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The "Middle Risk Gap" and Financial System Reform: Small Firm Financing in Japan

Ulrike Schaede*

Abstract

This paper addresses the puzzling existence and persistence of a pronounced "middle-risk gap" in Japan's interest rate structure, which reflects an underdeveloped and distorted market for small firm finance. The paper shows that a confluence of systemic reasons (including a shift away from the former reliance on real estate collateral, social constraints on bank strategies, bank capital adequacy constraints, and an underdeveloped market for securitized debt) and political pressure on banks have inhibited private bank activity in the middle market and necessitated specialized banks for small firm financing. A second concern is the overall low level of the loan interest rate structure. The paper argues that the government's small firm loan programs at greatly subsidized rates have depressed loan rates and exacerbated the "middle-risk gap", creating great impediments to banking reforms. However, these subsidized small firm loans are best understood as welfare, and while they are market-distorting they cannot simply be abolished without a substitute. The "middle-risk gap" is both, a strong indicator of, and an important reason for, the stalling of financial system reform in Japan. Successful reforms toward more market orientation in Japanese banking have to begin with the interest rate structure.

Key words: Middle market, Interest rates, Japan, small firm financing, government lending, securitization, banking reform.

JEL classification: D40, E43, G21, G28, I38

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1. INTRODUCTION

Japan's government has long been concerned with ensuring small firms' access to credit. In the period of rapid growth, this was a challenge because under strictly regulated interest rates (aimed at lowering the cost of borrowing to spur reconstruction), small firms would lose out against large firms when applying for loans. To address this issue, regulation segmented the banking system, limiting certain banks to certain tasks. Specialized small firm banks, such as credit unions and credit cooperatives, were restricted by law to cater only to their local, small member firms. Specialized government banks supplemented private small firm loans. A banking system developed where regulation, rather than price, determined who could lend to and borrow from whom.

Over time, economic growth and financial liberalization have put stress on this system to a point where business segmentation and price regulation have become untenable, and the coexistence of private and public banks in the same market problematic. In the 1990s, Japan embarked on a great push towards financial system reform, and in this context small firm financing and banking segmentation have once again become focal issues. The ambitious 2002 "Financial Revitalization Program" explicitly initiated corporate revival programs based on a turn away from existing processes of "political finance" and towards more market-orientation (Kinyūcho 2002).

However, Japan's interest rate structure strongly suggests that the price mechanism still does not work well in the credit market. This is underscored by a pronounced "middle-risk gap", i.e. a gap in the interest rate structure of loans outstanding that indicates an underserved middle market. This gap has persisted before the background of three seemingly contradictory elements in Japanese banking: an "overbanked" system (with bank loans outstanding nearly equaling GDP); extremely low interest rates; and an alleged "credit crunch"; i.e. many small firms reporting great difficulty in securing bank loans (cf. Figure 1).

In this paper, I address Japan's interest rate structure and the situation of small firm financing in the early 21st century, and how these relate to banking system reform. I show that what I label the "middle-risk gap" is a long-lived feature of Japanese finance. I present several

explanations for this gap — systemic, structural and political — that combine to keep banks from entering the potentially lucrative middle market. Further, the government's efforts to compensate for the credit crunch by increasing subsidized loan programs, in addition to political pressure on banks not to charge higher interest rates to small firms, has put downward pressure on the overall interest level and exacerbated the middle-risk gap, and has thus created disincentives for private banks to lend to small firms (Figure 2). Even as the government is proposing grand reforms for more market-orientation in banking, politicians from rural areas keep pushing for more protection of small firms.

As financial system reform continues, one issue is whether Japan needs specialized private banks, such as those for small firm lending. As we will see, as of 2003 private banks could or would not price loans according to their lenders' risk, and therefore refused to keep lending to small firms. Political pressure to do so will only reinforce their cautious attitude. As long as this is so, Japan needs regulation that tasks certain banks with specializing on small firms. Only when banks can craft strategies that yield profits in furnishing loans to firms, large and small, will it no longer be necessary for Japan to regulate bank specialization. This suggests that Japanese banking system reform has to begin with addressing the loan interest rate structure.

The middle-risk gap has triggered government attempts at making this market segment more attractive to banks, in spite of political pressure against it. In 2000, the Tokyo Metropolitan Government structured a market for collateralized loan obligations, and in 2003 the Bank of Japan committed ¥1 trillion to purchase collateralized loans from city banks. Also in 2003, the

¹ For example, on January 31, 2003, the Financial Services Agency issued a "business improvement order" to Mizuho Holdings, because the bank had not reached its targeted loan volume to small firms. Between March and September 2002, Mizuho's small firm loans had decreased by ¥5 trillion, and the regulator found the bank to have taken insufficient measures to lend to small firms at low rates. The political twist is that Mizuho and other city banks had received public funds in 1998 contingent on their lending a certain amount to small firms, regardless of the market situation. Mizuho announced that it would open nine new branches specializing on small firm clients (see press releases of the FSA and Mizuho at www.mizuho-fg.co.ip/pdf/release/data/20030228.pdf.)

² This position is taken by doubters within Japan of the market-oriented reform program, who argue that given the relevance of small firms for economic stimulus, specialized small firm banks should be reformed at their own pace and under continued protection (e.g., KS 2002b; KS 2003, p.4). The problem of protecting small firms' access to credit is a universal one, and many countries have special provisions for small bank finance. In the U.S., studies of the recent bank mergers and the increase in bank size have not produced unanimous results on the effects on the middle market. While some find that the merger trend is causing some large banks to specialize on small

Governor of Tokyo and an advisor to Finance Minister Takenaka announced separate plans to establish new banks that will exclusively operate in the middle market (see Section 4). The paper will show that doubts remains whether either of these initiatives can cure the middle-risk gap.

Finally, this paper argues that government banks for small firms should be discussed separately from private banks, because these banks are performing a welfare function. They do this through special program lending aimed at slowing down the bankruptcy rate of small firms. A discussion of the welfare efficiency consequences of this system will be left for future discussion; efficient or not, as long as the government has insufficient alternative routes to provide welfare to very small firms, curtailing or abolishing these loan programs may cause severe social hardship. At the same time, the middle-risk gap and the overall low level of interest rates are the best proof that subsidized loans distort the market. In the least, government programs have to be more clearly separated and demarcated from the private loan market.

The paper begins with a brief overview of the theoretical issues involved in small firm financing (Section 2). Section 3 offers a short summary of Japan's small firms and specialized private banks. Section 4 presents the middle-risk gap, as well as three separate sets of explanations why this phenomenon is so pronounced and so persistent. Section 5 discusses the activities of the government banks, and Section 6 concludes.

2. THEORIES OF SMALL FIRM FINANCING

A brief summary of the theories pertaining to small firm financing is helpful for the following analysis of the Japan's interest rate structure. Initially, economics cared little about small firms: if markets are efficient and information is complete, the size of the company has no effect on its ability to raise funding, for there will be a price that covers the risk. These assumptions have since been challenged.

First, there are scale economies in lending. The higher the loan amount, the lower the lender's inspection cost per unit of loan, and the lower the borrower's unit cost of providing

firms (e.g., Strahan/Weston 1998), other suggest differently (e.g., Peterson/Rajan 1995, Rajan 1995). It is evident, however, that bank specialization on small firms can occur by competition rather than through regulation.

information, filling out forms, etc. Because there is a correlation between loan size and firm size, regardless of firm quality, scale merits mean that large loans receive precedence. During recessions, small firms are most likely to feel a credit crunch first.

