

The Evolving Role of National Development Banks in East Asia

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Introduction

Numerous countries across the globe face significant challenges today in competently regulating, supervising and reforming government-backed financial institutions in line with a changing business environment. Since 2003, accounting irregularities surrounding government-sponsored mortgage finance companies Fannie Mae and Freddie Mac have grabbed the headlines in the U.S., while in Japan, a political battle has unfolded surrounding the Prime Minister Jun'ichiro Koizumi's attempts to privatize that country's government-backed postal savings system.

Government-backed financial institutions are typically established when private sector entities are either unable or unwilling to provide services deemed important by the government. Central to the success of such entities at the time of their creation is typically the preferential regulatory treatment they receive and their lower capital procurement costs. (The larger development banks in Japan, for instance, have been privileged with strong credit ratings because of their government backing.) Preferential treatment early on also typically includes tax-exempt status, exemption from requirements to pay deposit insurance premiums or payments to other financial industry safety nets, and disclosure and accounting requirements less strict than those imposed on private sector banks. Such operational parameters present regulators with special challenges in ensuring the accountability and efficiency of government-backed financial institutions. These challenges, present from the beginning, may be compounded as circumstances change and the rationale for the utility of these institutions expires or evolves in light of economic development, the development of capital markets, and the maturation of private sector financial institutions.

This paper focuses on a particular type of government financial institution found in many countries around the globe: national development banks. Development banks are government financial institutions usually established at an early stage of industrial development. They typically provide a source of long-term financing to industries deemed important to economic development but which might not otherwise be funded by the private sector. They may also serve to finance other projects consistent with state policies. With economic development, domestic financial deregulation and deepening and the emergence of private markets for long-term debt, however, the need for such banks declines. Yet, the process of dismantling or privatizing such institutions is often fraught with political conflict, affecting further attempts to deepen a country's financial sector.

This paper examines the prominent role that development banks continue to play in the more advanced economies of East Asia through focusing on the role of such banks in Japan, Korea, and Singapore. The paper focuses, in particular, on the period since the latter 1990s, when many countries in the region were beset by financial crisis. The paper seeks to uncover answers to a number of questions of interest to political scientists through its analysis. The first has to do with why, given that these banks were established with similar objectives, do we observe considerable variance today on many dimensions of these banks' operations? More specifically, we observe variance with regard to governance structures, funding mechanisms, scope of business activity, performance, and their respective relationships with elected officials and other government agencies. On one end of the spectrum, The Development Bank of Singapore (DBS) today is a majority government-owned company but also has private

shareholders and operates largely as a commercial bank. It is not only the most internationally active development bank in East Asia but also one of the largest financial services groups in the region. On the other end of the spectrum, the Development Bank of Japan (DBJ, now slated to be privatized)¹ is 100 percent government-owned and very domestically focused in its business orientation.

This project's analysis of the evolving role of national development banks is also hoped to make progress towards better understanding the role of politics in the operation of financial systems in different countries. How can we understand these systems and the reform paths respective governments have chosen for their government-backed financial institutions with reference to politics, as well as to variables such as country size, their ability to attract international investors, and the nature of government debt markets? The widespread use of development banks in countries across the globe makes the study of their political dynamics and reform paths particularly amenable to comparative analysis. The analysis is particularly relevant for countries in East Asia, however, given the structural transformations in these economies and the new fiscal challenges faced as a result of changing demographics. These fiscal challenges have led to increased scrutiny of the operation of government-backed financial institutions and new pressures for reform in many countries in the region.

The second question of interest has to do with the nature of the government's role in the economy in East Asia today and the relationship among various actors in the political economy. While major changes have taken place in the nature of interaction between government financial regulators and private banks in many economies in the region since financial crises of the later 1990s, scant attention has been paid to the reorientation of development banks triggered by these events. Because development banks maintain special relationships with national and local governments and their associated policymaking and planning agencies, as well as with private banks, it is only natural that they have been affected as well.

Third, the story of these development banks provides us with interesting case studies of how organizations created for one purpose often seek out new rationale for their existence in order to maintain their organizational survival.

