  - ✓ Credit guarantee fee rate is determined by the credit risk level of the borrower.
    - ✓ Borrowers are classified into 9 levels according to the credit risks.
    - ✓ Credit risk level is determined by the evaluation of CRD (quantitative and qualitative appraisal) since April 2006.

Credit Risk Level	1	2	3	4	5	6	7	8	9
Guarantee Fee	1.90%	1.75%	1.55%	1.35%	1.15%	1.00%	0.80%	0.60%	0.45%


CRD Mechanism
Members
Data on SMEs under the Small and Medium Enterprise Basic Law
(1) Financial data
(2) Non-financial data and attribute data
(3) Default information
(1) (Provision of data)
CRD services
(1) Credit risk scoring
(2) Data sampling
(3) Statistical information
(2) (Provision of services)
CRD Data Center
Member data stored in anonymous form
Cleansing
Data consolidation
Database for Use (Accumulated CRD data)
Data on client SMEs (Attribute data is encoded)
Source : CRD Association
Data quality and consolidation is important.
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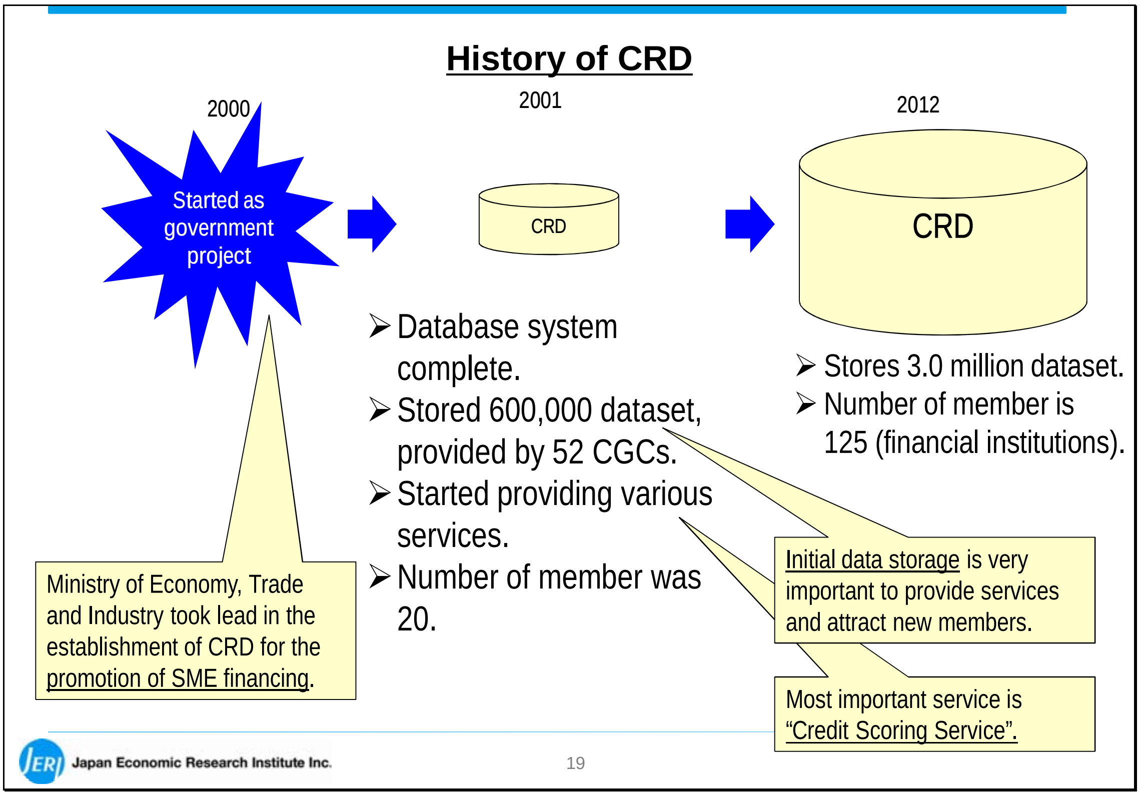
History of CRD
2000
Started as government project
2001
CRD
2012
CRD
Database system complete.
Stored 600,000 dataset, provided by 52 CGCs.
Started providing various services.
Number of member was 20.
Stores 3.0 million dataset.
Number of member is 125 (financial institutions).
Ministry of Economy, Trade and Industry took lead in the establishment of CRD for the promotion of SME financing.
Initial data storage is very important to provide services and attract new members.
Most important service is "Credit Scoring Service".
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Credit Information Providers in Japan

		Risk Data Bank of Japan (RDB)	Credit Risk Database (CRD)	Credit Risk Information Total Service (CRITS)	Shinkin Data Bank (SDB)
Established in		2000	2001	2004	2004
Members		61 institutions (ininitially 22 financial and non-financial institutions)	125 members (Finacial institution), and 52 credit guarantee corporations	64 regional banks	Shinkin Central Bank & 278 shinkin banks
Number of data stored	Financial statement	550,000 (corporations and sole proprietors)	More than 3,000,000 (corporations and sole proprietors, focuses on SME)	679,000	684,000 (corporations)
	Default data	157,000 (corporations and sole proprietors)	More than 300,000 (corporations and sole proprietors)		
Services		- Scoring services - Statistical information - Sample data	- Scoring services - Statistical information - Sample data - Consulting services	-Scoring services -Statistical information -Portfolio analysis	-Scoring services -Statistical infomation - Risk & portfolio management report

- There are other credit information providers; (i) Tokyo Shoko Research and (ii) Teikoku Databank. They provide credit, financial and default information and analytical report of individual companies to members.
- Also, there are three credit bureaus focusing on personal credit information including CIC.