Next, information economics highlighted the imperfections involved in small firm lending. Incomplete information in terms of creditworthiness and interest rate evaluation of a small firm triggers a "lemon" problem equivalent to that in the car market (Akerlof 1970). The lender cannot fully determine how risky the borrower is, and cannot monitor the borrower once the loan is furnished. This causes problems of adverse selection and moral hazard.³

To overcome these problems, the lender needs to acquire information, which is costly. For arm's-length lending, the smaller the firm and the smaller the loan amount, the higher are the transaction costs of information; this disadvantages small firms in the spot loan market. Banks, as specialized lenders, have introduced two primary mechanisms to mitigate the information problem: by building relationships, and by combining monitoring with requiring assurances. In the past, Japanese banks have become shareholders and/or had repeated interactions with their borrowers, thus securing better information over time. In general, in "relationship banking" interest rates on loans may be determined differently from those in arm's-length transactions, and may decline over time, given accumulated information and trust. A second way to mitigate adverse selection, practiced actively by Japanese banks in the past, is to demand real estate as collateral and focus skill creation on collateral evaluation rather than borrower credit risk assessment. (See Shiozawa 2000, Adachi/Ōsawa 2000, Yabushita/Busimata 2002: 32-40, Boot 2000, Rajan 1998, Horiuchi 2003).

Stiglitz and Weiss (1981) argue that information barriers and moral hazard in lending are so severe that there is a certain (equilibrium) rate beyond which the bank's returns decline, because the more a borrower is willing to pay, the riskier he can assumed to be. Therefore, as a matter of sound business a bank only lends at its equilibrium rate, regardless of supply and

³ To see how this works, imagine a scenario where a bank is willing to give a very good borrower a rate of 5%, and a somewhat riskier borrower a rate of 10%. Lacking information, the bank cannot differentiate good from bad. If the bank therefore decided to lend to everybody at 7.5%, it would invite only the high-risk firms, which really should pay 10%. Good companies stay away, and banks end up with high-risk clients only.

demand. Inherent risk means that price does not clear the market for loans. High-risk firms are driven to alternative sources of funds, e.g. by turning to non-bank lenders or raising venture capital. A wide spread may develop between the banks' equilibrium rate and the non-banks' rate, i.e., a middle-risk gap. In the U.S., finance companies have successfully entered this gap beginning in the 1980s by developing new strategies of dealing with the higher risk, eventually causing banks to also cater to the middle market. In Japan, as we will see, new strategies of handling risk (such as through loan securitization) have long been thwarted by structural and regulatory obstacles, so that finance companies and banks were unable or unwilling to enter the gap, regardless of overall interest rate levels or money supply conditions.

Given these universal problems associated with small firm financing, three possible political solutions present themselves. First, a government can choose to invoke market mechanisms, such as by imposing strict rules on firm disclosure, by supporting institutions that advance information flow (e.g., special credit rating agencies for small firms), or by structuring markets that allow providers to guard against the increased risk, such as through loan securitization.

Another way to address middle market imperfections is to reduce asymmetric information costs through specialization among lenders. This may be based mostly on strategic choice by banks (as in the U.S. or Europe) or on regulation (Japan). Specializing on local borrowers increases expertise in small firm risk evaluation as well as acquaintance with the companies. Thirdly, the government can supplement the market by offering loan guarantees for small firm loans, or by financing government banks that specialize in small firm lending. Loan guarantees greatly reduce the need for inspection, as a successful first loan signals creditworthiness to private lenders.

Taken together, these options result into two basic routes to address small firm financing issues: to allow the market to price and structure the risk factors inherent in small firm lending; or to limit markets through bank regulation and government loan programs. Over the course of the postwar period, the U.S. has by and large attempted to go the first route, with a few guarantee

⁴ This also helps explain the small firm credit crunch in Japan: the logic of holding real estate as collateral to mitigate borrower risk stopped working when real estate prices began to fall in 1991. This suddenly introduced a

and subsidy programs to complement the private activities. In contrast, Japan has traditionally followed primarily the second route. With the banking reform plans of 2003, this approach may have reached its limits. Indeed, maybe the biggest factor slowing down Japan's reform efforts is that the government is attempting to adopt both solutions at the same time: while the reformists are pushing for more market-oriented mechanisms, many politicians with an eye on their rural constituencies are upholding the concept of nationalizing risk. This has affected Japan's interest rate structure, as visible in the "middle-risk gap".

3. THE SITUATION OF SMALL FIRMS AND SMALL BANKS

3.1. Small Firms

Small firms in Japan fall into three broad categories: firms that are long-term subcontractors of a large firm and tied into the large firm's network (*shitauke*, about 50% of all small firms); independent small- and medium-sized firms that compete on specialized knowledge; and "very small" firms. Since a 1999 revision of the Small- and Medium Enterprise Basic Law, manufacturing firms are defined as "small- and medium-sized" if they have capital of less than ¥300 million or fewer than 300 employees; lower limits apply to firms in distribution and services (see Table 1). There is no legal definition of "very small" firms, but in most statistics, these are firms with fewer than 20 employees in manufacturing, and up to 5 employees in wholesale, retailing, food and services.

Tables 2 and 3 shed some light on the role of small firms in Japan's economy. Table 2 highlights the situation referred to as Japan's "dual structure": while large firms account for less than 1% of all firms, they employ about 20% of the workforce. Table 3 shows that in the

new cost difference between large and small borrowers, causing a more severe credit crunch for small firms.

⁵ In comparison, in the U.S. the definition of a "small firm" is based either on employees or on annual sales, rather than capital. The 1958 Small Business Act allows the Small Business Administration (SBA) to define "small" by industry, and market concentration is an important consideration in this assessment. In statistics, the most often used cutoff point for a "small" firm is fewer than 500 employees. A "small firm loan" is defined by the size of the loan rather than the borrower, and is typically set at less than \$100 million (\$1 million in some statistics). Overall, a "small firm" in the U.S. is typically much larger than a "small firm" in Japan.

⁶ Literature on very small firms is scarce, with the exception of Patrick/Rohlen (1987), who have shaped most of the established views on the topic. See also Whittaker (1997).

construction industry, very small firms account for 95% of all firms, and they employ 45% of all workers. In 1997, small firms accounted for 56% of total value added in Japan, and 51% of shipments in manufacturing, 64% of shipments in wholesale, and 76% of shipments in retailing (Aoyama 2001: 37).

3.2. Small Firm Banks

Given this role in the economy and the number of voters affected, small firms have long been of keen interest to politicians. To correct for the banks' bias to lend to larger firms, especially under interest rate regulation from the 1950s to the 1980s, certain banks were specifically tasked with small firm financing. However, financial liberalization and the burst of the "bubble economy" in 1991 have challenged the logic and functioning of this segmented banking system (Hoshi/Kashyap 2001). The bad loan crisis of the 1990s led to a restructuring of the banking sector through mergers, especially among failing credit unions and credit cooperatives. The ambitious 2002 "Financial Revitalization Program" has brought to the fore the interesting question whether Japan still needs specialized banks for small firm finance.

Credit cooperatives (*shinkumi*) and credit unions (*shinkin*) are Japan's legally specialized small firm banks.⁷ While both operate based on similar not-for-profit, mutual help membership schemes, and by law have to offer services to local small- and medium-sized firms and their employees, some differences in business areas are outlined in their respective laws.⁸ Credit cooperatives are supposed to lend to slightly larger firms than credit unions, and may accept deposits from non-members. In contrast to the unions, the cooperatives may also conduct business with "growing firms"; i.e., firms that have outgrown the legal limits of a "small firm" but may stay with their credit cooperative for a certain period. While this allows cooperatives to

⁷ Savings banks (*sōgo ginkō*) were transformed into "Second-Tier Regional Banks" in 1989, when these banks were brought under the umbrella of the same Banking Law that applies to city and regional banks. Therefore, legally these banks are no longer specialized "small firm banks", although in practice most of them cater exclusively to local small firms. -- This analysis excludes agricultural cooperatives and their central bank, Norin Chukin, because they are regulated by the Ministry of Agriculture, Fisheries and Forestry, and are excluded from official banking statistics and even banking reform plans.

⁸ Credit cooperatives (*Shinyō kumiai*, short: *shinkumi* or *shinso*) have their roots in the 19th century but were reorganized after WWII based on the 1949 "Law for Small Business Cooperatives etc." (*Chūsho kigyō-tō kyōdō*

cater to a broader clientele than credit unions, both operate strictly locally.