Preliminary findings suggest that many development banks in advanced economies in the region continue to be seen as having public utility. Their roles have evolved in the light of maturation of the private banking sector, financial liberalization—and most recently—financial crisis. And, in general, their scope of activities has expanded in the face of what are argued to be new needs for financial sector development and stabilization. At the same time, variation in political features of the respective countries in the region help explain why some development banks are under greater pressure than others to reform in light of general global trends away from wholly government-owned entities and toward more hybrid institutions that mix characteristics of both the public and private.

¹ The precursor organizations to the DBJ were the Japan Development Bank (JDB) and the North East Finance Corporation of Japan (Hokuto Koko), which were merged in 1999 to form the DBJ.

The paper proceeds as follows. Section 1 provides a brief general background on development banks in East Asia. Section 2 examines the new opportunities financial crisis provided for development banks in Japan, Korea, and Singapore. Section 3 further describes some innovations in public-private financing that are emerging as alternatives to state-funded development banks. Section 4 then turns to examine more closely the case of the Development Bank of Japan (DBJ), examining the political dynamics surrounding its evolving role in the nation's economy. The paper concludes with some observations about general trends as well as observations about how the Japanese case fits into these trends.

1. Historical Background of Development Banks in East Asia

Development banks, which number over 520 worldwide,² have contributed importantly to economic development. The first national development banks formed in the 1930s. By the 1950s, as former colonies began to win independence, the establishment of both multilateral and national development banks accelerated, together with the total assets they accumulated as a group. Development banks serve as instruments of public policy. In contrast to private banks licensed under a general banking law, development banks are typically established through separate legislation with the mandate to prioritize the financing of projects that yield substantial economic, social and environmental benefits but which might otherwise not be undertaken by the private sector. Such banks are thought to generate a multiplier effect in early stages of the development process, financing projects that yield substantial public benefits but which might otherwise not be undertaken by the private sector. The value of their role in advanced economies is more open to question.

The prominent role played by such banks even following maturation of the economy has been notable particularly in East Asia, where markets for long-term debt have been slower to develop and financial systems remain heavily bank-centered.³ The banks' main business areas have historically been the extension of policy loans. Loosely defined, policy loans are those provided with preferential interest rates or earmarked for specific sectors or industries. Development banks have also played an important role when state-owned industries have been privatized. For example, the Japan Development Bank (JDB; predecessor of the DBJ), funneled funds from the sale of telecom giant NTT and Japan National Railway shares into interest-free loans (a new concept at the time) aimed at revitalizing industry and regional areas. The Korea Development Bank (KDB) plays a role in privatization today, as well -albeit in a different way. It has provided three rounds of guarantees since 2002 to Korean Electric Power Corporation (KEPCO) bonds to enable six KEPCO subsidiaries to privatize with reasonable financial leverage.

In general, development banks in East Asia have been viewed as unusually successful

² Bruck (1998).

³ The percentage of total loans to industry supplied by these banks varied significantly across country, however. According to the World Bank (1993: 227), Japan's JDB accounted for 18 percent of new funds loaned at its peak in 1953, the KDB made a third of all loans and guarantees in the 1970s, the development bank of Taiwan (the Bank of Communications) held about half the assets of the banking system, Malaysia's development banks accounted for less than 3 percent of total financial system assets in the 1980s, Thailand's industrial development bank had only 1 percent, and Hong Kong had no development bank at all.

compared to those in South Asia, Latin America, and Sub-Saharan Africa, where most of development banks were beset by bad debt as high as 50 percent of their total lending⁴ The World Bank attributes the greater success of development banks in the high-performing economies of East Asia to the ability of governments to insulate these banks from political pressure to finance bad projects and to provide better incentives for and capabilities to screen and monitor projects.⁵ Prudential regulation of most national development banks has historically been more flexible than has been the regulation of local and foreign commercial banks. In Korea, state-run banks have operated under more flexible rules as to credit ceilings because of their large involvement in the nation's restructuring activities. In Japan, a separate section of the Finance Ministry historically oversaw government financial institutions until 2004, when they became subject to inspections by the Financial Services Agency (FSA), the same regulator of private banks (although the nature of the inspections differs somewhat).