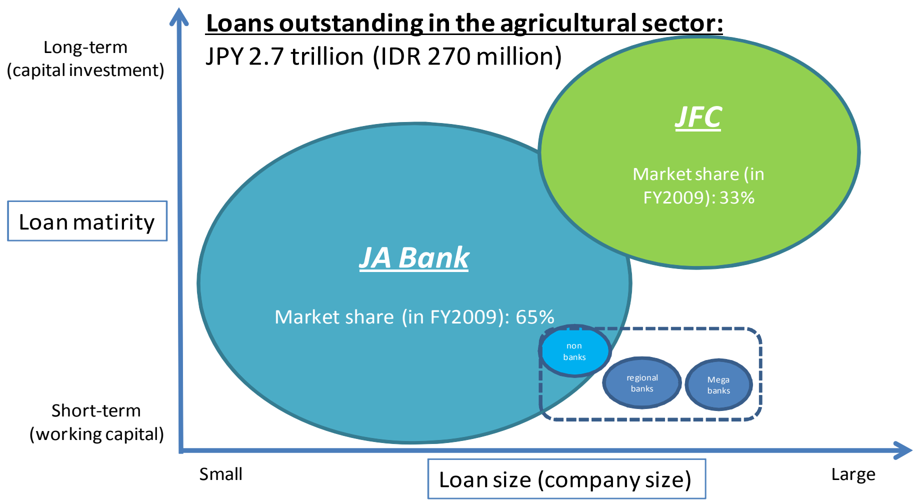
2. Financial System for the Agriculture Industry in Japan

- Financial system for the agricultural industry in Japan was created by the end of 1950s
- Major characteristics of the agriculture finance system in Japan are:
  - ☆ Unique market monopolized by two main players
  - ☆ Policy-based financial institution
  - ☆ Credit guarantee system separated from that for SMEs
  - ☆ Credit database in the agricultural sector created recently
  - ☆ “Agriculture Business Advisor” system started to transfer know-how to private banks

History of Agricultural Finance in Japan

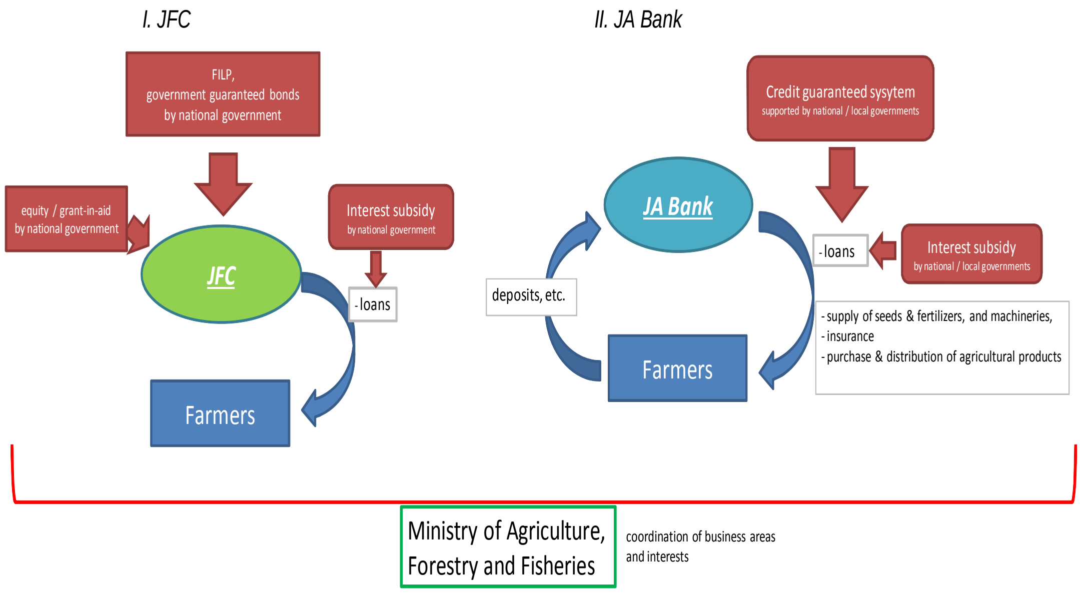
1945-	World War II over ➢ "Farm reform program" started. ✓ Land owned by landlords were distributed to smallholders. ✓ Number of smallholders expanded. ➢ Food supply problems- Japan faced serious needs for the expansion of food production.	1951 ➢ Agricultural Credit Guarantee Scheme started. 1953 ➢ Agricultural Financial Corporation (JFC AFFF Unit) established.
Around 1960	➢ Food production expansion target achieved. ➢ Farmers started moving to manufacturing sectors. ➢ Income gap between manufacturing sector and agricultural sector expanded. ➢ The gov't targeted on enhancing the productivity of agricultural production.	1961 ➢ Agricultural Modernization Loans started. ➢ Agriculture Credit Guarantee System Started.
1998-	➢ "New policy direction on food and agriculture" established. ➢ Certified farmer" system started.	➢ Loan programs for "certified farmers" started.

JA Bank and JFC: Two Major Players with Different Roles



✓ Loans in the agricultural sector is 0.6% of total loan balance in Japan, smaller than the share of agriculture in GDP (1.2%).
✓ Although there is no statistics on number of borrowers in the agricultural sector, most of small farmers have financial access to JA Bank.

Financial System Strongly Supported by Central / Local Governments



Main Player: JFC Agriculture, Forestry, Fisheries and Food Business Unit (former Agriculture Forestry and Fisheries Finance Corporation)

– Established in 1953, to increase long term financing for farmers, in order to meet huge food needs.
  - Since 1945, Japan was in a serious needs for food production increase (after Japan lost the war). Independence of small farmers was also important policy at that time.
  - The government tried to avoid possible deteriorations of the financial situation of JAs.

– JFC AFFF Unit has modified its functions and tools according to the changes in agricultural policy
  - JFC started focusing on "certified framers" by providing long term loans with low interest rate since 1990s.

