

# The “Middle-Risk Gap” and Financial System Reform: Small-Firm Financing in Japan

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*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 Japanese 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 slow course of financial system reform in Japan. Successful reforms toward a greater market orientation in Japanese banking must begin with the interest rate structure.*

Keywords: Middle market; Interest rates; Japan; Small-firm financing;  
Government lending; Securitization; Banking reform

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

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## I. Introduction

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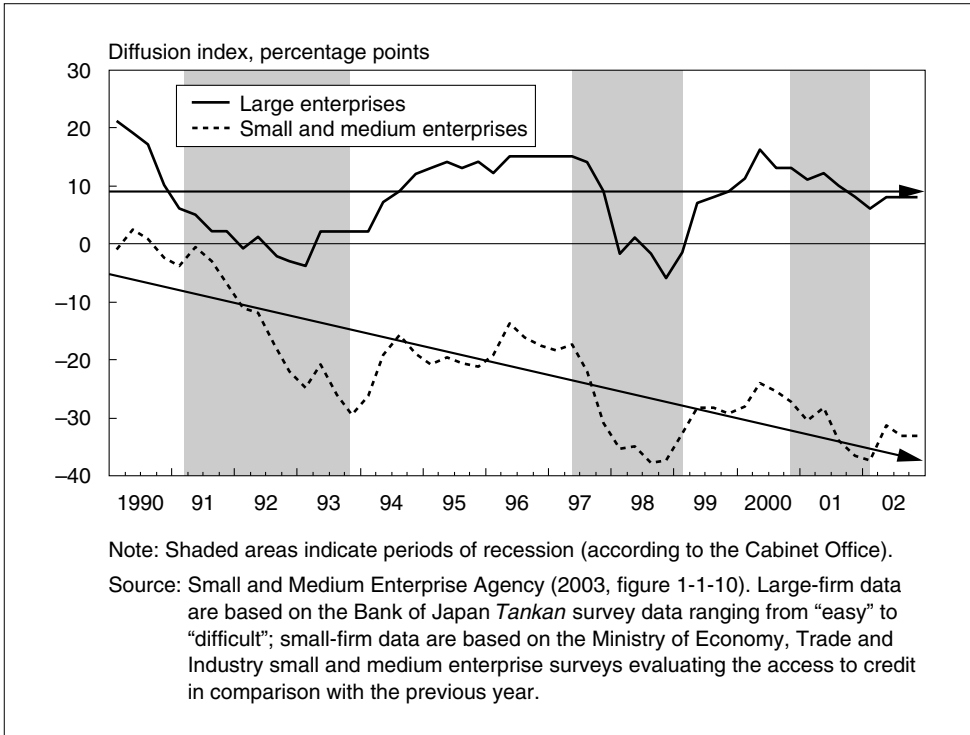
Japan's government has long been concerned with ensuring small firms' access to credit. In the period of rapid growth this was a challenge because, under strictly regulated interest rates (aimed at lowering the cost of borrowing to spur reconstruction), small firms lost out against large firms when applying 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 serve only their local, small-member firms. Specialized government banks supplemented private small-firm loans. A banking system developed in which 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 toward financial system reform, and in this context small-firm financing and banking segmentation have once again become focal issues. The government's ambitious 2002 Financial Revitalization Program explicitly initiated corporate revival programs based on a turn away from existing processes of "political finance" and toward a greater market orientation (Financial Services Agency [2002]).

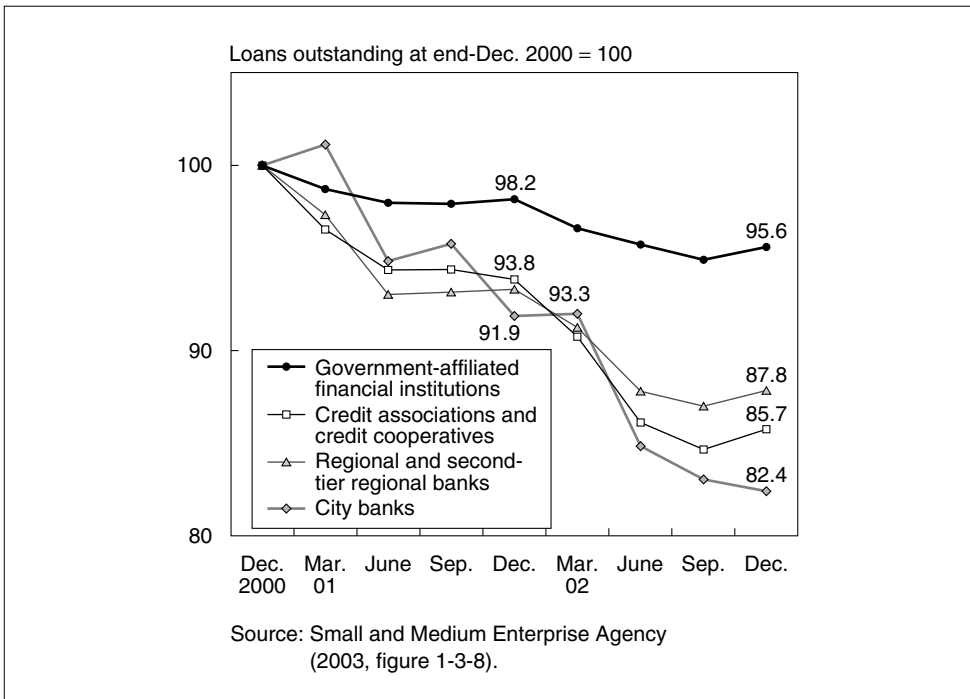
However, Japan's interest rate structure strongly suggests that the price mechanism still does not work well in the credit market. This is underscored by a pronounced "middle-risk gap," i.e., a gap in the interest rate structure of loans outstanding that indicates an under-served middle market. This gap has persisted against a 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 report great difficulty in securing bank loans (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 to not charge higher interest rates to small firms, has put downward pressure on the overall interest level and exacerbated the middle-risk gap, and thus created disincentives for private banks to lend to small firms (Figure 2). Even as the government proposes grand reforms to achieve a greater market orientation in banking, politicians from rural areas keep pushing for greater protection of small firms.

**Figure 1 Perceived Credit Access for Large versus Small Firms, 1990–2002**



**Figure 2 Changes in Small-Firm Loans Outstanding, by Bank Category, 2000–02**



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 only reinforces their cautious attitude.<sup>1</sup> As long as this is so, Japan needs regulation that tasks certain banks with specializing in small firms.<sup>2</sup> 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 must begin by addressing the loan interest rate structure.

The middle-risk gap has triggered government attempts to make this market segment more attractive to banks, despite political pressure against it. In 2000, the Tokyo Metropolitan Government structured a market for collateralized loan obligations (CLO), and in 2003 the Bank of Japan (BOJ) committed ¥1 trillion to purchase collateralized loans from city banks. Also in 2003, Tokyo Governor Shintaro Ishihara and an advisor to Finance Minister Heizo Takenaka announced separate plans to establish banks that will operate exclusively in the middle market (see Section IV). This paper will show that doubts remain as to 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 the former are performing a welfare function. They do this through special program lending aimed at slowing 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. At the least, government programs must be more clearly separated and demarcated from the private loan market.