2. New opportunities for development banks in the wake of financial crisis

Financial crises in the latter 1990s presented new opportunities for development banks in the region to demonstrate their continued public utility. In the wake of crisis, these banks were called on to stabilize domestic financial markets, fill credit vacuums caused by sharp reductions in lending by private banks, advance the corporate restructuring necessary to get rid of the sources of bad debt, and take the lead in financial innovation as the private sector became increasingly risk averse.

The Korea Development Bank (KDB) played an important role in stabilizing Korean financial markets during the 1997 financial crisis by restoring adequate market liquidity. In 2003, the bank again provided important capital support to credit card companies to deal with a crisis in that industry, and a recent amendment of the KDB Act allows for capital infusions into the Bank without prior parliamentary approval, thereby bolstering its capacity for response to any liquidity problems. KDB's role as a haven for money in the midst of financial sector instability is also reflected in the bank's rising ratio of liabilities occupied by deposits, from 6 to 14 percent over the past seven years, with a particularly notable surge amid the instability in 2003.

Corporate lending by development banks also helped fill the credit vacuum left by private banks amid their efforts to clean up non-performing loans and restore capital bases. The role played by the Development Bank of Japan (DBJ) here has been particularly important upon the backdrop of eight straight years of decline in private sector lending balances in Japan. Large Japanese commercial banks once co-financed

⁴ World Bank (1993: 227), citing World Bank (1989c).

⁵ World Bank (1993: 227). It was also said that because the development banks in Japan and in Singapore had to repay with interest the funds they obtained from the government, that this gave them an incentive to choose projects that were viable and could repay. Disclosure of the financial condition of development banks such as JDB was minimal, however, so it is difficult to tell how successful they really were in this area. In Japan, one 1993 study co-authored by JDB and the Japan Economic Research Institute argued that JDB's lending activities created spillover effects for the private financial sector, due to its project evaluation and monitoring capacities and the way in which private banks often looked to the JDB to see where good investments lay.

with regional banks in urban areas, relying heavily on the larger banks to bear a disproportionate burden of monitoring costs and lending risk. Today DBJ often assumes this type of co-financing with regional banks.

Most DBJ borrowers today are unlisted medium-scale companies; KDB meanwhile plans to expand its lending to smaller companies in 2005 by \$5 billion. When development banks funded heavy industries in earlier periods, they generally dealt with a fixed and stable client base. The recent shift in lending to a more diversified and fluid clientele increases the range of skills required of bank staff for information gathering and assessment, and heightens lending risk. It is unclear whether human resources and expertise at the development banks have been raised accordingly.

KDB and DBJ have also played pivotal roles in facilitating corporate restructuring through carrying out debt-equity swaps, debt readjustments, and aiding in M&As. In 2004, KDB expanded the scope of its operations into “defensive” restructuring activities, aiming to prevent rather than simply respond to corporate insolvencies. A growth in private corporate turnaround funds has led the DBJ to more actively pursue SME rehabilitation recently, as part of a larger scheme to bolster the financial positions of both regional and major commercial banks.

Japanese regional banks have long been reluctant to sell bad loan claims to SMEs for fear of hurting their business ties in regions in which they are based. Recently, private “regional rehabilitation funds” have begun to successfully persuade these banks to sell them their bad debt, with the promise that the funds will endeavor to rebuild the business, and then resell the loans at a profit, providing the banks with the opportunity to repurchase the original loans that to rehabilitated firms and thereby maintain ties to longstanding borrowers. A total of 43 such funds worth over 120 billion yen had been launched as of April 15, 2005. By forming syndicate loans with private banks to target these regional rehabilitation funds, DBJ encourages the expansion of such SME rehabilitation activities. For the large commercial banks joining with DBJ in the syndicated loans, this offers an opportunity to expand sources of income at a time when demands for loans remain sluggish. DBJ has also encouraged private institutional investors to pour money into struggling Japanese firms by investing in both domestic and overseas buyout funds.

Development banks in the region have also contributed importantly to the growth of nontraditional asset classes and new loan products in their home markets. KDB has taken the lead in the development of the derivatives market in Korea, while the Development Bank of Singapore (DBS) and DBJ have advanced the securitization of loan claims for SMEs in their home markets. In Japan, the DBJ also actively provides guarantees for new types of loan products as a way to lure the private banks into new areas of lending business.