Main Player: JFC Agriculture, Forestry, Fisheries and Food Business Unit

- JFC AFFF Unit (Cont'd)
  - Major loan product: "Super L Loan"
    - Anticipated loan purposes; Acquisition of farmland, Construction of farm buildings, cultivation facilities, livestock sheds and other structures
    - Loan applicants: "Certified farmers"
    - Loan period: Maximum 25 years (10 year grace period)
    - Interest rate: 0.0% for 5 years, then 0.6 - 1.40%.
      - ✓ Interest subsidy is provided by MAAF (2%) and by municipalities and provinces
    - Collateral: Case by case
    - Average loan size: 8 million JPY (800 billion Rp)
      - ✓ Larger than average agriculture loans (2 million JPY)

<Note> Certified farmers

- Certified farmers are;
  - Farmers had their "management improvement plans" approved by municipal governments.
  - They consist of 15% of total farmers.
- In the management improvement plans, farmers have to indicate;
  a. Target on the expansion of business size (e.g. farmland size, number of cattle)
  b. Target on the expansion of outputs (e.g. update of equipments, adoption of new technology)
  c. Target on the management efficiency

Main Players in Agricultural financing (cont'd)

- JFC AFFF Unit (Cont'd)
  - Profitability and government subsidy

	2005	2006	2007
Operating Income	131,852	120,453	115,910
- Interest income	73,108	65,654	60,995
- Government Subsidy	37,792	38,132	35,523
Loans	3,105,950	2,942,501	2,823,225
Interest income / Loans	2.35%	2.23%	2.16%
Government Subsidy / Loans	1.22%	1.30%	1.26%

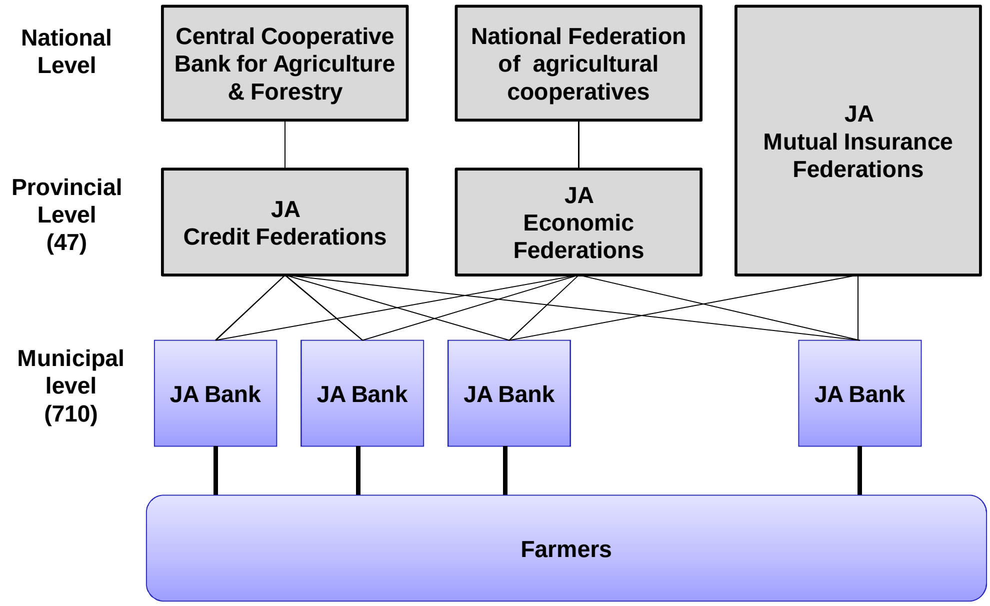
Million JPY

- About 30% of the operating income JFC is from government subsidy (equivalent to 1.2% of loan balance).

Main Player: JA Bank

- Japan Agricultural Cooperatives (JA)
  - 710 JAs in all over Japan at municipal level
  - Apex bodies at provincial and national level.
  - Conduct a wide range of businesses and activities in the spirit of mutual assistance
    - Technical support for farmers
    - Marketing of crops, and supply materials for production
    - Provide mutual insurance
    - Banking services
  - JAs mainly provide short term loans to farmer based on the estimated production of farmers (that JAs would purchase).

Structure of Agricultural Cooperatives (JAs)



Main Player: JA Bank

- Japan Agricultural Cooperatives (JA)
  - Major loan product; “Agriculture Modernization Loan”
    - Anticipated loan purposes; Machinery &. Equipment Investment, working capital
    - Loan applicants: Farmers with certain size or income
    - Loan period: Maximum 15 years (7 year grace period)
    - Interest rate: 1.0%
      - ✓Certified farmers can receive interest subsidies.
    - Collateral: Not necessary (Guaranteed by a CGC)

Guarantee scheme for agriculture loans in Japan

- Separately established in 1951 from SME credit guarantee.
  – In the same year "Agriculture Modernization Loan" was established.
- Currently, most of the agricultural loans of JAs (incl short term loans) are guaranteed.
- NPL of JAs is 2.3% (as of 2011), decreased from 5.5% in 2002.