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1. For example, on January 31, 2003, the Financial Services Agency (FSA) issued a "business improvement order" to Mizuho Holdings, because that 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 subsequently that it would open nine new branches specializing in small-firm clients (see press releases of the FSA and Mizuho at [www.fsa.go.jp/news/newsj/14/ginkou/f-20030131-3.html](http://www.fsa.go.jp/news/newsj/14/ginkou/f-20030131-3.html), and at [www.mizuho-fg.co.jp/pdf/release/data/20030228.pdf](http://www.mizuho-fg.co.jp/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., Financial System Council [2002b; 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 United States, 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 in small firms (e.g., Strahan and Weston [1998]), others suggest differently (e.g., Peterson and Rajan [1995] and Rajan [1998]). It is evident, however, that bank specialization in small firms can occur through competition as well as regulation.

The paper begins with a brief overview of the theoretical issues involved in small-firm financing (Section II). Section III offers a summary of the situation faced by Japan’s small firms and specialized private banks. Section IV presents the middle-risk gap, as well as three sets of explanations as to why this phenomenon is so pronounced and persistent. Section V discusses the activities of the government banks, and Section VI concludes.

## **II. Theories of Small-Firm Financing**

A brief summary of the theories pertaining to small-firm financing is helpful for the following analysis of Japan’s interest rate structure. Initially, economics paid scant attention to small firms: it was considered that if markets were efficient and information complete, the size of the company had no effect on its ability to raise funding, for there would be a price that covered 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 information, filling out forms, and so on. 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 has 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.<sup>3</sup>

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

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

the past, is to demand real estate as collateral and focus skill creation on collateral evaluation rather than borrower credit risk assessment.<sup>4</sup>

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 it is assumed to be. Therefore, as a matter of sound business a bank only lends at its equilibrium rate, regardless of supply and demand. Inherent risk means that price does not clear the market for loans. High-risk firms are driven to alternative sources of funds, for example, 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 United States, finance companies successfully entered this gap beginning in the 1980s by developing new strategies of dealing with the higher risk, eventually prompting banks to also serve 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 potential 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.

A second 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 United States or Europe) or on regulation (in Japan). Specializing in local borrowers increases expertise in small-firm risk evaluation as well as acquaintance with the companies. Third, 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 represent two basic routes for addressing 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 United States has by and large attempted to go the first route, with a few guarantee 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, perhaps the largest factor hindering Japan's reform efforts is that the

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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 new cost difference between large and small borrowers, causing a more severe credit crunch for small firms. See Shiozawa (2000), Adachi and Osawa (2000), Yabushita and Bushimata (2002, pp. 32–40), Boot (2000), Rajan (1998), and Horiuchi (2003).

government is attempting to adopt both solutions at the same time: while reformers push for greater market-oriented mechanisms, many politicians with an eye on their rural constituencies uphold the concept of nationalizing risk. This has affected Japan’s interest rate structure, as visible in the middle-risk gap.

### III. The Situation of Small Firms and Small Banks

#### A. Small Firms

Small firms in Japan fall into three broad categories: firms that are long-term sub-contractors of a large firm and tied into the large firm’s network (*shitauke*, about 50 percent 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 or medium-sized” if they have capital of up to ¥300 million or fewer than 300 employees; lower limits apply to firms in distribution and services (Table 1).<sup>5</sup> There is no legal definition of “very small” firms, but in most statistics, these are firms with fewer than 20 employees in manufacturing, and fewer than five employees in wholesale, retail, food and services.<sup>6</sup>

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 fewer than 1 percent of all firms, they employ about 20 percent of the work force. Table 3 shows that in the construction industry, very small firms account for 95 percent of all firms, and they employ 46 percent of all workers.

**Table 1 Definitions of Small Firms in Japan, the United States, and the European Union**

	Manufacturing	Construction	Wholesale	Retail	Services
Small and Medium Enterprise Basic Law of 1999	Capital of up to ¥300 million, or 300 employees		Capital of up to ¥100 million, or 100 employees	Capital of up to ¥50 million, or 50 employees	Capital of up to ¥50 million, or 100 employees
“Very small”	Up to 20 employees		Up to five employees	Up to five employees	Up to five employees
United States	Up to 500 employees	Sales of up to US\$17 million	Up to 100 employees	Sales of up to US\$5 million	Sales of up to US\$5 million
European Union	Sales of up to 40 million euros, or 250 employees			Sales of up to 15 million euros, or 95 employees	

Source: Aoyama (2001).

5. In comparison, in the United States 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 US\$100 million (US\$1 million in some statistics). Overall, a “small firm” in the United States is typically much larger than a “small firm” in Japan.

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

**Table 2 Large Firms versus Small Firms in Japan**

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

Notes: \*Business places (*jigyosho*) are firms plus branches, plants, outlets, etc.; data are for private firms only, and exclude agriculture, forestry, and fisheries.

\*\*Very small firms are those with fewer than 20 employees; in wholesale/retail/food/services, with fewer than five employees.

Source: Small and Medium Enterprise Agency (2002, pp. 347–401).

**Table 3 Large versus Small Firms in Japan, by Industry**

		All firms*		Large firms		Small firms		Of which: Very small firms**	
		Number	Percentage of total	Number	Percentage of total	Number	Percentage of total	Number	Percentage 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	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

Notes: \*Data include all registered firms (*hojin*) and self-employed, but exclude agriculture, forestry, and fisheries.

\*\*Very small firms are those with fewer than 20 employees; in wholesale/retail/food/services, fewer than five employees.

Source: Small and Medium Enterprise Agency (2002, pp. 398–402).

In 1997, small firms accounted for 56 percent of total value added in Japan, and 51 percent of shipments in manufacturing, 64 percent of shipments in wholesale, and 76 percent of shipments in retail (Aoyama [2001, p. 37]).

## B. 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 toward lending 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 aftermath of the "bubble" economy in the 1990s have challenged the logic and functioning of this segmented banking system (Hoshi and



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 of 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.<sup>7</sup> While both operate based on similar not-for-profit, mutual-aid membership schemes, and by law must offer services to local small and medium-sized firms and their employees, some differences in business areas are outlined in their respective laws.<sup>8</sup> Credit cooperatives are supposed to lend to slightly larger firms than credit unions, and may accept deposits from nonmembers. In contrast to the credit 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 serve a broader clientele than credit unions, both operate strictly locally.

Since 2000, credit cooperatives and unions are regulated by the central government.<sup>9</sup> 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.<sup>10</sup> 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 territory and began to market more aggressively to 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* accounted for about 19 percent of small-firm loans in 2002.