Since 2000, credit unions and cooperatives are regulated by the central government. After some restructuring based on pressure by the Financial Services Agency (FSA) to clean up bad loans, as of July 2003 there were 323 credit unions and 190 credit cooperatives in Japan. In rural areas, the *shinkumi* and *shinkin* are often the main banks of local small firms. When the larger regional and second-tier regional banks extended their turf and began to market more aggressively for smaller, rural firms, many cooperatives lost their strongest clients. Figure 3, showing the shares by bank category in total small firm lending, reveals that the *shinkumi* and *shinkin* account for about 20% of small firm loans.

Next to credit cooperatives and unions, three government banks are specifically in charge of small firm lending (Japan Finance Corporation for Small Business, National Life Finance Corporation, and Shoko Chukin Bank; see Section 5). In 2002, these accounted for roughly \(\frac{4}{2}\)7 trillion, or 9%, of total outstanding loans to small firms of about \(\frac{4}{2}\)80 trillion (cf. Figure 3). These banks offer special loan programs at subsidized rates, to certain categories of firms and for certain business purposes. The government's goal is to act counter-cyclically by offering more funding at lower rates during periods of recession.

Non-banks also lend actively to small firms. These differ in important ways from their U.S. counterparts. In the U.S., starting in the 1980s and growing rapidly, finance companies emerged as non-bank subsidiaries of large manufacturers and distributors (e.g., GE Capital, Ford Motor Credit Co., GMAC). They raise funds in the capital markets, based initially on their mothers', and now their own, strong credit ratings. Credit risks are partially passed on to other investors through securitization (see Section 4). Finance companies engage in a large variety of financial businesses, such as leasing, car loans, second mortgages, general consumer credit lines, and factoring. As of 2001, more than 50% of the U.S. finance companies' clients were

kumiai $h\bar{o}$). In 1951, further reform turned about half of the cooperatives into not-for-profit credit unions (*Shinyō kinko*, short: *shinkin*), based on a new "Law for Credit Unions" (*Shinyō kinko hō*).

⁹ Historically, credit cooperatives were regulated by the local governments of their prefectures, but regulation was centralized in the hands of the Financial Services Agency in April 2000.

These cooperatives also have central organizations, such as the National Federation of Credit Cooperatives (*Zenshinren*). In addition, there are labor credit associations with their umbrella bank, the National Federation of Labor Credit Associations. While mostly concerned with workers, i.e., individual accounts, these are not different from the *shinkumi* and the *shinkin*. See Suzuki 1987, BOJ 1995, Zenginkyo 1994, www.shinkin.org.

companies, and it was believed that most were small. (Yabushita/Bushimata 2002: 240).

In Japan, credit card companies and leasing firms continue to face many restrictions. Non-banks that specifically lend to small firms are consumer finance companies, and so-called "shōkō loan" (lit.: "small manufacturers' lenders") and other "high interest rate lenders" (kōrigashi). According to industry data, as of 1998 the shōkō loan had loans outstanding totaling ¥34 trillion, equivalent to about 10% of small firm loans at that time. 11 However, this is probably just a small fraction of the non-bank loan market, as some of the "high interest lenders" are members of the underworld; according to one estimate there were roughly 30,000 unregistered non-banks as of 2002. 12 The current legal usury limit is 29.28%, and most consumer finance companies lend at a range of 25-29% to consumers and very small firms (Kuemmerle 2000). While some non-banks are listed firms, others use highly questionable collection methods and are suspected to charge rates far exceeding the legal limit. ¹³ Given the black market aspect of this industry, no systemic information is available on the total size of non-bank lending in Japan, or how many firms are driven to non-banks due to the private banks' hesitations to lend to small firms.

4. SMALL FIRM FINANCING IN 2002: THE "MIDDLE-RISK GAP"

4.1. The "Credit Crunch" and the Interest Rate Gap

Figure 1 showed that Japanese small firms felt an increasing credit crunch between the early 1990s and 2002, and while medium-sized firms reported some relief in 1999, very small firms experienced even greater difficulties in accessing credit than the trend line suggests. Yet, as private bank loans to small firms dropped (cf. Figure 2), lending by "high-interest rate lenders" and consumer finance firms grew dramatically in the 1990s. Many of these firms were also highly profitable, implying that loans were being repaid (Kuemmerle 2000). Thus, there was demand from viable small firms that remained unanswered by banks.

 ¹¹ Zenkoku kashikin-gyō kyōkai rengōkai, 1998 White Paper.
 ¹² Interview, Ministry of Finance, Spring 2003.

In spite of the high liquidity in the banking system and pressure on banks to increase profits, in the early 2000s the credit crunch (*kashi-shiburi*) – the banks' unwillingness to furnish new loans – was accompanied by a new phenomenon: the so-called "credit withdrawal" (*kashi-hagashi*). This refers to private banks abruptly terminating existing credit lines, and it came as a surprise in light of the well-established customs of "evergreening" (automatic loan rollovers without new risk evaluation) and granting "bicycle loans" (new loans to distressed clients for them to pay interest on outstanding loans such that the latter remain "performing" on paper). ¹⁴ While there are no data on "credit withdrawal", anecdotal evidence suggests that in the early 2000s many small firms suddenly had open credit lines closed, regardless of business results.

All this was happening before a remarkable and persistent phenomenon I refer to as the middle-risk gap in Japan's loan interest rate structure. Figure 4 shows outstanding private bank loans, by interest rate, as of December 2002. This chart reflects private bank lending only, and does not include loans by the non-bank "high interest rate lenders", data on which are difficult to come by, especially for loans priced at above the usury rate. Figure 5 represents an attempt to combine private bank and non-bank loans, by interest rate, as of December 1998 (based on Ministry of Finance estimates). At that time the usury rate limit was still at 40.004%, and the "high interest lenders" reported a total of \mathbb{Y}34 trillion in small firm loans, which does not represent the full size of the high interest loan segment. Both charts clearly show the middle-risk gap, as there was hardly any lending in the range of 5%-15%. The middle market in Japan is clearly underserved.

Surprisingly, Figure 6 shows that this middle-risk gap has been persistent over the last 30 years. With the exception of 1990 (the bubble break-up year), Japanese interest rates have clustered in the 1.5%-4% region, almost regardless of booms or busts, or financial liberalization.

One potential caveat with these figures is that nominal interest rates may overstate the case, because banks may use non-price mechanisms to adjust for risk, either by asking for compensating balances (low-interest paying deposits that earn a spread and serve as a partial

¹³ For example, black market advertisement stickers posted in phone booths may offer rates exceeding 600% p.a., once daily rates and fees are recalculated into an annual rate. Based on advertisements in Shibuya Ward, Tokyo, Winter 2003.

collateral), or by demanding varying degrees of collateral depending on risk. Both of these mechanisms were common during interest rate regulation (through the 1970s, cf. Suzuki 1980), but this has changed in the 1990s. As for compensating balances, while some corporations held time deposits exceeding ¥10 million (the deposit insurance limit), for banks these were unprofitable, as the sum of the banks' deposit insurance fee plus interest on these deposits exceeded the prime rate. As for loan collateralization, data suggest that in 2001, 33.6% of all outstanding loans were uncollateralized, and 38.9% were secured by letter from a third party guarantor, leaving less than one third of all loans collateralized by real estate. Overall, this suggests that while variations in compensating balances or collateral requirements may push effective interest rates above the level indicated in these figures, certainly this effect is not so large as to negate the existence of a middle-risk gap.

One is thus left with a puzzle: Why is the middle-risk gap so pronounced, and why has the peak (equilibrium) rate for private bank lending been so low? Why would banks and nonbanks not step into this gap? This is all the more perplexing as studies suggest that in the early 2000's Japanese banks were unable to charge loan rates not only commensurate with the risk of the borrower, but even sufficient to cover costs. Using international syndicated loan data for 1990-2001, Smith (2003) shows that Japanese banks charged significantly lower rates than U.S. or European banks for similarly termed loans with higher risks. His comparative bank profitability data indicate that core earnings as percent of assets in the early 2000's were about 2% for U.S. banks, but only 0.6% in Japan. Supporting this finding, Shinsei Bank president Yashiro in a March 2003 presentation stated that given their credit rating and cost structures, in 2002 and 2003 Japanese banks did not earn profits on loans priced below 5%. ¹⁶

4.2. Explanations for the "Middle-Risk Gap"

Explanations for the interest rate gap can be grouped into three broad types of arguments:

¹⁴ See Smith (2003) for a review of the literature on "evergreening", and Caballero et al. (2003) on the effects of evergreening and bicycle loans on the economy.