Another policy function of development banks is to facilitate foreign aid and to make strategic international investments, in the absence of deep expertise within a country’s domestic private financial institutions. For instance, in recent years, Japan has proactively been using foreign aid and development financing to help secure the supply of industrial inputs. Japanese development banks, most notably the of DBJ and the Japan Bank for International Cooperation (JBIC) have been highly active in recent years in

making loans to countries that source raw materials. Recent loans, often in syndicate with private financial institutions, have been made for energy and resource projects in Libya, United Arab Emirates, Kazakhstan, Russia, Brazil and Mexico.

Japan has also been active in cultivating relationships through its engagement in multilateral development banks and with the national development banks of other countries. For instance, Japan (the only Asian member of the Inter-American Development Bank (IDB)) hosted the IDB's annual meeting in April 2005 in Okinawa, calling for increased trade and investment between Asia and Latin America. Its activities in Latin America have accelerated because of an interest in securing raw materials from the region. (Latin America, in turn, is interested in both export markets and access to capital markets in East Asia.) Other examples of Japan's direct engagement with emerging markets through development banks include loans made by JBIC to the Brazil Development Bank, Mexico's Banco Nacional de Comercio Exterior SNC, the government-owned International Bank of Azerbaijan Republic Bank, and Malaysia's Pembangunan dan Infrastruktur.

These types of loan projects have increased rapidly in recent years, and often go hand in hand with strategic foreign direct investment by Japan's private firms. Efforts by Japan to deregulate national financial markets to better integrate them with the international markets have paid off by making it easier for domestic firms to obtain credit and guarantees through innovative instruments in order to establish a presence in some countries that were previously considered too risky for direct investment. Nevertheless, private financial institutions continue to be eager to hedge their risks by partnering with state-funded development banks.

Crisis spurs business reorientation at DBS

In Singapore, the perception of poor performance by DBS during the Asian financial crisis spurred a shift to a more outward-oriented business strategy for the development bank. Prior to the crisis, DBS career staff or others from the state sector generally filled senior executive positions. From 1998, however, appointments to such positions began to include several foreign bankers.⁶ A clear shift to a more outward oriented business strategy also took place in this year. Only 17 percent of DBS assets were sourced outside Singapore in 1998, but that figure stood at 32 percent last year. Similarly, operations outside of Singapore rose to 37% of total revenues by 2004, compared to 15% in 1998.⁷ Today DBS anchor markets are in Singapore and Hong Kong but it also serves institutional, corporate, and retail customers in Thailand, the Philippines, Malaysia, Indonesia, and China, and maintains numerous overseas subsidiaries in the US and elsewhere.

Three new business opportunities beyond Singapore's borders have encouraged further outward expansion by the bank since the crisis. The first is the September 11, 2001 terrorist attacks. Since 9/11, large amounts of Islamic money have flowed out of the US and into Europe, the Middle East, and Asia. Drawing on expertise developed in its domestic Islamic banking business, DBS is working to court these funds through measures such as the establishment of Islamic investment trusts.⁸ The

⁶ Hamilton-Hart (2002).

⁷ DBS annual report.

⁸ DBS has been active in investments in its non-Islamic neighbors as well. The DBS presence in Thailand has been particularly notable here and began in 1993, when the bank obtained a Bangkok International

second development is the rise of China.

Singapore's majority Chinese population provides the bank with a comparative advantage in making inroads into the Chinese market. In 2001, DBS acquired a Hong Kong bank to form a group firm through which it is now expanding its network in China. In 2003, DBS was also awarded a license to operate in the Chinese derivatives market. The third development posing new business opportunities for DBS is the package of regional government initiatives to develop an Asian bond market.⁹ In 2004, the bank launched a Pan-Asian Bond index to track local sovereign and quasi-sovereign bonds from eight regional markets, with the hopes that the regional central bankers forum might adopt it for its second Asian Bond Fund (ABF-2). Although unsuccessful, the bid did enable DBS to gain chairmanship of the technical committee for the index selected, and serve as fund manager for a Singapore sub-fund of ABF-2. Additional related business opportunities are on the horizon here.