Next to credit cooperatives and unions, three government banks are specifically in charge of small-firm lending: the Japan Finance Corporation for Small Business (JFS), the National Life Finance Corporation (NLFC), and Shoko Chukin Bank (see Section V). In 2002, these accounted for roughly ¥27 trillion, or 9 percent, of total outstanding loans to small firms of about ¥280 trillion (Figure 3). These banks offer special loan programs at subsidized rates to certain categories of firms and for certain business purposes. The government’s official goal is to act counter-cyclically by offering more funding at lower rates during periods of recession.

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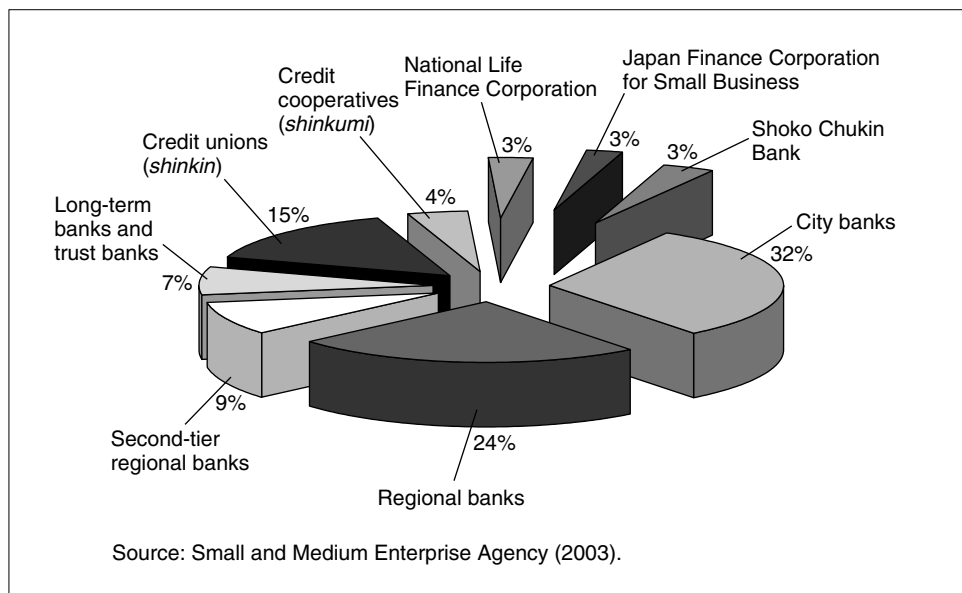
7. Savings banks (*sogo ginko*) were transformed into “second-tier regional banks” in 1989, when these banks were brought under the umbrella of the same Banking Law that applies to city and regional banks. Therefore, legally these banks are no longer specialized “small-firm banks,” although in practice most of them cater exclusively to local small firms. (This analysis excludes agricultural cooperatives and their central bank, Norinchukin Bank, because these are regulated by the Ministry of Agriculture, Forestry and Fisheries and are excluded from official banking statistics.)

8. Credit cooperatives (*shinyo kumiai*, *shinkumi*, or *shinso*) have their roots in the 19th century but were reorganized after World War II based on the 1949 Law for Small Business Cooperatives etc. (Chusho Kigyoto Kyodo Kumiai Ho). In 1951, further reform turned about half of the cooperatives into not-for-profit credit unions (*shinyo kinko*, or *shinkin*), based on a new Credit Union Law (Shinyo Kinko Ho).

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

10. 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 do not differ from the *shinkumi* or the *shinkin*. See Bank of Japan (1995).

**Figure 3 Japan Bank Lending to Small Firms, by Banks, in 2002**



Non-banks also lend actively to small firms. These differ in important ways from their U.S. counterparts. In the United States, starting in the 1980s and growing rapidly thereafter, finance companies emerged as non-bank subsidiaries of large manufacturers and distributors (e.g., General Electric Capital Corporation, Ford Motor Credit Company, and General Motors Acceptance Corporation). They raise funds in the capital markets, based initially on their parent companies', and now their own, strong credit ratings. Credit risks are partially passed on to other investors through securitization (see Section IV). 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 percent of the U.S. finance companies' clients were companies, and it was believed that most were small (Yabushita and Bushimata [2002, p. 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 "shoko loan companies" (small manufacturers' lenders) and other "high interest rate lenders" (*korigashi*). According to industry data, as of 1998 the *shoko* loan companies had loans outstanding totaling ¥34 trillion, equivalent to about 10 percent of small-firm loans at that time.<sup>11</sup> However, this is probably just a small fraction of the non-bank loan market, as some of the high interest rate lenders are members of the underworld and thus their loans go unrecorded; according to one estimate, there were roughly 30,000 unregistered non-banks as of 2002.<sup>12</sup> The current legal usury rate limit

11. Zenkoku Kashikingyo Kyokai Rengokai (1999).

12. This information draws on an interview conducted by the author at the Ministry of Finance in spring 2003.

is 29.2 percent, and most consumer finance companies lend at a range of 25–29 percent to consumers and very small firms (Kuemmerle [2000]). While some non-banks are listed firms, others use highly questionable collection methods and are suspected of charging rates far exceeding the legal limit.<sup>13</sup> Given the underground 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 private banks’ reluctance to lend to small firms.