¹⁵ See Bank of Japan, *Kinyū keizai tōkei geppō*, various years. Oyama and Tanaka (2003a) offer an analysis of the effects of decreasing levels of collateralization and the banks' failure to assess real estate value properly on the Japanese economy in the 1990s.

(a) the interest rate structure is a true reflection of the market, which is in a "demand crunch" rather than a "credit crunch"; (b) systemic features of the banking system, such as an underdeveloped market for securitized debt, prevent banks from lending in the middle market; and (c) political influence constrains banks from moving into the gap. In addition, government participation in the loan market puts downward pressure on the overall interest rate level.

(a) Recession: The "Credit Demand Crunch" Hypothesis.

A first possible explanation of the middle-risk gap is that it reflects market conditions in Japan after a decade of recession. Caballero et al. (2003) argue that government measures in support of failing firms throughout the 1990s have led to a situation where "zombie" (*de facto* bankrupt) firms have crowded out new firms and new entrepreneurial spirit, by tying up financial and human capital in unproductive areas. In this scenario, there are simply no viable middle-risk firms. Banks compete for the few remaining profitable firms, which further depresses interest rates.

While there is some validity to this argument, three factors diminish its explanatory power. First, a variety of surveys suggest that an increasing number of small firms want to borrow but cannot; thus, there is demand that is not met (cf. Figure 1). Second, while banks were reducing their loans to small firms in the 1990s, the "high interest rate lenders" (consumer finance companies and $sh\bar{o}k\bar{o}$ loan companies) were thriving and reported increasing loan volumes and profits. Apparently, they were effective in identifying viable small firm clients, and in collecting collateral in case of default. Third, this explanation cannot explain the persistence of the middle-risk gap over the last 30 years. Therefore, while there may have been a decrease in small firm loan applications, this alone cannot explain the magnitude of the middle-risk gap.

(b) Systemic Reasons: A "Credit Crunch" Initiated by Banks.

There are four reasons related to Japan's banking structure and regulation that combine to effectively hinder banks from entering the middle-risk market: limited risk management

¹⁶ M. Yashiro, CEO and Chairman, Shinsei Bank, at a lunch presentation at the Foreign Correspondent's Press Club, Tokyo, on March 4, 2003.

techniques by banks, limited recovery of collateral in case of default, capital-adequacy constraints by banks, and the lack of a developed market for securitized debt. While several initiatives have been launched to correct for these structural obstacles, they continue to create a great disincentives for banks to enter the middle-risk gap.

Arguing these points in order, first, it is possible that the interest rate structure simply reflects a Stiglitz/Weiss situation, where credit-rationing occurs above the equilibrium rate of about 5% because banks feel they cannot adequately judge risk at higher levels. A variant of this explanation is that Japanese banks have traditionally engaged in loans backed by real estate as collateral, and their evaluation capabilities were primarily in judging, and pricing loans by, the value of real estate rather than the business project at issue. When the land price bubble ended in 1991, it undercut the commonly held belief in the value of Japanese real estate. In reaction, instead of transitioning to an evaluation of business risk, banks simply reduced lending altogether. The challenge of risk evaluation was even more severe for small firms, which therefore bore the brunt of the credit crunch.

A second structural explanation for the middle-risk gap derives from the widely-shared understanding in Japan of the functions of a private bank. It continues to be difficult for banks to deny rescue loans to defaulting borrowers and collect collateral to cover losses. Partially this may be due to obstacles created by a slow and underserved judicial system, and the novelty of bankruptcy legislation in Japan. More importantly, however, there is social resistance to bank behavior that threatens the existence of a corporation, especially a small one (as reflected in the public outcry over "credit withdrawal", *kashi-hagashi*, which is standard banking practice elsewhere). Banks continue to be considered as having a fiduciary duty towards their borrowing clients, and they incur great reputation damage if their denying loan extensions to defunct firms, let alone collecting collateral, causes social hardship. This social understanding of the obligations of private banks, and the costs incurred by banks who act against it, greatly inhibit more aggressive lending at higher rates and with clearer default rules. As a result, private banks shun the middle market.¹⁷

¹⁷ I thank Kruskal Hewitt for suggesting this line of argument, based on a banker's perception of Japan's loan markets.

However, these two explanations cannot fully account for the magnitude of the middle-risk gap, because banks could supplement their skill sets by hiring risk evaluation capabilities, or form subsidiaries with different names to enter the middle market. In fact, in 2003 a few new initiatives were launched, such as New Bank Tokyo (see below), to pursue exactly this strategy. Meanwhile, established banks moved very cautiously. We need additional reasons to explain their behavior.

One prominent early explanation for the credit crunch and credit withdrawal phenomena in the late 1990s was that large banks found it increasingly difficult to attain the 8% capital-adequacy ratio as required by international BIS rules. To make the cut, many reduced commercial loans and instead purchased government bonds (e.g., Ito/Nagataki Sasaki 2002). Beginning in 1998, domestic banks were subjected to a 4% domestic capital-adequacy ratio. Many faced difficulties clearing this hurdle, which contributed greatly to the small firm credit crunch 1998. At the same time, the Financial Services Agency (founded in 1998) pressured banks to clean up bad loans; to be safe, banks lent to the very best firms only, driving small firms to high interest rate lenders.

Restrictions on loan securitization further exacerbate the pressure on banks facing capital adequacy constraints. In the U.S., the percentage of total loans outstanding that is securitized is much higher than in Japan (Figure 7). U.S. banks can lend to a middle market firm at a mid-level interest rate, then securitize this loan and sell it to institutional investors, so that no loan reserves are required and the bank's asset-capital ratio remains unaffected. The fast growth of small firm loans by U.S. finance companies, too, can be partially attributed to securitization. At year-end 2001, 34% of U.S. finance company loans to consumers were securitized, as were 15% of their business loans (Yabushita/Bushimata 2002).

In Japan, markets for asset-backed securities are underdeveloped, mainly due to regulation. As late as in 1993, reacting to lobbying by finance companies, Japan's government passed a "Special Debt Securities Law" ($Tokutei\ saiken\ h\bar{o}$) that allowed the securitization of lease contracts, credit card debt, sales credits, and car loans; however, bank loans could still only be handled by banks. Banks, in turn, faced prohibitively expensive paperwork for issuing securitized debt collateralized by real estate due to complications caused by the Civil Code. Only

in October 1998 did the government move to pass a "Special Transfer Exemption Law"¹⁸ that exempted the trade of securitized debt from these Civil Code restrictions (Yabushita/Bushimata 2002:147).

While this set the stage for more active loan securitization, it coincided with the banks' growing non-performing loan problem. Whatever loan portfolio banks would securitize, it was likely to be a bag of foul apples. At the same time, life insurance companies, pension funds and other potential buyers of securitized debt were facing their own problems and had few funds to invest. The market was very slow to take off.

Given the increasing credit crunch for small firms, the government felt a need to step in. In July 2002, the Financial Advisory Council (*Kinyū Shingikai*) advised that an active market for debt papers was critical for the development of Japan's financial markets (KS 2002b). The Federation of Bankers' Associations (*Zenginkyō*) in a March 2003 position paper pushed aggressively for deregulation of the various remaining constraints (Zenginkyo 2003). At the same time, three hands-on initiatives were launched to jumpstart the market.

The first came through an increasingly active stance in providing government loan guarantees to small firms, with the goal to facilitate securitization of these loans (see Section 5). This increase in turn fed into a new market for CLO (collateralized loan obligations), which the Tokyo Metropolitan Government had initiated in 2000. By March 2001, about ¥69 billion worth of loans to 1,715 firms had been pooled into CLOs, roughly 90% of which were covered by government loan guarantees.¹⁹

In parallel with the Tokyo CLO initiative, large banks also became more active in issuing CDO (collateralized debt obligations), which pool loans and other debt, to create more diversified investment opportunities for their large clients while moving debt off their balance sheets. Early on, the biggest players in this market were Mizuho Corporate Bank (with a ¥1.3

¹⁸ Saiken jōto no taikō yōken ni kan suru minpō no tokurei-tō ni kan suru hōritsu", or "Taikō yōken tokureihō" for short.