3. Development Bank of Japan

We turn now to look more closely at the political dynamics surrounding Japan's DBJ. Much has been written about the way in which the Bank carried out "indicative lending" to promote private sector investment in prioritized industries in the early decades of postwar economic reconstruction.¹⁰ Much less has been written about the political dynamics surrounding interaction between the Bank, the Government, and private sector financial institutions in more recent years.

Increased politicization of the bank from 1985

DBJ (and its precursor bank, the JDB) was forced to place more emphasis on political relationships and take political demands into greater consideration from 1985, when the Diet enacted a change in the procedure for identifying target industries. Until this time, legislation specified target industries and selection of these industries was not part of the DBJ mandate. From 1985, however, selection of target industries was done by cabinet order (*seirei*) and the change spurred reforms in the DBJ organizational structure.¹¹ A planning division was created and the JDB was given the authority to take the initiative in proposing its own projects.

A change to the JDB law in June 1985 also led to an increase in the types of enterprises targeted by bank financing and raised new management issues.¹² Debate arose within the Bank itself about the wisdom of particular projects. The JDB moreover was required to gain approval from the Finance Minister of projects. Accordingly, the JDB's relationship with politicians and with MOF became

Banking Facility license and then gained a majority stake in 1998 (after financial crisis in Thailand) in what was subsequently renamed DBS Thai Danu Bank, Plc. This bank merged in September 2004 with the Industrial Finance Corporation of Thailand and the Thai Military Bank to form the fifth largest bank in Thailand (now operating under the name of the Thai Military Bank) and carry out business as a universal bank, as part of the Thai government's plan to create internationally competitive megabanks. DBS maintains a 16 percent stake in the merged entity, second only to the 31.2 percent stake of the Ministry of Finance of Thailand's, and today also maintains a representative office in Thailand to gather financial and economic data and assist local companies who require support. In late 2003, DBS also formed a joint venture with a Thai consumer finance company to tap into that aspect of the market and today retains a 40 percent stake in this company, Shin Corporation.

⁹ See Amyx (2004) for more on regional initiatives in East Asia to develop bond markets.

¹⁰ See, for example, Calder (1993).

¹¹ *Nihon Kaihatsu Ginko-shi* (2002).

¹² *Nihon Kaihatsu Ginko-shi* (2002).

increasingly important. The process of selecting projects, developing those project proposals, and oversight after funding had been granted became increasingly important tasks. Because a policy of fiscal austerity prevailed with regard to the general budget in the second half of the 1980s, the number of funding requests being made of the JDB, funded through the Fiscal Investment and Loan Program, increased dramatically. Political pressures on the JDB increased and the bank had to focus more on how to appropriately allocate a limited amount of funds.

The Bubble Bursts

The situation changed 180 degrees in the 1990s. After the bursting of the speculative bubble in 1990/91 the DBJ was deluged with funds. A framework was established for adding money to the JDB budget via the supplemental budget, and in 1993, *three* supplemental budgets allocated additional funds to JDB. In the short span of 3 years, the JDB's operating funds doubled. The bank's official history notes the anxiety this development created on one level, as staff worried about the increased potential to make bad lending decisions if they focused only on ensuring that all of the money was lent.¹³ An internal resolution was made by staff at that time not to feel pressured to loan all of the money it was given if the number of deserving projects appeared inadequate.¹⁴

Other changes accompanied financial liberalization. Policy loans historically had the advantage of lower interest rates than those loans extended by private banks but this advantage in lending by the DBJ gradually eroded within the era of financial liberalization. With time, the assessment of potential clients became more difficult and the process became more machine-like. The bank accordingly tried to avoid placing unnecessary burdens on clients. The relationship between the bank and its borrowers changed considerably, as a result, as the bank did everything it could to try to lighten the procedural burdens on potential borrowers. The authority for making lending decisions was also transferred to lower-level officials in the bank. Amid this trend of simplifying procedures, trends in loan examinations changed dramatically. The percentage of all loans that were screened by the *Shinsabu* or Examination Division dropped drastically from 60.7% in 1970, to 33.1% in 1975, to 22.8% in 1980, to 12.8% in 1985, and to 4.8% from 1993-98.¹⁵ In the process, the bank also suspended its former general assessments of industries as a whole. Of course, as a result, the accumulated experience of the *shinsabu* decreased. In 1997, amid the system of financing in response to the financial environment and the weakness of companies, the number of requests for financing increased and the number of items brought to the Examination Division increased but it was too lightly staffed to respond appropriately and capacity issues were apparently also a problem.