## IV. Small-Firm Financing in 2002: The Middle-Risk Gap

### A. 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 (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.

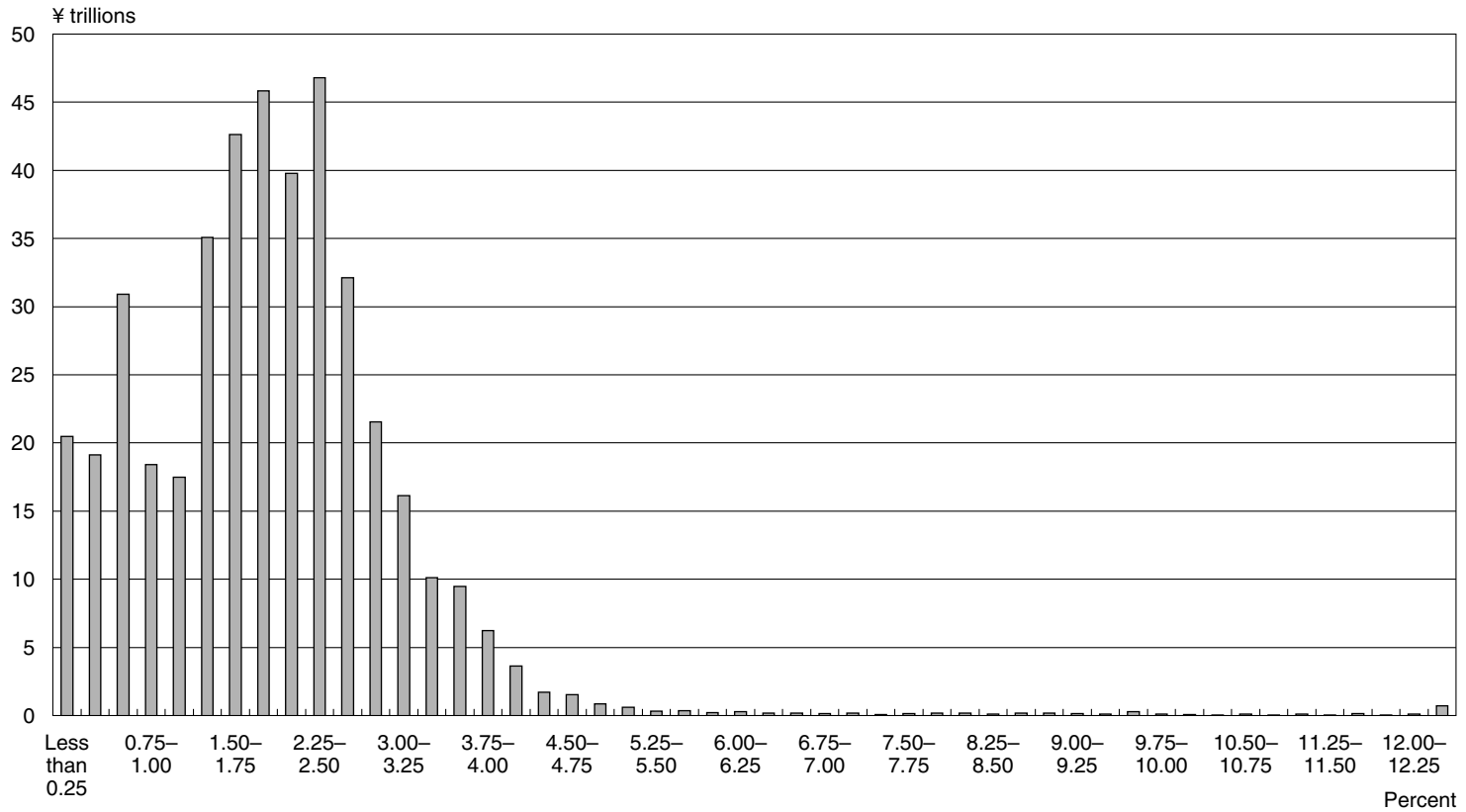
Despite the high liquidity in the banking system and pressure on banks to increase profits, in the early 2000s the credit crunch (*kashi-shiburi*)—the banks’ unwillingness to furnish new loans—was accompanied by a new phenomenon: “credit withdrawal” (*kashi-hagashi*). This refers to private banks abruptly 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 of “bicycle loans” (new loans to distressed clients enabling them to pay interest on outstanding loans so that the latter remain “performing” on paper).<sup>14</sup> 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 their business results.

All this is the background to the remarkable and persistent phenomenon I refer to as the middle-risk gap in Japan’s loan interest rate structure. Figure 4 shows private bank loans outstanding, by interest rate, as of December 2002. This figure reflects private bank lending only, and does not include loans by the non-bank high interest rate lenders, data on which are difficult to collect, especially for loans priced at above

13. For example, advertisement stickers posted in phone booths may offer rates exceeding 600 percent per year, once daily rates and fees are recalculated into an annual rate. Such advertisements were seen by the author in Shibuya Ward, Tokyo, in winter 2003.

14. See Smith (2003) for a review of the literature on “evergreening,” and Caballero, Hoshi, and Kashyap (2003) on the effects of evergreening and “bicycle loans” on the economy.

Figure 4 Private Bank Loans Outstanding, by Interest Rate, as of December 2002



Source: Bank of Japan, "Financial and Economic Statistics Monthly."

the usury rate limit. Figure 5 represents an attempt to combine private bank and non-bank loans outstanding, 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 percent, and high interest rate lenders reported a total of ¥34 trillion in small-firm loans, which does not represent the full size of the high interest rate loan segment. Both figures clearly show the middle-risk gap, as there was hardly any lending in the range of 5–15 percent. The middle market in Japan is clearly under-served.

Surprisingly, Figure 6 shows that this middle-risk gap has persisted for more than 30 years. With the exceptions of 1980 (when interest rates were raised to prevent inflation) and 1990 (when the bubble economy burst), Japanese nominal interest rates have clustered in the 1.5–4 percent region, almost regardless of booms or busts, or financial liberalization.

One potential caveat to 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 partial collateral), or by demanding varying degrees of collateral depending on risk. Both of these mechanisms were common during the period of interest rate regulation (through the 1970s; see Suzuki [1980]), but this changed in the 1990s. As for compensating balances, while some corporations held time deposits exceeding