¹⁹ Yabushita/Bushimata 2002; Tokyo Metropolitan Government website at www.metro.tokyo.jp. The second batch of CLOs consisted of loans to 925 firms worth about ¥32.5 billion, and the third batch in March 2002 was over ¥88 billion of loans to 2,489 firms. Altogether, only ¥5 billion of loans in these three batches were not government-guaranteed, thus leaving most of the risk covered by the government, not by the price and market (Tokyo Metropolitan Government 2002).

trillion issue in 2002), as well as Sumitomo Mitsui Bank and UFJ Bank, with issues of about ¥1 trillion each; the latter included small firm debt (Komiya 2003:7). Moreover, private initiatives to securitize sales credit (*urikake saiken*) and sell them to private investors also surfaced. For example, in February 2003, the Mizuho Group announced that it would sell commercial paper backed by a package of 30,000 sales credits from small firms (Nikkei, Feb 9, 2003, p.7).

Still, the total market for securitized debt in Japan remains comparatively small, covering hardly 5% of total loans outstanding (cf. Figure 7). To further the development, in April 2003 the Bank of Japan committed to purchase ¥1 trillion worth of securitized debt from banks during 2003.²⁰ Importantly, the BOJ's policy goal was to address the credit crunch rather than the middle-risk gap. Unless it invites new competition for middle market loans, this initiative is unlikely to affect the interest rate level or the middle-risk gap.

Whether an active secondary market for securitized debt can successfully be established and increase banks' loan origination activities will critically depend on whether banks will be able to lend at interest rates that attract investors and help the development of a private market for pooled debt. Throughout 2003, private investors largely shunned the market. To some part this was due to remaining legal constraints of banking segmentation (what institutions are allowed to handle securities), as well as legal obstacles to the development of mutual funds, investment trusts, financial managers, and other financial intermediaries that would purchase securitized debt (KS 2002b: 48-49). But, perhaps more importantly, without interest rates at levels commensurate with risk, the market for securitized debt is unlikely to take off.

(c) Political Interference: Distortion of the Interest Rate Structure.

There is ample evidence of open political pressure on banks not to raise interest rates into the middle range. When city banks received an injection of public funds in 1998, with it came an obligation to increase loans to small firms by a certain percentage.²¹ Politicians, especially from regions with many small firms, then exerted pressure on large banks not only to lend more to

²¹ See also footnote 1.

²⁰ For details on the BOJ action, see www.boj.or.jp/en/seisaku/03/pb/k030611b.htm; www.boj.or.jp/en/seisaku/03/pb/k030408.htm; and a speech by Governor Fukui at www.boj.or.jp/en/press/03/ko0307a.htm (Section 4). Commentary can also be found in Hirata/Shimizu 2003.

small firms, but to do so at large firm rates.²²

In 2002, the Prime Minister's Financial Advisory Council argued:

"Setting rates commensurate with risk will not only increase the banks' profitability, but also the circle of companies that can borrow. It should at least theoretically be possible for banks to lend in that gap between current low bank loan rates and the high-rate $sh\bar{o}k\bar{o}$ loan rates. This situation leads us to advice that political lending (seisaku $kiny\bar{u}$) should be replaced with private interest rate setting." (KS 2002b: 44, 45).

In other words, as of late 2002 Japanese banks were not free to set interest rates to market, but were constrained by political considerations. The government pushed private banks to furnish low rate loans to failing large firms to preserve employment, or to lend at small firms at low rates to pay their "dues" for government subsidies.

Even with this pressure on city banks to lend to high-risk firms at low rates, however, one still wonders why some banks, and certainly some of the non-banks, would not move more aggressively into the middle market. Regulation offers one reason: Until recently, finance companies were not allowed into a variety of business areas, but as these develop, we may see more activities from leasing firms, credit card companies and others, which may spur competition for the middle market even with banks.

In 2003, the middle-risk gap caused two rather unlikely, political players to launch exactly this competitive move. First, Takeshi Kimura, a financial consultant and advisor to Finance Minister Takenaka, raised \(\frac{4}{30}\) billion to establish the new *Nihon Shinkō Ginkō* (lit.:"Japan Promotion Bank") with the explicit mission to lend in the middle-risk gap, i.e. between roughly 5% and 13%. ²³ In May 2003, Tokyo Governor Ishihara announced the establishment of "New Bank Tokyo", with the same strategy. This bank's founding capital of \(\frac{4}{200}\) billion was provided to more than half by the Tokyo Metropolitan Government, and by a consortium of Japan's large financial institutions (HSK 2003, Kimura 2003:30). Being public in

²² Interview with a Japanese banker, Tokyo, February 2003. Many city banks have found a creative ways around this pressure; e.g., by having their largest clients set up paper subsidiaries that fall into the legal category of a "small firm" but do no more than to pass the loan back to the large firm mother company. On paper, the bank has furnished a "small firm" loan, at a large firm rate.

²³ Kimura is convinced that the "credit crunch" for small firms is real and caused by the incompetence of Japanese banks, and his idea is that he will reform the Japanese banking system by inviting competition, so that eventually the middle-risk gap will be much reduced; see Kimura (2003).

nature, this bank's biggest challenge may be the government's plan to reduce public lending to small firms significantly over the next decade (see Section 5). However, even if these banks prove successful, it remains doubtful that they alone can fix the middle-risk gap, as they are addressing symptoms rather than the causes. Only when politicians withdraw from interfering in private bank strategy can the middle-risk gap be addressed.

In sum, several market- and system-related reasons combine with political intervention to make private banks shun the middle market. But one more question remains: Why is the equilibrium rate so low? If loans priced at below 5% are not profitable to banks, why do cost pressures not work to shift the entire interest rate structure, as shown in Figure 4, to the right? The answer lies with the government's small firm loan programs.

5. GOVERNMENT PROGRAMS FOR SMALL FIRM FINANCING

In addition to the direct pressure on banks to lend to small firms at low rates, Japan's government also affected the overall interest rate structure by participating in the credit market with subsidized financing programs for small firms. Initially, small firm policy programs were intended to complement private lending by offering public loan guarantees, low- or zero-interest loans, and subsidies for specific activities in areas unlikely to be served by private banks under interest rate regulation in the 1950s-1970s. As we will see, however, rather than being abolished with deregulation, these programs reached new levels of activity during the 1990s.

One main initiative of the Koizumi government for the early 21st century is to reduce the role of the government in Japan's markets. In the banking system, the criticism is that public banks had "crowded out" private banks by competing for similar customers at subsidized rates. Reform will come though a reorganization of government banks and a major reduction of government lending. It is unlikely that politicians, in defense of small firms in their constituencies, will be supportive of these reforms. It is also unclear whether the issue is really one of "crowding out": Figure 3 showed that in 2002 private banks accounted for 90% of the total small firm loans outstanding, and Shoko Chukin, the one government bank that may target similar clients as large banks, accounted for only 3% of the total. More importantly, the

government banks' direct participation in the loan market at highly subsidized rates has pushed the entire interest rate structure downwards, and by impeding pricing according to risk it has greatly exacerbated the middle-risk gap.

5.1. Public Loan Guarantees for Small Firms

One important part of government small firm programs is the loan guarantee system. Guarantees are offered locally through 52 loan guarantee associations (*shinyō hoshō kyōkai*) established by prefectures and five municipalities. These offer full guarantees for loan applications of local firms for loans up to ¥200 million, at an insurance fee of 1% of the loan amount. Eligibility requirements are generous, thus providing even small firms facing severe problems access to very low-interest rate loans. During the 1990s recession, the loan guarantee system has been used with increased frequency, and by the late 1990s, about 10% of all new small loan applications were covered by the system (Aoyama 2001: 220-222). ²⁴ Because these loans are indirectly subsidized, they contribute to the downward pressure on interest rates.