1999 Reorganization

In 1999, the Japan Development Bank was merged with the North East Finance Corporation (an entity that provided financing for the Hokkaido and Tohoku areas).¹⁶

¹³ JDB officials also feared that the sudden expansion of the scale of their activities might elicit criticism from and generate friction with the private sector banks. This factor also contributed to relatively cautious thinking in the Bank at this time. *Nihon Kaihatsu Ginko-shi* (2002).

¹⁴ *Nihon Kaihatsu Ginko-shi* (2002).

¹⁵ *Nihon Kaihatsu Ginko-shi* (2002).

¹⁶ Interestingly, the Japanese name for the bank, *Nihon Seisau Toshi Ginko*, does not contain the word "development".

The organization cultures and politicization of the two entities merged at this time were very different. Frictions emerged within the organization in the years thereafter, as a result¹⁷ DBJ officials all received training on assessing borrowers and lending decisions were made on the basis of technocratic criteria. In fact, as one former bank employee notes, "If politicians contacted local bank branches to request special consideration of a company, then that case tended to be scrutinized even *more* so than normal, as the presumption was that an extraordinary amount of risk had to surround the borrower for the politician to make such a request. At the North East Finance Company (*Hokuto Koko*), however, *all* loans were political. So, the kinds of skills valued at that organization were very different and were political rather than technocratic skills."

The newly formed entity also had to deal with mounds of bad debt that had been accumulated by the North East Finance Corporation. Difficulties also included the fact that the nature of policy-based finance had differed between JDB and the North East Finance Corporation. JDB lending prior to the merger focused on improving the social infrastructure, promoting measures to protect the environment and conserve energy, and reform the nation's economic structure. The North East Finance Corporation, on the other hand, focused on internationalization and computerization of Hokkaido and Tohoku, and the development of social infrastructure and creation of new businesses in these areas. In many respects, the North East Finance Corporation had been engaging in the types of basic development activities that were no longer a focus elsewhere in Japan.

Fiscal Investment Loan Program-related Reforms in Funding

Much of DBJ funding comes from postal savings deposits and insurance premiums that are funneled through the Fiscal Investment and Loan Program but recent reforms have forced the Bank to procure a significant amount of its funds from the Bank's issuance of its own bonds. In August 2000, the DBJ began to issue government-guaranteed bonds domestically, and in September 2001, it began issuing non-guaranteed bonds (Fiscal Investment Loan Program agency bonds) domestically. In FY 2003, DBJ planned to issue 100 billion yen worth of government-guaranteed bonds and 240 billion yen worth of non-guaranteed bonds.

Renewed utility in the aftermath of financial crisis

Despite the changes noted above, the DBJ has expanded its scope of activities in recent years. Some of this has already been detailed in section 2. Here we briefly elaborate on the bank's activities in project finance, venture fund investment, and business partnering with foreign investors.

The DBJ initiated Japan's first project finance scheme in 1998. Its success inspired project finance schemes to spread. Today, the DBJ is particularly active in private finance initiatives (PFI), securing large numbers of PFI financing contracts. The PFI market, expected to top 1 trillion yen in fiscal 2005, is increasingly a lucrative profit source for Japan's megabanks and some of the larger regional banks.¹⁸ The financing of PFIs typically involves a consortium of banks, which provides the bulk of project

¹⁷ Most of this paragraph draws on Amyx's interview with a former JDB/DBJ employee, April 24, 2005.

¹⁸ "PFI Market: Battle Between Major Banks Intensifies" *Nikkei Net Interactive* (Nov. 18, 2004).

financing, with a few major lenders taking the lead in the syndicated loan. If the projects are successful, the private sector makes profits while the public sector avoids having to pay construction costs.