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

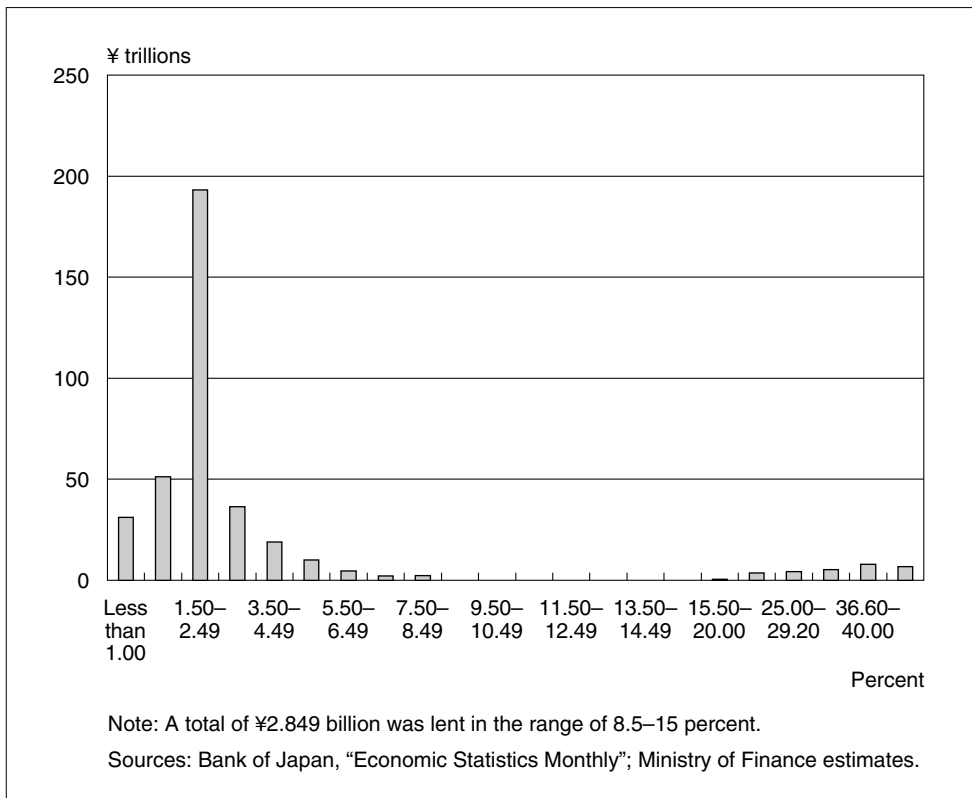
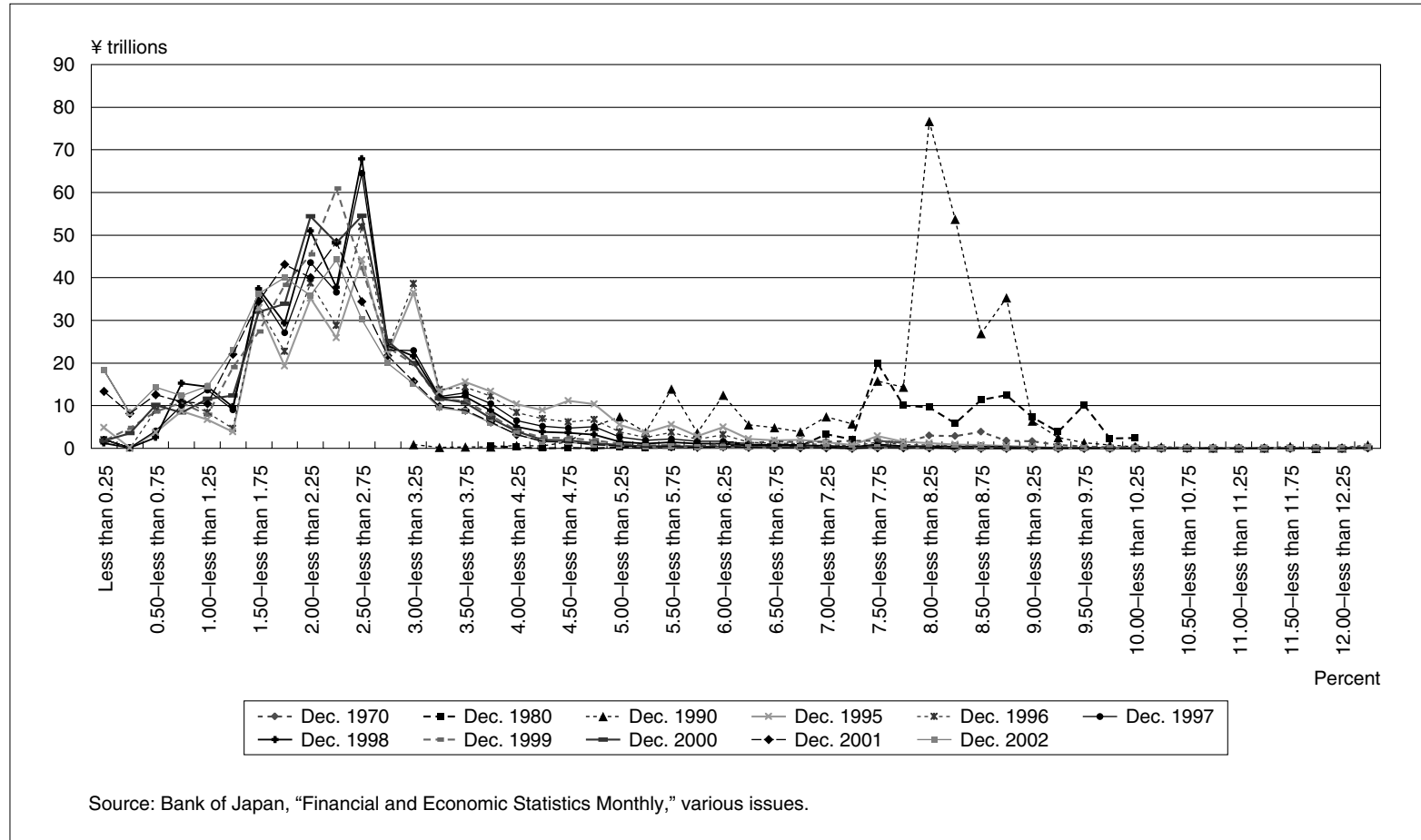


Figure 6 Bank Loans Outstanding (on Bills and Deeds), by Interest Rate, 1970–2002



¥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 percent of all outstanding loans were uncollateralized, and 38.9 percent were secured by letter from a third-party guarantor, leaving less than one-third of all loans collateralized by real estate.<sup>15</sup> 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 do banks and non-banks not step into this gap? This is all the more perplexing as studies suggest that in the early 2000s Japanese banks have been 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 data on bank profitability indicate that core earnings as a percentage of assets in the early 2000s were about 2 percent for U.S. banks, but only 0.6 percent in Japan. Supporting this finding, Shinsei Bank Chairman and CEO Masahiro Yashiro in a presentation in March 2003 stated that, given their credit rating and cost structures, in 2002 and 2003 Japanese banks did not earn profits on loans priced below 5 percent.<sup>16</sup>

## **B. Explanations of the Middle-Risk Gap**

Explanations of the interest rate gap can be grouped into three broad types of arguments: (1) the interest rate structure is a true reflection of the market, which is in a “demand crunch” rather than a credit crunch; (2) systemic features of the banking system, such as an underdeveloped market for securitized debt, prevent banks from lending in the middle market; and (3) 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.

### **1. Recession: The “credit demand crunch” hypothesis**

The first apparent explanation of the middle-risk gap is that it reflects market conditions in Japan after a decade of recession. Caballero, Hoshi, and Kashyap (2003) argue that government measures in support of failing firms throughout the 1990s have led to a situation in which “zombie” (*de facto* bankrupt) firms have crowded out new firms and new entrepreneurial activity, 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 may be some validity to this argument, three factors diminish its explanatory power. First, a variety of surveys suggest that an increasing number of small

15. See Bank of Japan, “Financial and Economic Statistics Monthly,” various years. Oyama and Tanaka (2003) 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.

16. This statement was made at a lunch presentation at the Foreign Correspondents’ Press Club in Tokyo on March 4, 2003.

firms want to borrow but cannot; thus, there is demand that is not met (Figure 1). Second, while banks were reducing their loans to small firms in the 1990s, high interest rate lenders (consumer finance companies, *shoko* loan companies, and others) were thriving and reported increasing loan volumes and profits. Apparently, they were effective in identifying viable small-firm clients and collecting collateral in case of default. Third, the 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.

## **2. Systemic reasons: A credit crunch initiated by banks**

Four factors related to Japan's banking structure and regulation combine to effectively hinder banks from entering the middle-risk market: limited risk management 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 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 and Weiss (1981) situation, in which credit rationing occurs above the equilibrium rate of about 5 percent 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 burst in 1990, 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 of 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. Partly this may be due to obstacles created by a slow and under-served 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, which is standard banking practice elsewhere). Banks continue to be considered to have a fiduciary duty toward their client borrowers, and they incur great reputational damage if their denial of loan extensions to defunct firms, let alone their attempt to collect collateral, causes social hardship. This social understanding of the obligations of private banks, and the costs incurred by banks that 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.<sup>17</sup>

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 to enter the middle market. In fact, in