Loan guarantees are centrally administered and reinsured to 80% of the loan amount through two public corporations that in July 1999 merged into JASMEC (Japan Small and Medium Sized Enterprise Corporation, *Chūsho kigyō sōgō jigyōdan*), a public corporation financed through the general budget as well as special budgets. As of July 2003, of a total loan guarantees outstanding of ¥32.2 trillion (roughly \$300 billion) on 4.25 million cases, JASMEC reinsured ¥13 trillion (roughly \$110 billion), covering more than 1 million cases. In addition, JASMEC also provided, through private banks, to small firms so-called "system finance loans" at 0%, with an outstanding volume of ¥3 trillion (roughly \$27 billion) in 2003; and emergency loans of almost ¥2 trillion (roughly \$18 billion). Because these loans are implemented through private banks, they are not earmarked as government-related in Figure 3.²⁶

²⁴ For an overview of the guarantee system, see also www.chusho.meti.go.jp/kinyu/030206karikaehosyou.htm.

²⁵ Until its 2001 reform, JASMEC and the small firm banks were financed through the FILP (Fiscal and Investment Loan Program, *Zaisei tōyūshi*), which pooled postal savings to finance public policy. The 2001 reform decoupled the postal savings system from funding through special budgets, which are now financed through special government bonds called *zaiyūsai*.

²⁶ In comparison, government loan programs have also existed for many years in the U.S., but as of 2001, total outstanding guarantees were at only \$9.9 billion, covering 43,000 cases. However, the U.S. experience suggests

The increasing bankruptcy rate of very small firms since the mid-1990s has challenged the system and put severe financial strain on JASMEC. At the same time, calls for more active small firm lending by private banks have become louder. This triggered ideas to use guaranteed loans to create a new market for securitized loans (as described in Section 4). To push these developments further, in January 2003 the government made non-banks and trading houses eligible to use public loan guarantee for emergency loans to small firms.

5.2. Government Banks and Small Firm Loans

A second pillar of small firm policies is through three public banks charged specifically with small firm lending at subsidized rates. Although their market share in small firm lending is only about 9%, the government's participation is relevant for the shape and form in which these loans are offered, and how they impact the interest rate structure.

The first of these banks is the JFS (Japan Finance Corporation for Small Business; *Chūsho kigyō kinyū kōko*). JFS was founded in 1953 to "provide long-term funds to foster the development and stable operations of small business" (JFS Annual Report 2001). Most of its clients are small- and medium-sized firms in manufacturing, distribution, and services, and loans typically require some form of collateral or assurance. Its sister organization, the NLFC (National Life Finance Corporation; *Kokumin seikatsu kinyū kōko*) was originally founded as a welfare and pension bank for self-employed, but after WWII was transformed to serve a similar purpose as JFS but with a focus on very small firms: 86% of its loans are to firms with fewer than nine employees.²⁷ Thus, NFLC clients are typically proprietors in services and traditional trades, and the majority of NFLC loans are small and non-collateralized.

The third bank, Shoko Chukin, is a hybrid bank, in that it receives government funding but also has independent ways of refinancing through bond issues and in its role as the central bank of cooperatives; i.e. it is based on a membership system, and most of its business is for

that these loans are easily securitized; in 1999, the SBA estimated that 34% of all small firm loans covered by a loan guarantee had been securitized, and finance companies were the most active users of this system (Yabushita/Bushimata 2002: 160-163, 244, 251; Aoyama 2001:222).

²⁷ In 2000, the NFLC furnished 407,103 loans totaling ¥2.8673 trillion (i.e., average loan size about ¥7 million, or \$60,000). Looking at equivalent numbers for private banks for 2000, city bank loans to small firms

member cooperatives and their members. In contrast to the other two banks, Shoko Chukin offers full-fledged banking services, mostly to small- rather than medium-sized firms, but it also implements government small firm lending programs. As of March 2002, the outstanding loan volume of the NLFC was ¥9.6 trillion, that of the JFS ¥7.5 trillion, and that of Shoko Chukin ¥10.5 trillion (Yabushita/Bushimata 2002: 158-160; Aoyama 2001: 217; www.jfs.go.jp, www.kokuin.go.jp, and www.shokochukin.go.jp).

All three banks offer so-called "special purpose loans" on behalf of the government. More than 80% of JFS and NFLC, and about 20% of Shoko Chukin loans are in this category. "Special purpose loans" are highly subsidized loans based on specific government objectives that have evolved over time: in the 1960s, the emphasis was on "business modernization", in the 1970s on "energy efficiency", and in the early 1990s on venture-type programs for "new business development". Since the mid-1990s, the programs have primarily addressed the effects of recession by introducing programs ranging from "IT modernization" and "management innovation" to "DIP (debtor-in-possession) Finance" for companies in the state of bankruptcy. That is, the loan programs have become more clearly focused on small firms in dire straits. In the fall of 2002, together with the announcement of major financial reforms the government further expanded the "safety net loan programs" earmarked to help firms facing bankruptcy. These loans serve to keep very small firms alive that would otherwise falter, in order to preserve employment for their owners, family members and employees.

5.3. Government Loans as Welfare

Figure 8 shows that, in 2002, safety net loans outstanding exceeded those for capital investments. While the banks insist they do not hand out free loans, there are voices even within the cognizant agencies that many of the public loans only serve to prevent or postpone bankruptcy by the small firm borrower.²⁹ Many of the highly subsidized "special purpose" loans are, in effect, equivalent to welfare payments.

averaged at \$20.2 million (roughly \$180,000), those from regional banks at \$11.23 million (roughly \$95,000), and from 2^{nd} tier regional banks for \$10.47 million (Yabushita/Bushimata 2002:167).

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²⁸ See www.chusho.meti.go.jp/kinyu/030313karikaeQ&A.htm#4; and Nikkei 1/17/2003.

²⁹ Interviews, Tokyo, February 2003.

This becomes clearer through the hypothetical example of a 50-year-old *tatami* (rice straw mat) manufacturer who has to close shop due to the recession. If he previously paid into the system, he would receive a maximum of 330 days of unemployment insurance, at a rate of up to 80% of his previously reported salary. Only at age 65 will he receive a pension. If he cannot find new employment in the meantime, he is dependent on his savings, because welfare payments for this type of hardship are limited and most unemployed do not apply even if eligible – possibly because it is very cumbersome and not well advertised. Average household savings data suggest that an average family can live off savings for about three years. Thus, between 55 and 65, this person would have no income, and receive no transfers from the government.³⁰

Because the Japanese government does not offer a full-fledged welfare program for structurally unemployed, it strives to keep unemployment as low as possible. This explains desperate policies in the 1990s to maintain employment, by subsidizing small firms and by bailing out failing large firms. A fundamental role of the JFS and the NFLC has become to keep small firms, and their owners, alive, not so much for economic but for social purposes.

One can identify two major reasons why Japan's politicians have chosen this route of welfare provision. First, to the extent there is shame associated with being on welfare in the Japanese society (as anywhere else), providing government loans to bankrupt firms is an elegant way to arrange for welfare while preserving the appearance of economic contribution. Perhaps more importantly, because the NFLC is financed in large part through a special budget (that used to be the FILP and financed through private postal savings, but now funded through special bonds that remain outside the general budget), channeling welfare through NFLC loans reduces the strain on the government's social security budget.

The cost of this route to provide welfare is a distortion of interest rates, because the special loan programs are anchored at the long-term prime rate (i.e., the best rate for large blue-chip firms) in various tiers. For example, in December 2002, the long-term prime rate was at around 1.65%, and special loan programs were offered in the range between 0.95% and 1.95%. Thus, a small firm could receive a government loan to help restructuring at a rate lower than the

³⁰ See, e.g., Niimura 2001.

country's blue chip firms would receive from their main banks.³¹ The resulting upward stickiness of interest rates means that private banks are unlikely to rebound to strong profits.