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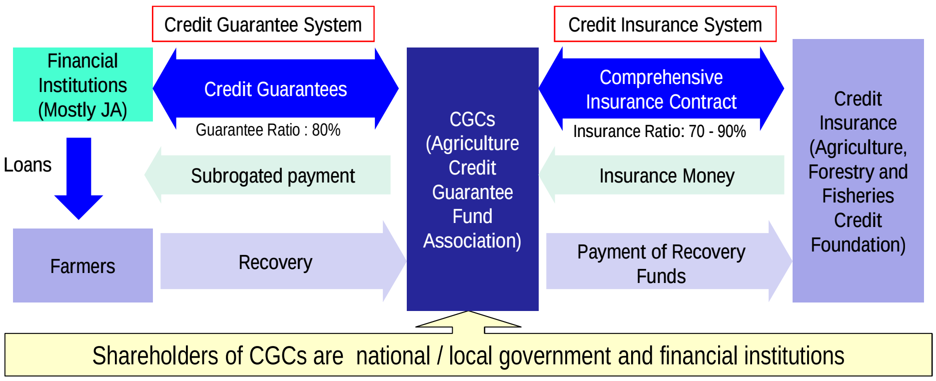
Credit Guarantee System for Agriculture, Forestry and Fisheries



- Characteristics of Credit Guarantee System for agriculture are
  - Dedicated guarantee system for agriculture sector.
  - Two layer system : CGSs are backed by insurance (re-guarantee)

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Another player: multi-finance companies

- The share of multi-finance companies in agriculture finance is estimated to be 5%.
- Multi-finance companies started putting priorities on agricultural sector, as one of the next growth areas after consumer finance for electric appliances, automobiles.
- Multi-finance companies utilize its existing broad network and collaborate with retailers of farm equipment, as in the case of electric appliances and automobiles.
- More flexible financing terms (e.g. annual installment) are introduced, with shorter internal process.
- "Certified farmers" can receive subsidies for leasing cost for agricultural machineries (10 – 15 %).

3. Implications from the Experience of Japan

1. Policy-based financial institution focusing on SME financing and agricultural financing
2. Two-layer credit guarantee system
3. Combination of interest subsidy and credit guarantee for priority areas
4. Credit information bureau – Government initiative to support SMEs financing and private credit bureaus

3. Implications from the Experience of Japan (1)

- **Policy-based financial institutions focusing on i) MSME financing and ii) agricultural financing**
  - MSME Financing : (a) JFC Micro Business and Individual Unit and (b) JFC SME Unit
  - Agriculture financing: JFC AFFF Unit

See slide 11 and 25 for details

Pros	Cons
Stable long-term funds for borrowers	Government budget burden
Know how accumulation, which is to be shared with private banks	Crowding out of private banks
Pump-priming effect	Market distortion
Reducing information asymmetry	
Stronger tool for the government to achieve policy goals, including credit facilitation during market crisis	
Lower interest rate for borrowers	

3. Implications from the Experience of Japan (2)

- Two-layer credit guarantee system
  - CGCs at provincial level provide guarantee to borrowers.
  - They are then re-guaranteed by JFC SME Unit under the "Credit Insurance System".

See slide 15 for details

Pros	Cons
Better outreach (financial access) by regional credit guarantee corporations, supported by national credit insurance company	Government budget burden
Equity contribution by stakeholders, which contributes to reduce moral hazard issues	Moral hazard of banks
Widespread participation of financial institutions including smaller local financial institutions	

3. Implications from the Experience of Japan (3)

- Combination of interest subsidy and credit guarantee
  - In agricultural financing in Japan, interest subsidies and credit guarantee have been used in combination for priority areas.
    - eg. Capital investment of “Certified farmers” who are willing to expand or increase its efficiency in production.
    - Guarantee fees are paid by borrowers.

See slide 26 for details

Pros	Cons
Stronger and more effective financial incentive for policy targeted areas --- beneficial for both SMEs / farmers and financial institutions	Larger government budget required Moral hazard of borrowers and banks

3. Implications from the Experience of Japan (4)

- Initiative of the government to set up credit risk database (CRD)
  - CRD was developed under the initiative of METI to promote SME financing.

Pros	Cons
Access to credit scoring system at affordable prices by small financial institutions, which do not have enough data	Limited disclosure by financial institutions to prevent free ride or over-control by the government. Hence, possibly insufficient data collection / storage.

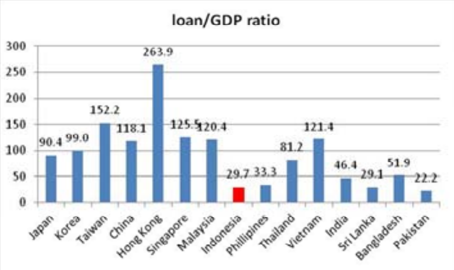
- Several credit risk database operated by different players
  - Besides CRD (developed under the initiative of the government), there are a few more private credit databases.

See slide 19 and 20 for details

Pros	Cons
Better and variety of credit information and services available due to competition among the private sectors. No need to concern on possible government interventions.	Alliance of financial institutions needed to have better database

III. Evaluation on MSME Finance in Indonesia

1. Financial Inclusion in Indonesia (1)



(Source) Business Monitor International Ltd. "Indonesia Commercial Banking Report Q3 2012"

Financial Inclusion Index by the World Bank

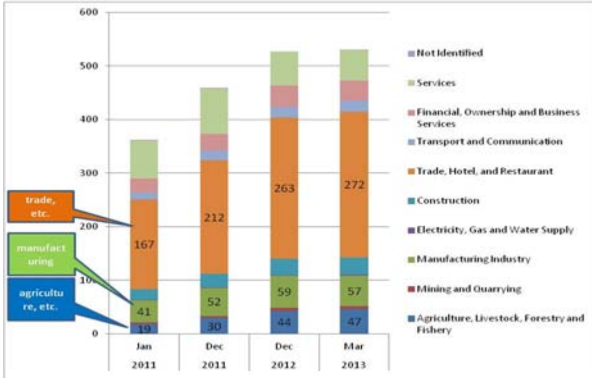
	Indonesia	East Asia & Pacific	World
Percent of firms with a checking or savings account	51.5	86.9	87.7
Small (5-19)	46.3	85.6	85.5
Medium (20-99)	89.1	91.3	92.6
Large (100+)	92.5	89.8	95.7
Percent of firms with a bank loan/line of credit	18.2	38.7	35.5
Small (5-19)	16.5	32.2	29.4
Medium (20-99)	27.6	48.8	44.4
Large (100+)	47.1	46.3	55.2
Proportion of loans requiring collateral (%)	83.6	76.5	77.9
Small (5-19)	81.1	80.0	76.6
Medium (20-99)	94.6	86.4	81.4
Large (100+)	91.7	87.3	82.1
Percent of firms using banks to finance investments	11.7	24.7	26.3
Small (5-19)	10.3	21.2	22.4
Medium (20-99)	12.9	26.2	28.4
Large (100+)	29.5	29.3	35.4
Proportion of investments financed internally (%)	85.8	70.1	69.4
Small (5-19)	86.2	72.2	71.3
Medium (20-99)	85.0	72.6	68.5
Large (100+)	81.9	75.7	66.0