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

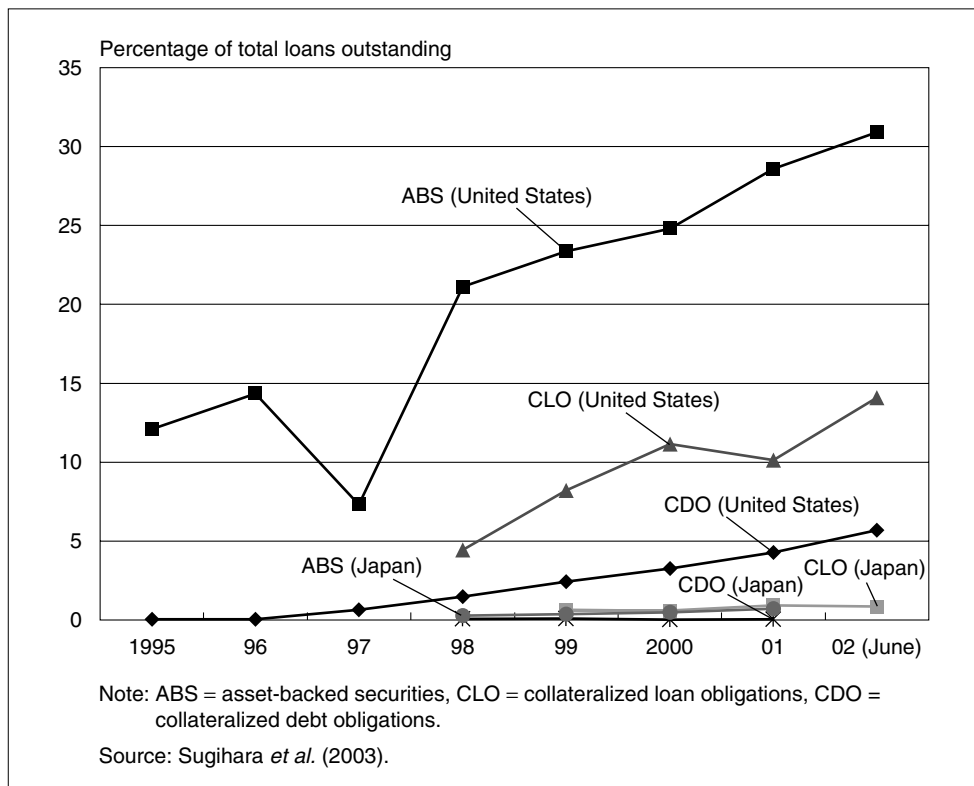


2003 a few new initiatives were launched, such as New Bank Tokyo (see Section IV.B.3), to pursue exactly this strategy. Meanwhile, established banks moved very cautiously. We need additional reasons to explain their behavior.

One prominent early explanation of the credit crunch and credit withdrawal phenomena in the late 1990s was that large banks found it increasingly difficult to attain the 8 percent capital adequacy ratio as required by Bank for International Settlements rules. To make the cut, many reduced commercial loans and instead purchased government bonds (see, e.g., Ito and Nagataki Sasaki [2002]). Beginning in 1998, domestic banks were subjected to a 4 percent domestic capital adequacy ratio. Many faced difficulties clearing this hurdle, which contributed greatly to the small-firm credit crunch in 1998. At the same time, the FSA (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 United States, 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 banks' capital ratios remain unaffected. The fast growth of small-firm loans by U.S.

**Figure 7 Securitized Debt Assets, as a Percentage of Total Loans Outstanding, in the United States and Japan in 2002**



finance companies, too, can be partially attributed to securitization. At year-end 2001, 34 percent of U.S. finance company loans to consumers were securitized, as were 15 percent of their business loans (Yabushita and Bushimata [2002]).

In Japan, markets for asset-backed securities (ABS) are underdeveloped, mainly due to regulation. As late as in 1993, reacting to lobbying by finance companies, the Japanese government passed a Special Debt Securities Law (Tokutei Saiken Ho) that allowed the securitization of lease contracts, credit card debt, sales credits, and car loans; however, bank loans could still be handled only 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<sup>18</sup> that exempted the trade of securitized debt from these Civil Code restrictions (Yabushita and Bushimata [2002, p. 147]).

While this set the stage for more active loan securitization, it coincided with the banks' growing nonperforming-loan problem. Whatever loan portfolio banks would securitize, it was likely to be a bag of "rotten 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 System Council (Kin'yu Shingikai) (2002a, b) advised that an active market for debt was critical for the development of Japan's financial markets. The Japanese Bankers Association (Zenginkyo), in a March 2003 position paper, pushed aggressively for deregulation of the various remaining constraints (Japanese Bankers Association [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 of facilitating securitization of these loans (see Section V). This increase in turn fed into a new market for CLO, 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 CLO, roughly 90 percent of which were covered by government loan guarantees.<sup>19</sup>

In parallel with the Tokyo Metropolitan Government's CLO initiative, large banks also became more active in issuing collateralized debt obligations (CDO), 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 trillion issue in 2002), as well as Sumitomo Mitsui Banking Corporation and UFJ Bank, with issues of about ¥1 trillion each; the latter included small-firm debt (Komiya [2003]). 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

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18. Saiken Joto no Taiko Yoken ni kansuru Minpo no Tokurei-to ni kansuru Horitsu, or Taiko Yoken Tokureiho in abbreviated form.

19. Yabushita and Bushimata (2002); see also the Tokyo Metropolitan Government website at [www.metro.tokyo.jp](http://www.metro.tokyo.jp). The second batch of CLO consisted of loans to 925 firms worth about ¥32.5 billion, and the third batch in March 2002 totaled more than ¥88 billion in 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 prices or the market (Tokyo Metropolitan Government [2002]).

announced that it would sell commercial paper backed by a package of 30,000 sales credits from small firms.<sup>20</sup>

Still, the total market for securitized debt in Japan remains comparatively small, covering hardly 5 percent of total loans outstanding (Figure 7). To further the development, in April 2003 the BOJ committed to purchase ¥1 trillion worth of securitized debt from banks during 2003.<sup>21</sup> 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 be established and increase banks' loan origination activities will depend critically on whether banks are able to lend at interest rates that attract investors and spur the development of a private market for pooled debt. Throughout 2003, private investors largely shunned the market. To some extent, this was due to remaining legal constraints pertaining to banking segmentation (for example, which institutions were 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 (Financial System Council [2002b, pp. 48–49]). But perhaps more importantly, without interest rates at levels commensurate with risk, the market for securitized debt is unlikely to take off.

### 3. Political interference: Distortion of the interest rate structure

There is ample evidence of open political pressure on banks to not 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.<sup>22</sup> Politicians, especially from regions with many small firms, then exerted pressure on large banks not only to lend more to small firms, but also to do so at large-firm rates.<sup>23</sup>

In 2002, the Prime Minister's Financial System 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 *shoko* loan rates . . . . This situation leads us to advise that political lending (*seisaku kin'yu*) should be replaced with private interest rate setting.<sup>24</sup>

20. See *Nihon Keizai Shimbun*, February 9, 2003, p. 7.

21. For details on the BOJ's action, see [www.boj.or.jp/en/seisaku/03/pb/k030611b.htm](http://www.boj.or.jp/en/seisaku/03/pb/k030611b.htm), [www.boj.or.jp/en/seisaku/03/pb/k030408.htm](http://www.boj.or.jp/en/seisaku/03/pb/k030408.htm), and a speech by BOJ Governor Toshihiko Fukui, "Prospects for the Future of Japan's Economy," at [www.boj.or.jp/en/press/03/ko0307a.htm](http://www.boj.or.jp/en/press/03/ko0307a.htm) (section IV). Commentary can also be found in Hirata and Shimizu (2003).