An important step towards truly market-oriented reforms is a restructuring of welfare-type loans to small firms. One option is to abolish special loan programs altogether; for budgetary and other reasons, politicians may find this options unpalatable. Alternatively, the government can greatly reduce its role in the loan market, or it can continue its special small firm programs but keep them clearly separate from the private loan market (e.g., by subsidizing interest rate payments *ex post*). A December 2002 reform program of government finance (*Seisaku kinyū kaikaku ni tsuite*) suggests that the government is considering the option of a reduced role, by aiming to cut the percentage of GDP accounted for by loans provided by the current eight government banks by half "in the future". However, it is not clear whether this reduction will occur through privatizing some of these banks, or by reducing their loan program. This reform is also scheduled to take several years, thus upholding the price distortion and the middle-risk gap for the intermediate future. Second, even at a much reduced and reformed level of operations, the government banks plans to continue is subsidized loan programs even after 2005, thus continuing price distortion in the long run.

Understanding government "special loan programs" as welfare introduces a new aspect to banking reform. Does Japan need government banks for small firms? As long as Japan's welfare programs for very small firms remain insufficient, furnishing subsidized loans constitutes an important way to avoid social hardship at a large scale. Simply reducing the size of the government in the loan market is unlikely to do any good, as it will reduce support for small firms and still maintain distortions of the interest rate structure. A better policy choice may be to uphold the loan programs but separate them from the market, or introduce functional equivalents to these programs before the government banks are reduced in their roles.

6. CONCLUSIONS

Many aspects combine to explain the puzzling existence and persistence of a pronounced

³¹ Current interest rates are posted at www.jfs.go.jp/jpn/topics/base/html.

"middle-risk gap" in Japan's interest rate structure, which reflects an underdeveloped credit market for small firms. Whereas high-quality small- and medium-sized firms can easily borrow from private banks at almost the prime rate, most small firms are forced to borrow from high-rate non-bank lenders. Interestingly, the middle-risk gap between 5% and 15% has existed, with only few exceptions, for over 30 years.

This situation cannot be fully explained by one single reason. It is not just a Stiglitz/Weiss type of credit rationing, and the lower bound of 5% is too low for banks to earn profits in lending. Neither is it plausible that there are no firms at all in the middle market, as evidenced by the fact that high interest rate lenders have operated profitably in the 15% - 25% range for many years. Structural factors, such as remaining regulation on finance companies and the underdeveloped market for loan securitization, add to the picture.

A prominent reason for the middle-risk gap is politics. Political pressure to lend to small firms at large firm rates has greatly contributed to the middle-risk gap, by keeping interest rates low and keeping banks from lending more aggressively to small firms. Moreover, as the recession continued into the early 21st century, the government has largely increased its subsidized loan programs for small firms. These programs push interest rates downward, and exacerbate the middle-risk gap. By 2003, the middle-risk gap had become the "normal" situation in Japan's financial markets.

Another reason why banks shun the middle-risk market is a particular view of the rights and obligations of private banks in Japan. Not only does the legal system, and with it the enforcement system, of collateral transfers to the lender in case of a borrower's bankruptcy, remain underdeveloped. What is more, the generally-held social interpretation of a private bank is one of an integral part of the industrial policy process in charge of supporting its clients, especially in times of crisis. A bank that refuses further lending to a client in bankruptcy and moves to collect collateral on the client's loans is viewed with suspicion and incurs great public relations damage. In contrast, non-banks have been aggressive about collateral recovery, but for their profits are paying the price of a lousy image: the public does not see their behavior as a valid business model, but rather as that of a "credit shark". Japan is unlikely to move towards market finance unless property rights transfers of loan collateral are unambiguous, and using

these rights becomes politically and socially acceptable.

A final root cause for the interest gap, and the downward pressure on the overall interest rate structure, is the participation of the government in the loan market at highly subsidized rates for purposes of welfare transfers. Ironically, Japan's smallest firms with the highest risk are borrowing at the lowest rates. The situation would be helped greatly if the government were to consider more direct ways of transferring welfare to the structurally unemployed, or if the government could participate in the market without affecting price.

The interest rate gap has existed for many years. It is a reflection of banking sector segmentation, political pressure on keeping interest rates low, and the active participation of public banks in the market. It is also a strong indicator that financial reform is not progressing to the core areas. As long as these distortions continue, to ensure access to credit by small firms it is necessary to uphold current banking system segmentation and task small private banks with specialized lending to small firms. Only when market forces are allowed to take over and a middle market develops, will it not be necessary any longer to restrict credit cooperatives and unions to exclusively cater to small firms. True market-oriented reforms in banking will have to begin with the interest rate structure.

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Table 1: Definitions of Small Firms in Japan, the United States, and the European Union Source: Aoyama 2001

	Manufacturing	Construction	Wholesale	Retail	Services	
SME Basic Law of 1999	Capital of up to or 300 employee	-	Capital of up to ¥100m, or 100 employees	1 1	Capital of up to ¥50m, or 100 employees	
"Very Small"	up to 20 employees		up to 5 employees	up to 5 employees	up to 5 employees	
U.S.	Up to	Sales up to	Up to	Sales up to	Sales up to	
	500 employees	\$17 million	100 employees	\$5 million	\$5 million	
	Sales up to €40 or 250 employee	-		Sales of up to €15 million, or 95 employees		

Table 2: Large Firms vs. Small Firms in Japan

Source: SMEA 2002b: 347-401Ō

		All Business Places*		Large Firms		Small Firms		Of which: Very Small Firms**	
							% of		
		#	% of total	#	% of total	#	total	#	% of total
Number of	1991	6,541,741	100.0	57,445	0.9	6,484,296	99.1	4,901,641	74.9
Business Places*	1999	6,184,829	100.0	45,094	0.7	6,139,735	99.3	4,514,464	73.0
Number of	1991	54,791,827	100.0	11,392,533	20.8	43,399,294	79.2	15,565,550	28.4
Employees	1999	53,590,313	100.0	10,395,532	19.4	43,194,781	80.6	13,835,301	25.8

^{* &}quot;Business places (*jigyōsho*) are firms plus branches, plants, outlets, etc.; Data are for private firms only, and exclude agriculture, forestry, and fishery.

^{**} Very small firms = fewer than 20 employees; in wholesale/retail/food/services: less than 5 employees.

Table 3: Large vs. Small Firms in Japan, by Industry

Source: SMEA 2002b: 398-402

		All Firms*		Large Firms		Small Hirms		Of which:	TTO state
								Very Small	Firms**
			% of		% of		% of		
		#	total	#	total	#	total	#	% of total
Construction	Firms	555,847	100	475	0.1	555,372	99.9	526,027	94.6
	Employees	4,001,728	100	687,889	17.2	3,313,839	82.8	1,828,362	45.7
Manufacturing	g Firms	607,626	100	2,414	0.4	605,212	99.6	537,430	88.4
	Employees	11,062,690	100	4,189,681	37.9	6,873,009	62.1	1,904,318	17.2
Wholesale	Firms	296,162	100	2,259	0.8	293,903	99.2	203,261	68.6
	Employees	3,734,037	100	1,120,608	30.0	2,613,429	70.0	362,210	9.7
Retail	Firms	1,087,993	100	3,784	0.3	1,084,209	99.7	945,211	86.9
	Employees	6,123,121	100	2,236,490	36.5	3,886,631	63.5	934,781	15.3
Food/Drinks	Firms	715,396	100	642	0.1	714,754	99.9	639,231	89.4
	Employees	2,871,213	100	770,822	26.8	2,100,391	73.2	795,190	27.7
Services	Firms	1,185,708	100	3,881	0.3	1,181,827	99.7	1,001,806	84.5
	Employees	7,531,472	100	1,995,273	26.5	5,536,199	73.5	1,097,087	14.6
Total*	Firms	4,851,104	100	14,340	0.3	4,836,764	99.7	4,228,781	87.2
	Employees	40,773,258	100	11,000,763	33.6	27,073,036	66.4	7,515,958	18.4

^{*} Data include all registered firms (hōjin) and self-employed, but exclude agriculture, forestry, and fishery.