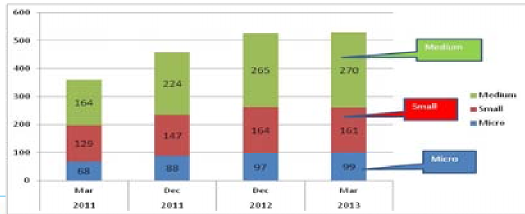
(Source) The World Bank Enterprise Survey (manufacturing firms only)

- ✓ Loan / GDP ratio of Indonesia is one of the lowest among major Asian countries.
- ✓ Percent of firms with bank account and bank loans in Indonesia is much lower in “Small” and “Medium” sized companies.

1. Financial Inclusion in Indonesia (2)

Loans outstanding to MSMEs by commercial banks





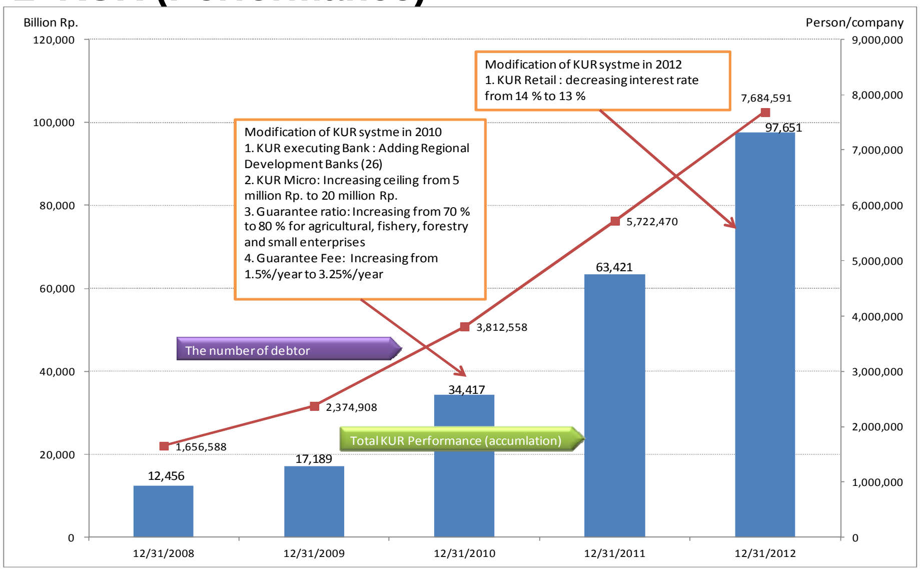
% of MSMEs loans to total loans (industrial origin) by commercial banks

	2011 Jan	2011 Dec	2012 Dec	2013 Mar
Loans by Industrial Origin	30.5%	24.3%	20.7%	20.3%
Agriculture, Livestock, Forestry & Fishery	20.8%	16.8%	14.1%	13.2%
Mining and Quarrying	5.3%	3.8%	3.5%	3.3%
Manufacturing Industry	15.3%	12.3%	10.0%	9.9%
Electricity, Gas and Water Supply	3.4%	2.6%	1.8%	1.6%
Construction	31.7%	26.8%	21.8%	22.1%
Trade, Hotel, and Restaurant	53.2%	42.1%	33.0%	31.0%
Transport and Communication	17.0%	13.4%	11.3%	10.9%
Financial, Ownership & Business Services	20.7%	15.1%	12.7%	12.4%
Services	47.0%	40.9%	49.7%	54.6%

✓ Loans outstanding to MEMEs has been increasing. In terms of sector, "trade, hotel and restaurant" is the largest and leading the growth.

✓ However, % of MSMEs loans to total loans has been decreasing. It is considered that commercial banks has been allocating more funds to large companies.

2. KUR (Performance)



Performance : 12.5 trillion (08) →97.7 trillion (12) →108.4 trillion (March 13)
Number of debtors : 1.7 million(08)→7.7 million(12) →8.3 million (March 13)

2. KUR

- KUR coverage (Penetration Ratio) (as of Mar 2013)

Sector	The number of company			Loan outstanding (billion Rp)			KUR
	①Total	②KUR	②/①	①SME	②KUR	②/①	Outstanding/company
Agriculture, Fishery	26,685,711	1,183,619	4.4%	46,951	8,164	17.4%	6.9
Mining	276,861	1,803	0.7%	4,966	49	1.0%	27.2
Processing industry	3,423,078	139,568	4.1%	57,836	1,446	2.5%	10.4
Electricity, gas and water	12,853	1,115	8.7%	1,644	30	1.8%	26.9
Construction	570,639	8,938	1.6%	32,116	724	2.3%	81.0
Trade, Hotel, Restaurant	15,910,965	5,549,372	34.9%	271,546	23,768	8.8%	4.3
Transportation	3,487,691	30,231	0.9%	21,337	963	4.5%	31.9
Total	53,823,734	8,254,733	15.3%	529,452	42,494	8.0%	5.1

* The total company number in Indonesia : as of 2010
* the user number of KUR: as of March 2013