22. See also Footnote 1.

23. This information comes from the author's interview with a Japanese banker in Tokyo in February 2003. Many city banks have found creative ways around this pressure, for example, by having their largest clients set up "paper" subsidiaries that fall into the legal category of a "small firm" but do no more than pass the loan back to the large-firm parent company. On paper, the bank has thus furnished a "small-firm" loan at a large-firm rate.

24. See Financial System Council (2002b, pp. 44 and 45). The English translation is the author's.

In other words, as of late 2002 Japanese banks were not free to set interest rates at the 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 to 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 regulations are relaxed, we may see more activity by leasing firms, credit card companies and others, which may spur competition with banks for the middle market.

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 ¥30 billion to establish the Japan Promotion Bank (Nihon Shinko Ginko) with the explicit mission to lend in the middle-risk gap, i.e., between roughly 5 percent and 13 percent.<sup>25</sup> In May 2003, Tokyo Governor Ishihara announced the establishment of New Bank Tokyo, with the same strategy. More than half of this bank’s founding capital of ¥200 billion was provided by the Tokyo Metropolitan Government and a consortium of Japan’s large financial institutions (Hitotsubashi Sogo Kenkyujo [2003] and Kimura [2003, p. 30]). As it is public in 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 V). However, even if these two new banks prove successful, it remains doubtful that they alone can fill the middle-risk gap, as they are addressing symptoms rather than the causes. Only when politicians withdraw from interfering in private banks’ strategies can the middle-risk gap be addressed.

In sum, several market- and system-related factors 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 percent are not profitable for 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.

## V. 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 has 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–70s. As we will see, however, rather than being abolished with the advent of deregulation, these programs reached new levels of activity during the 1990s.

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

One major initiative of Prime Minister Junichiro Koizumi for the early 21st century is to reduce the role of government in Japan’s markets. In the banking system, the criticism is that public banks have “crowded out” private banks by competing for similar customers at subsidized rates, and it is argued that reform will come through 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 support 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 some 90 percent of the total small-firm loans outstanding, and Shoko Chukin Bank, the one government bank that may target similar clients as large banks, accounted for only 3 percent 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 downward, and by impeding pricing according to risk it has greatly exacerbated the middle-risk gap.

### **A. 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 (*shinyo hoshō kyokai*) established by prefectures and five municipalities. These offer full guarantees for loan applications of local firms for loans of up to ¥200 million, at an insurance fee of 1 percent of the loan amount. Eligibility requirements are generous, thus providing even small firms facing severe problems with access to very low interest rate loans. During the 1990s recession, the loan guarantee system was used with increased frequency, and by the late 1990s about 10 percent of all new small-loan applications were covered by the system (Aoyama [2001, pp. 220–222]).<sup>26</sup> Because these loans are indirectly subsidized, they contribute to the downward pressure on interest rates.

Loan guarantees are centrally administered and reinsured to 80 percent of the loan amount through two public corporations that in July 1999 merged into the Japan Small and Medium Sized Enterprise Corporation, or JASMEC (Chusho Kigyo Sogo Jigyodan), a public corporation financed through the general budget as well as special budgets.<sup>27</sup> As of July 2003, of total loan guarantees outstanding of ¥32.2 trillion (roughly US\$293 billion at an exchange rate of ¥110 to US\$1) for 4.25 million cases, JASMEC reinsured ¥13 trillion (US\$118 billion), covering more than one million cases. In addition, JASMEC provided, through private banks, “system finance loans” to small firms at zero percent, with an outstanding volume of ¥3 trillion (US\$27 billion) in 2003, and emergency loans of almost ¥2 trillion (US\$18 billion). Because these loans are implemented through private banks, they are not identified as government-related in Figure 3.<sup>28</sup>

26. For an overview of the guarantee system, see also [www.chusho.meti.go.jp/kinyu/030206karikaehosyou.htm](http://www.chusho.meti.go.jp/kinyu/030206karikaehosyou.htm).

27. Until its 2001 reform, JASMEC and the small-firm banks were financed through the Fiscal and Investment Loan Program (FILP), or Zaisei Toyushi, 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 *zaiyusai*.

28. In comparison, government loan programs have also existed for many years in the United States, but as of 2001 total outstanding guarantees were at only US\$9.9 billion, covering 43,000 cases. However, the U.S. experience suggests that these loans are easily securitized; in 1999, the SBA estimated that 34 percent of all small-firm loans

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

## **B. 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 percent, 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 Japan Finance Corporation for Small Business, or the JFS (Chusho Kigyō Kin'yū Kōkai). The JFS was founded in 1953 to "provide long-term funds to foster the development and stable operations of small business."<sup>29</sup> 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 National Life Finance Corporation, or NLFC (Kokumin Seikatsu Kin'yū Kōkai) was originally founded as a welfare and pension bank for the self-employed, but after World War II was transformed to serve a similar purpose as the JFS but with a focus on very small firms: 86 percent of its loans are to firms with fewer than nine employees.<sup>30</sup> Thus, NLFC clients are typically proprietors in services and traditional trades, and the majority of NLFC loans are small and non-collateralized.

The third bank, Shoko Chūkin Bank, is a hybrid, 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 member cooperatives and their members. In contrast to the other two banks, Shoko Chūkin Bank 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 Chūkin Bank ¥10.5 trillion.<sup>31</sup>

All three banks offer "special-purpose loans" on behalf of the government. More than 80 percent of the JFS and NLFC loans, and about 20 percent of the Shoko Chūkin Bank loans, are in this category. Special-purpose loans are highly subsidized loans

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covered by a loan guarantee had been securitized, and finance companies were the most active users of this system (Yabushita and Bushimata [2002, pp. 160–163, 244, and 251] and Aoyama [2001, p. 222]).

29. See the JFS Annual Report for 2001 at [www.jfs.go.jp](http://www.jfs.go.jp).

30. In 2000, the NLFC furnished 407,103 loans totaling ¥2.87 trillion (for an average loan size of about ¥7 million, or US\$63,000 at an exchange rate of ¥110 to US\$1). Looking at equivalent numbers for private banks for 2000, city bank loans to small firms averaged ¥20.2 million (roughly US\$184,000), those from regional banks ¥11.23 million (US\$102,000), and those from second-tier regional banks ¥10.47 million (US\$95,000); see Yabushita and Bushimata (2002, p. 167).