Japan had experimented in the past with public-private projects through its so-called third-sector initiatives, most of which met with abject failure. PFIs, (modeled after a British innovation of the early 1990s) are a relative innovation in Japan. As was the case during fiscal tightening brought on by oil price crises in the 1970s, private sector involvement is being viewed today in an era of record public debt in Japan as a means of replacing government funding of social capital projects. Also, as was the case in the midst of the expansion of private capital in the 1980s (together with the privatization of state monopolies on tobacco and salt, and the Japan National Railway), private sector involvement holds out the hope of introducing greater accountability and vitality to these projects. The stated difference between the third-sector projects and the current PFI trend is purportedly better project selection and more formal contracting arrangements that clearly spell out expectations and objectively verifiable specifications. Nevertheless, there is great leeway in the ways that PFIs are currently being implemented.

It should not be surprising, therefore, that private banks have been quick to jump on the PFI bandwagon with the DBJ as a partner, if there is even the implicit notion of guarantees should a project go south. One observer suggests that PFIs may simply be an accounting mechanism that makes it appear that private capital is being tapped, but is really government borrowing in disguise: in other words, a way of incurring public debt off the books.¹⁹ Close government monitoring, accounting, and careful structuring of PFI contracts are a way to mitigate some of the problems encountered with previous third-sector projects. Perhaps the DBJ may offer greater expertise in this regard.²⁰ However, given the local nature of many of the new projects being selected in Japan and elsewhere, the oversight may not be stringent enough and there is no guarantee that PFIs will not meet with similar failures. Apart from being a core player in the emergent PFI field, the DBJ has been active in corporate restructuring.

In FY 2002, the DBJ launched a new program for financially troubled companies, which it dubbed the “Loan and Investment Program for Business Rehabilitation.” The program aims to contribute to government measures for resolving the non-performing loans of financial institutions and the excessive indebtedness of the banks’ corporate borrowers.²¹ As part of this program, the DBJ provides debtor-in-possession (DIP) financing and equity investment in corporate restructuring funds.

¹⁹ Varma (2003). Varma points to the PFI example of Britain’s re-nationalization of Railtrack through the creation of Network Rail. The government does not own Network Rail (which is nominally owned by some one hundred shareholders who have not put up significant capital), but paid for Railtrack’s acquisition, subsidizes its operation, and controls it through the appointment of a board and an executive director. Meanwhile, the corporation’s debt is kept off the government’s balance sheet.

²⁰ It should be mentioned, however, that instances of poor planning and ineffectual monitoring of project implementation by development banks is a perennial problem. Critics of multilateral development banks (MDBs) such as the World Bank or African Development Bank, have long bemoaned the waste or diversion capital because of inadequate supervision, and corruption involving loan recipients. Issues of moral hazard created by MDB and private sector bailouts of those affected by Asian financial crisis should be of equal concern for policymakers who want to prevent morally hazardous behavior by domestic firms as well as private creditors.

²¹ DBJ, “Business Rehabilitation Support Programme” April 2004.

Since 2004, the DBJ has also actively encouraged private institutional investors to pour money into struggling firms through its own investment in domestic and overseas buyout funds. As of August 2004, the DBJ had invested a total of some 100 billion yen in domestic and overseas buyout funds. In some senses, the DBJ's former role in the early decades after WWII of providing indicative lending to industries the government designated as being the target of industrial policy is now being played through a role of "indicative investing."

The bank also provides guarantees for a number of new types of loan products as a way to encourage private bank entry into new lending business areas where private sector firms are not yet convinced that profits can be made. Some of these projects have a 'public good' dimension – for example, loans related to post-earthquake rebuilding or based on eco-friendly ratings.²² The downside of DBJ involvement is private banks' reliance on the DBJ to not only shoulder but also price (through development of a ratings system) risk.

Today, the vast majority of lending risks in Japan are arguably borne by the government –and hence by taxpayers, when risks do not pay off. The Tokyo Metropolitan Government recently sought bankruptcy protection for two ailing joint ventures it had set up with the private sector with DBJ assistance. Another semipublic entity for which DBJ served as financier, Rinku Gate Tower Building, filed for protection for creditors under the Corporate Rehabilitation Law last month. Osaka Prefecture served as the leading shareholder for this entity but DBJ co-financed it. Moreover, when the prefecture began preparing to liquidate the company in February, all creditor institutions with the exception of the DBJ terminated their debt relief measures. In these ways, the DBJ bore the brunt of the failure. The company's debts totaled 43.6 billion yen.