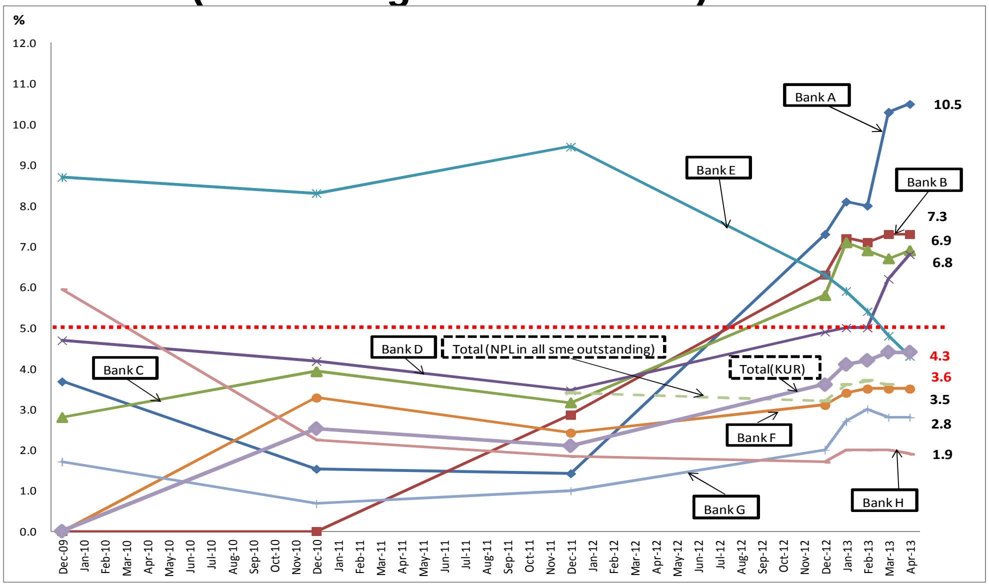
- User base: 15.3% (cf. Japan:36.8 % as of 2011)
  Agricultural: 4.4%, Processing:4.1%,Trade:34.9%
- Outstanding base: 8.0% (cf. Japan:14.0% as of 2011)
  Agricultural: 17.4%, Processing: 2.5%, Trade:8.8%

2. KUR (Performance on Project location)

Location	KUR						MSMEs Loan (Billion Rp.)		KUR Outstanding/MSME
	Debtor (Company)		Accumulation (Billion Rp)		Outstanding(Billion Rp)				
JAWA TIMUR	1,328,439	17.3%	14,775	15.1%	5,946	14.6%	65,980	12.5%	9.0%
JAWA TENGAH	1,784,123	23.2%	14,805	15.2%	5,307	13.0%	51,576	9.8%	10.3%
JAWA BARAT	1,090,436	14.2%	12,447	12.7%	4,811	11.8%	67,636	12.8%	7.1%
DKI JAKARTA	182,436	2.4%	4,647	4.8%	2,265	5.6%	93,051	17.7%	2.4%
BANTEN	117,793	1.5%	2,035	2.1%	797	2.0%	18,863	3.6%	4.2%
D.I. YOGYAKARTA	198,338	2.6%	1,835	1.9%	768	1.9%	6,549	1.2%	11.7%
Java Subtotal	4,701,565	61.2%	50,544	51.8%	19,895	48.9%	303,655	57.7%	6.6%
SULAWESI SELATAN	428,429	5.6%	5,552	5.7%	2,286	5.6%	19,460	3.7%	11.7%
SUMATERA UTARA	317,365	4.1%	5,029	5.2%	2,189	5.4%	31,470	6.0%	7.0%
RIAU	127,970	1.7%	3,083	3.2%	1,678	4.1%	16,096	3.1%	10.4%
SUMATERA BARAT	177,016	2.3%	2,964	3.0%	1,372	3.4%	10,663	2.0%	12.9%
SUMATERA SELATAN	140,552	1.8%	3,067	3.1%	1,315	3.2%	14,807	2.8%	8.9%
KALIMANTAN TIMUR	132,801	1.7%	2,621	2.7%	1,222	3.0%	17,295	3.3%	7.1%
KALIMANTAN SELATAN	143,839	1.9%	2,351	2.4%	1,136	2.8%	8,086	1.5%	14.1%
KALIMANTAN BARAT	90,932	1.2%	2,346	2.4%	1,052	2.6%	8,350	1.6%	12.6%
BALI	182,752	2.4%	2,182	2.2%	962	2.4%	16,356	3.1%	5.9%
LAMPUNG	178,057	2.3%	2,075	2.1%	919	2.3%	10,276	2.0%	8.9%
JAMBI	111,177	1.4%	1,824	1.9%	900	2.2%	7,809	1.5%	11.5%
KALIMANTAN TENGAH	73,133	1.0%	1,570	1.6%	830	2.0%	4,433	0.8%	18.7%
NANGGROE ACEH DARUSSALAM	132,261	1.7%	1,760	1.8%	530	1.3%	6,395	1.2%	8.3%
SULAWESI TENGAH	97,728	1.3%	1,167	1.2%	508	1.2%	5,559	1.1%	9.1%
NTB	115,579	1.5%	1,185	1.2%	474	1.2%	5,175	1.0%	9.2%
SULAWESI UTARA	73,818	1.0%	1,024	1.0%	458	1.1%	5,861	1.1%	7.8%
PAPUA	46,379	0.6%	943	1.0%	436	1.1%	5,477	1.0%	8.0%
SULAWESI TENGGARA	71,299	0.9%	848	0.9%	381	0.9%	3,715	0.7%	10.3%
NTT	78,769	1.0%	1,030	1.1%	374	0.9%	3,297	0.6%	11.3%
KEPULAUAN RIAU	24,513	0.3%	697	0.7%	295	0.7%	5,514	1.0%	5.4%
MALUKU	38,850	0.5%	774	0.8%	287	0.7%	1,808	0.3%	15.9%
BENGKULU	55,293	0.7%	695	0.7%	284	0.7%	3,598	0.7%	7.9%
IRIAN JAYA BARAT	16,806	0.2%	547	0.6%	247	0.6%	2,523	0.5%	9.8%
SULAWESI BARAT	39,681	0.5%	539	0.6%	223	0.5%	1,567	0.3%	14.2%
GORONTALO	50,872	0.7%	519	0.5%	154	0.4%	1,820	0.3%	8.5%
MALUKU UTARA	19,072	0.2%	401	0.4%	149	0.4%	1,327	0.3%	11.3%
BANGKA BELITUNG	18,083	0.2%	296	0.3%	128	0.3%	2,604	0.5%	4.9%
TOTAL	**7,684,591**	**100.0%**	**97,633**	**100.0%**	**40,686**	**100.0%**	**526,397**	**100.0%**	**7.7%**