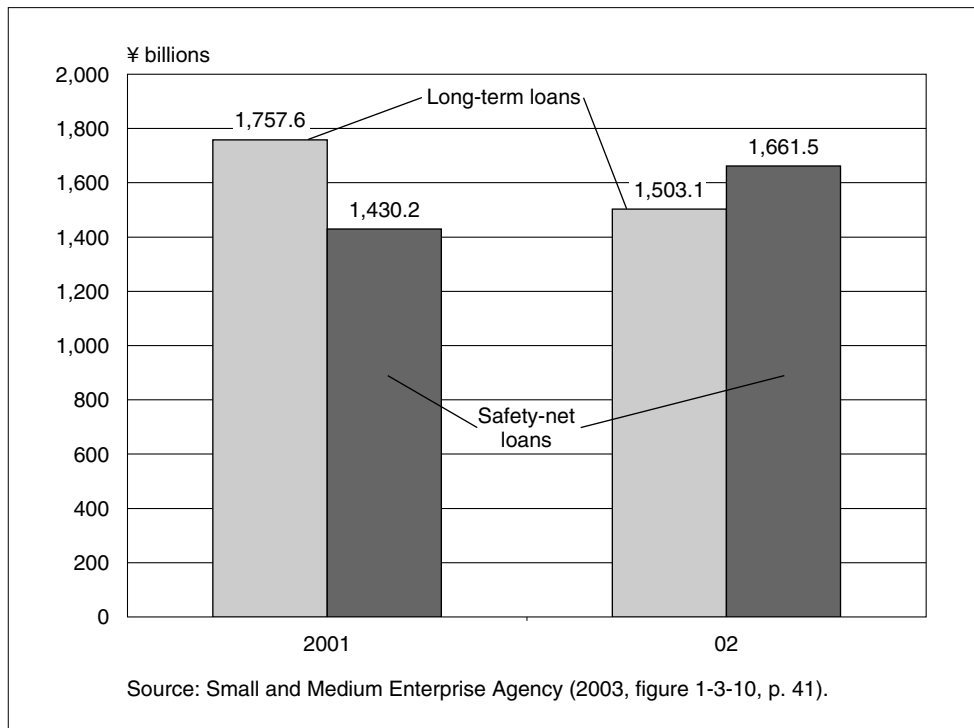
31. See Yabushita and Bushimata (2002, pp. 158–160) and Aoyama (2001, p. 217); also [www.jfs.go.jp](http://www.jfs.go.jp), [www.kokuin.go.jp](http://www.kokuin.go.jp), and [www.shokochukin.go.jp](http://www.shokochukin.go.jp).

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 the recession by introducing programs ranging from “IT modernization” and “management innovation” to “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 “safety-net loan programs” earmarked to help firms facing bankruptcy.<sup>32</sup> These loans serve to keep alive very small firms that would otherwise falter, to preserve employment for their owners, family members, and employees.

### C. Government Loans as Welfare

Figure 8 shows that, in 2002, safety-net loans outstanding exceeded those for capital investment. While banks insist that they do not hand out free loans, it is argued even within the cognizant agencies that many of the public loans serve only to prevent or postpone bankruptcy by the small-firm borrower.<sup>33</sup> Many of the highly subsidized special-purpose loans are, in effect, equivalent to welfare payments.

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



32. See [www.chusho.meti.go.jp/kinyu/030313karikaeQ&A.htm#4](http://www.chusho.meti.go.jp/kinyu/030313karikaeQ&A.htm#4); and the *Nihon Keizai Shimbun*, January 17, 2003.

33. This information is drawn from the author’s interviews in Tokyo in February 2003.

This becomes clearer through the hypothetical example of a 50-year-old *tatami* (rice-straw mat) manufacturer who must close his business due to the recession. As a self-employed person, he is not eligible for unemployment insurance, and only at age 65 would 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 structurally 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.<sup>34</sup>

Because the Japanese government does not offer a full-fledged welfare program for the structurally unemployed, it strives to keep unemployment as low as possible. This explains the aggressive policies in the 1990s to maintain employment, by subsidizing small firms and bailing out failing large firms. A fundamental role of the JFS and the NLFC has become to keep alive small firms, and their owners, 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 that shame is associated with going on welfare in Japanese society (as anywhere else), providing government loans to bankrupt firms is an elegant way to arrange for welfare while preserving the appearance of an economic contribution. Perhaps more importantly, because the NLFC is financed in large part through a special budget (the FILP, previously financed directly through loans by private postal savings, but now funded indirectly through special bond issues that are purchased with these postal savings), channeling welfare through NLFC 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 percent, and special loan programs were offered in the range between 0.95 percent and 1.95 percent. Thus, a small firm could receive a government loan to facilitate restructuring at a rate lower than the country's blue-chip firms would receive from their main banks.<sup>35</sup> The resulting upward-stickiness of interest rates means that private banks are unlikely to rebound to strong profits.

An important step toward truly market-oriented reforms is a restructuring of the welfare-type loans to small firms. One option would be to abolish special loan programs altogether, but for budgetary and other reasons politicians might find this option unpalatable. Alternatively, the government could greatly reduce its role in the loan market, or it could 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 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

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34. See, for example, Niimura (2001).

35. Current interest rates are posted at <http://www.jfs.go.jp/jpn/topics/base/html>.



“in the future.” However, it is not clear whether this reduction would occur through privatizing some of these banks, or by reducing their loan programs. 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 plan to continue subsidized loan programs even after 2005, thus maintaining price distortion in the long run.

Viewing the government’s 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 on a large scale. Simply reducing the size of the government in the loan market is unlikely to do any good, as it would reduce support for small firms and maintain distortions of the interest rate structure. A better policy choice might 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.

## **VI. Conclusions**

Many aspects combine to explain the puzzling existence and persistence of a pronounced 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 interest rate non-bank lenders. Interestingly, the middle-risk gap between 5 percent and 15 percent has existed, with only two exceptions, for more than 30 years.

This situation cannot be fully explained by one single reason. It is not just a Stiglitz and Weiss (1981) type of credit rationing, and the lower bound of 5 percent is too low for banks to earn profits by 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 percent 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 contributed greatly to the middle-risk gap, by keeping interest rates low and preventing banks from lending more aggressively to small firms. Moreover, as the recession has 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, it is generally considered that one of the fundamental social responsibilities of a private bank is to

support its clients, especially in times of crisis. A bank that refuses further lending to a client in danger of bankruptcy and moves to collect collateral on the client's loans incurs great reputational damage. In contrast, non-banks have been aggressive about recovery of collateral, but for their profits pay the price of a very negative image: the public does not see their behavior as a valid business model, but rather as that of a "loan shark." Japan is unlikely to move toward a greater market finance orientation unless property rights transfers of loan collateral are unambiguous and use of these rights becomes politically and socially acceptable.

A final root cause of 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 the purpose of welfare transfers. Ironically, Japan's smallest firms with the highest risk are borrowing at the lowest rates. The situation would be improved 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 prices.

The interest rate gap has existed for many years. It is a reflection of banking-sector segmentation, political pressure to keep 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 into the core areas of the financial system. As long as these distortions continue, to ensure access to credit by small firms it is necessary to uphold the 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 be unnecessary any longer to restrict credit cooperatives and unions exclusively to serving small firms. True market-oriented reforms in banking will have to begin with the interest rate structure.

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