^{**} Very small firms = less than 20 employees; in wholesale/retail/food/services: less than 5 employees.

Figure 1: Perceived Credit Access for Large vs. Small Firms, 1990-2002

Source: SMEA 2003, Figure 1-1-10; large firm data are based on BOJ tankan survey data ranging

from "easy" to "difficult"; small firm data are based on METI SME surveys evaluating the access to credit in comparison to the previous year.

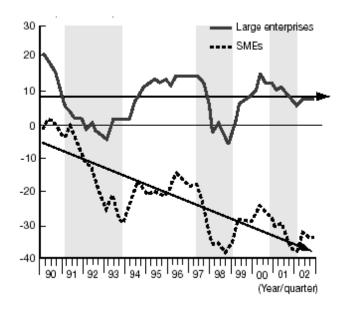


Figure 2: Changes in Small Firm Loans Outstanding, by Bank Category, 2000-2002
Source: SMEA 2003, Fig. 1-3-8

-- Government-affiliated financial institutions Outstanding at end December 2000 = 100 -D- Credit associations and credit cooperatives 95.6 90 87.8 85.7 82.4 Mar. Mar. Sept. Dec. Sept. Jun. 00 01 02

Figure 3: Japan Bank Lending to Small Firms, by Banks, in 2002 Source: Small and Medium Enterprise Agency

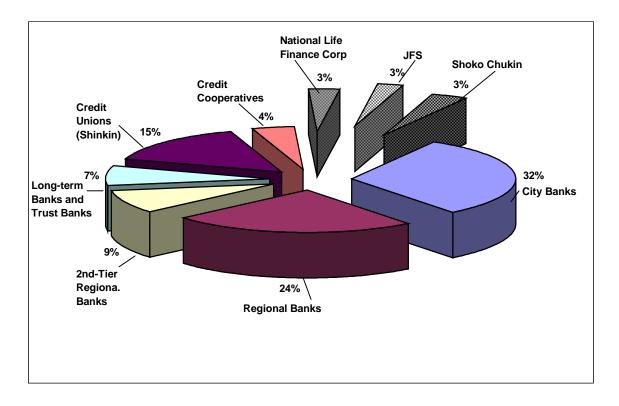


Figure 4: Private Bank Loans Outstanding, by Interest Rate, in 12/2002

Source: Bank of Japan, Kinyu keizai tokei geppo

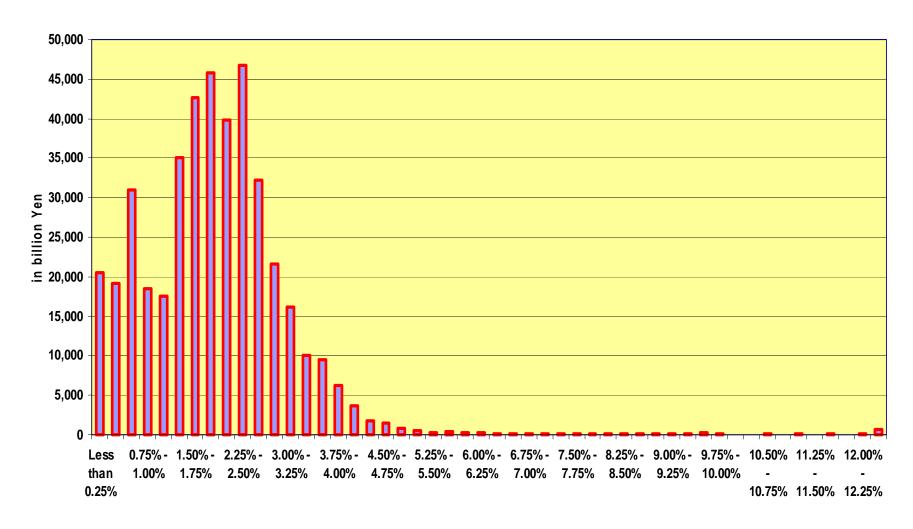


Figure 5: Bank and Non-Bank Loans Outstanding, by Interest Rate, as of December 1998

Source: Bank of Japan *Keizai tōkei geppō*, *Zenkoku kashikingyō kyōkai rengōkai*, Ministry of Finance (Note: A total of ¥2.849 billion was lent in the range of 8.5-15%)

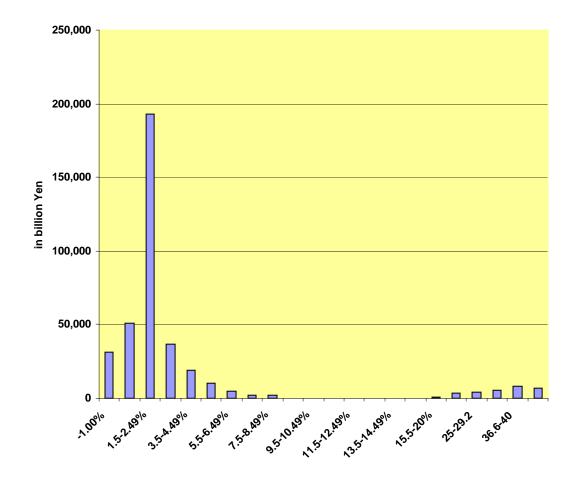


Figure 6: Bank Loans Outstanding (on Bills and Deeds), by Interest Rate, 1970-2002

Source: Bank of Japan, Kinyu keizai tokei geppo, various issues

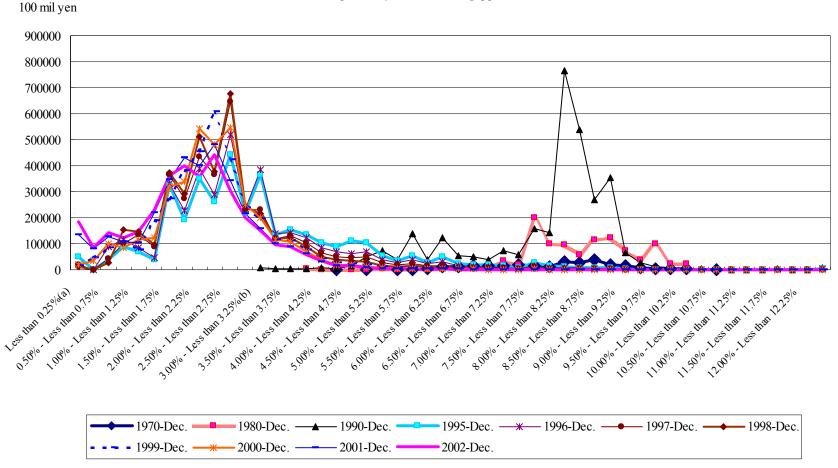
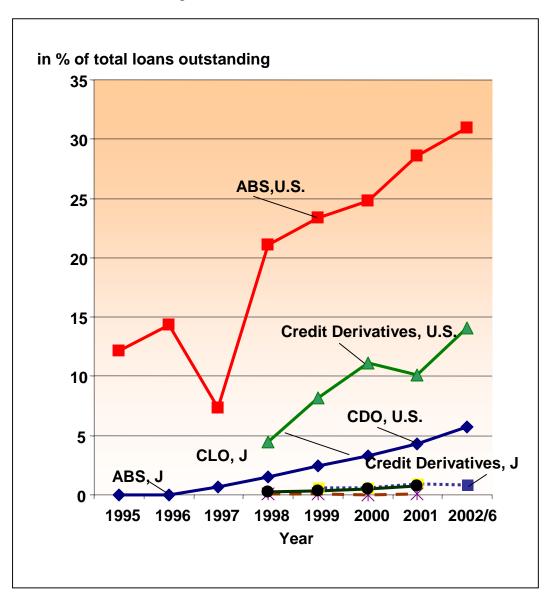


Figure 7: Securitized Debt Assets, as % of Total Loans Outstanding, in the U.S. and Japan in 2002

Source: Sugihara et al., 2003



Note: ABS = Asset-Back Securities; CLO = Collateralized Loan Obligations

Figure 8: Government Long-Term Loans and Safety Net Loans Outstanding, 2001 and 2002

Source: METI (2003), Figure 1-3-10, p. 41