- It could be evaluated that KUR is wide spread all over the country.

2. KUR (NPL : Target – 5% or less)



- NPL gradually increase : 2.5% (2010)→4.4% (Apr 2013)
- There is large difference in NPL among banks (Max:10.5%, Min:1.9%)

IV. Possible Improvement for Indonesia

1. Credit Guarantee System (1)

- Credit Guarantee System
  - ✧ Set up regional credit guarantee corporations (CGCs) in each region, and apex organization of regional CGCs
    - ✧ Establish credit insurance company which will be necessary for sustainable operation of regional credit guarantee companies
    - ✧ Revise risk weight of regional CGCs from 80% to the similar level of Jamkrindo/Askrindo
  - ✧ Combine credit guarantee with interest subsidy program for priority policy areas (guarantee fees to be paid by the borrowers)
  - ✧ Equity contribution by stakeholders including banks benefiting from credit guarantee system
  - ✧ Capacity development of CGCs in credit analysis, monitoring and loan collection skills
  - ✧ Set up a specialized debt collection company
  - ✧ Introduce countermeasure against moral hazard (e.g. Banks cannot use CGCs if NPL rate is too high.)

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1. Credit Guarantee System (2)

- KUR – further increase of KUR loans -
  - ✧ Include private banks which focus on SMEs and agricultural financing
    Current caps on interest rates should be more flexible.
  - ✧ Increase upper limit of loan amount in the KUR linkage program
    e.g. Upper limits of the linkage loans through BPR could be lifted according to their financial performances.
  - ✧ Introduce KUR Agriculture program which build in further financial incentives including higher coverage ratio, lower maximum interest rates, etc.
- KUR – decrease of NPLs –
  - ✧ Introduce countermeasures against moral hazard
    (e.g. penalty for banks with higher NPLs)
  - ✧ Financial education of KUR borrowers (KUR is not grant from the government!)

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1. Credit Guarantee System (3)

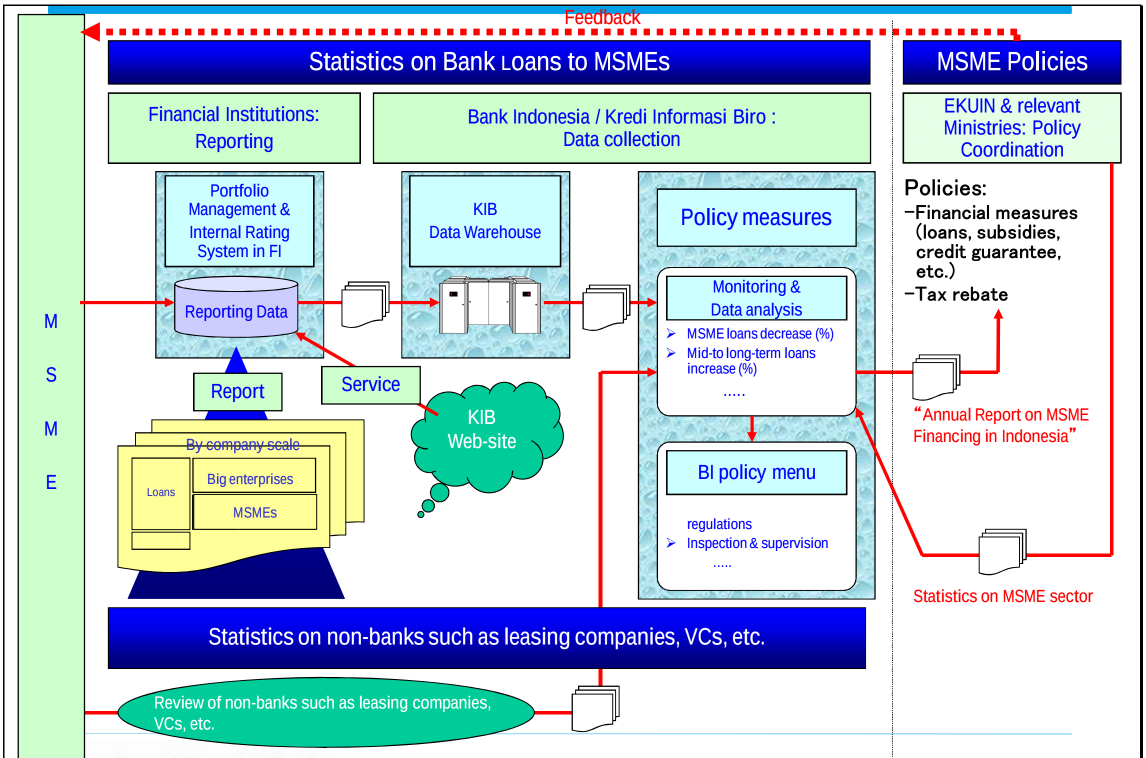
- KUR - What's next after 2014? -
  - Full and detailed evaluation of the performance should be conducted.
  - More detailed program design could be considered in the next KUR.
    - Priority sectors in accordance with the government industrial policy
      e.g. Agriculture: capital investment for value-added products
      Manufacturing: regional clusters
    - Priority areas (with lower financial inclusion)
  - Targets in the new KUR should be carefully introduced.
    - Aggressive target in loan amount alone could lead to higher NPL.
    - KPIs(Key Performance Indicators) could be different between KUR Micro and KUR Ritel.
  - Banks should make equity contribution in CGCs and/or pay guarantee fees based on their NPL performance.

2. Financial Mechanism & Financial Products

- Development and wider use of specific loan programs targeted for farmers based on the nature of agricultural business
  - Loans to Nuclear Estate System and group lending
  - Supply chain financing
  - Annual(not monthly) installment
- Interest subsidy programs for priority sectors in each region supported by MOI and local governments
  - The government should determine priority sectors based on its future industrial development directions.
- Long-term low-interest loan program focusing on the targeted sectors, possibly funded by international financial institutions
- Capacity building of BPDs, as the future Regional Champion Bank and the apex bank of BPRs, in the field of SMEs and agricultural financing
- Set up a agriculture policy bank (or a financial mechanism) to promote agriculture financing and accumulate its experiences / know-how.

3. Policy including Financial Regulations

- ✧ Establishment of monitoring system on SME finance status
- ✧ Consolidation and reinforcement of the financial industry in Indonesia
  - ✧ M&As by major commercial banks, and between small banks
  - ✧ Stronger supervision for BPRs and realignment of BPRs
    - ✓ OJK or relevant ministries should support BPRs to enhance its corporate and financial management.
    - ✓ Upper limit on the KUR linkage program can be lifted for good performing BPRs.



4. Basic Infrastructure

- SID (Debtor Information System) should be enhanced;
  - SID should store financial information and non-financial data.
  - SID should provide credit scoring services to member financial institution.
  - SID should provide “average financial indicators” of major sectors (credit officer can use them upon appraisal).
- Private credit information databases should be encouraged to achieve wider variety and better services of credit information.
- Credit appraisal manual for the major sectors should be prepared
- Introduce Agricultural Financing Advisor system / Hold seminars on agricultural financing

5. Summery of Policy Recommendations

	Short-term	Mid- to Long-term
Policy including financial regulation	✓ Monitoring system on SME finance status	✓ Consolidation of the financial industry
Financial mechanism & financial products	✓ Development of loan programs for farmers and interest subsidy programs for priority sectors ✓ Capacity building of BPDs	✓ Two step loan program for the priority sectors ✓ Set up a agriculture policy bank
Credit guarantee system	✓ Regional CGCs with credit insurance company ✓ Countermeasures against moral hazard ✓ KUR Agriculture with further incentives ✓ Combination of credit guarantee and interest subsidy	✓ Equity contribution by participating banks ✓ Specialized debt collection company for CGCs ✓ Financial education
Basic infrastructure	✓ Credit appraisal manual for major sectors ✓ Agricultural Financing Advisor system and seminars	✓ Enhancement of SID ✓ Various credit bureaus by different players

Terima kasih

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[Appendix] Comparative Analysis of Japan and Indonesia

Category		Japan	Indonesia
Policy including financial regulation	◆ Statistics	◆ Regular statistics made by SME Agency, SME SUPPORT JAPAN, JFC, Bank of Japan, FIs specializing SME, etc.	◆ Bank loan statistics and ad-hoc survey by BI
	◆ Regulation on SME loan	◆ No regulation on banks' SME loan portfolio ratio	◆ Regulation on banks' SME loan portfolio ratio (target: 20%)
Financial mechanism & financial products	◆ Policy-based finance model	◆ Combination of direct loans & agency loans and credit guarantee for the policy objectives, supplementary finance, pump-priming effect ◆ High share (governmental financial insitutions:10%, Penetration ratio of CGCs: 36.8%)	◆ Credit enhancement system centered on a credit guarantee system (KUR) + Interest subsidies for farmers(KKPE, KUPS, KPEU-RP) ◆ Relatively lower penetration ratio (KUR:15.3%)
	◆ Policy-based FIs	◆ JFC(Micro, SME, AFFF Unit)	◆ No governmental FI established
Credit guarantee system	◆ Model	◆ Two-layer credit guarantee system (credit guarantee + credit insurance)	◆ Credit guarantee system without credit insurance system
	◆ CGCs	◆ 52 CGCs in every prefecture (guarantee ratio: 80-100%) (financially contributed by local government and FIs) and Agriculture Credit Guarantee Fund Association ◆ Specialized debt collection company	◆ State-owned CGCs（Askrindo, Jamkrindo）, regional CGCs（Jamkrida Jatim, Jamkrida Bali Mandara）(guarantee ratio: 70-80%)
	◆ Credit insurance	◆ JFC's function of credit insurance (coverage ratio: 70-90%) and Agriculture, Forestry and Fisheries Credit Foundations (coverage ratio: 70%)	
	◆ Others	◆ Combination of interest subsidy and credit guarantee (e.g. "certified farmers")	
Basic infrastructure	◆ Credit information	◆ CRD (initiated by METI), Risk Data Bank of Japan (RDB), Shinkin Data Bank (SDB), Credit Risk Information Total Service (CRITS, main members: regional banks), Tokyo Shoko Research (TSR), Teikoku Databank (TDB), CIC (personal database), etc.	◆ Bank Indonesia's Debtor Information System (SID) ◆ Japan's CIC plans to establish a credit bureau with PEFINDO in 2013 as the first private credit bureau in Indonesia. In addition, there will be a JV of Italy's CRIF and VALDO, and later JV of Korea's NICE.
	◆ Financial data	◆ Guides to loan screening according to industry sector (Kinzai), SME management indexes (SME Agency)	◆ Lack of average financial statements by industry and industry information necessary for credit appraisal
	◆ Others	◆ Agriculture Financing Advisor system	