In these ways, the DBJ has become a main source of subsidized finance in Japan. The bank represents the assumption of risk by the government and this development might be considered worrisome given that no hard clock has been put in place, limiting this function of the bank. In many areas, an argument can be made for DBJ involvement in initial stages. For example, until recently, only those local banks involved in international lending activities had experience with syndicated loans, since domestic lending was carried out within the framework of the main bank system in which risk and costs were not borne on a pro rata basis. However, the use of syndicated loans has grown rapidly in Japan in recent years, so that know-how and experience are accumulating and spreading rapidly among private banks, suggesting a decreased need for DBJ participation.

The expansion in scope and intensity of DBJ activities over the past two years contrasts with the shift away from extraordinary means of government support in some other areas. On April 1, the government removed its blanket guarantee of ordinary savings accounts holdings, re-imposing a 10 million yen (\$92,280) insurance cap on these deposits. The beginning of the new fiscal year also marked the end of debt

²² Those with higher eco-friendly ratings obtain lower interest rates on syndicated loans. The DBJ provides 30-50% of the loan amount while private sector banks provide the remainder. "Banks Starting to Give Financing Edge to Eco-Friendly Firms" *Nikkei Net Interactive* (November 3, 2004).

purchasing by the government-backed Industrial Revitalization Corporation of Japan (IRCJ). Indeed, the situation surrounding the DBJ contrasts sharply with that surrounding the Industrial Revitalization Corporation of Japan (IRCJ), which was created to function for only a specified period of time-- a sunset organization, as determined by law. The decision to support a company and purchase assets had to be made by the end of March 2005. The IRCJ must also exit the scene within 3 years of the decision made to take on a project. The 190 staff of the IRCJ are comprised of 9 individuals seconded from government agencies such as MOF, METI, etc., one BOJ official on secondment, and the remainder are individuals who quit their jobs in the private sector and took up positions in the IRCJ in the hopes that this would provide them with marketable corporate turnaround experience. The entity strongly resisted political attempts to extend its life, as most staff already have plans in place for their careers once the entity's time expires. Voices in favor of extending the life of the IRCJ came primarily from politicians in Tochigi Prefecture, the home of Ashikage Bank-- a bank that was effectively nationalized. No supporters could be found within the IRCJ itself.²³ In contrast, DBJ staff have a very different incentive structure- and clear incentives to keep searching for new ways for the bank to provide financing so as to provide a rationale for its continued existence.

Current political pressures for reform

Although Singapore's DBS represents the most radical case of commercialization of a national development bank, government financial institutions that mix characteristics of private and public banks are increasingly popular mechanisms for implementing public policy around the globe.²⁴ Political pressures to reduce the scope of subsidized operations and reform governance and ownership structures are particularly strong today in Japan, where the government recently declared problems in the private banking sector largely over, private sector corporate revitalization funds are taking off, and the Koizumi administration continues to push fiscal austerity and structural reform.

In this context, the DBJ's scope of activities began to come under heightened scrutiny. The fiscal year (FY) 2005 Fiscal Investment and Loan Program budget, a key source of DBJ funding, represents a 16.3% reduction in the FY 2004 budget. Moreover, on April 1, the Cabinet Office established a new section to prepare for the consolidation of eight government-affiliated financial institutions, including the DBJ. The new office recommended advancing a 2002 advisory panel's recommendations to halve the ratio of these entities' combined loan balances relative to the nation's GDP and to abolish the status of these entities as special government corporations. The Government has now decided to privatize DBJ—a dramatic policy shift. This is slated to begin in 2008, although details have yet to be worked out.²⁵

Downsizing of the DBJ's project financing activities was difficult until this year because aggressive disposal of bad debt by private banks made private banks reluctant to take on new loans. Government-backed financial institutions such as the DBJ therefore filled the gap with increased lending, as noted earlier. With progress in the private sector bad debt cleanup and Koizumi's desire to see reforms of government-owned entities carried out

²³ Author (Amyx) interview with IRCJ official (seconded from MOF), 2004.

²⁴ Koppell (2003) makes this observation about government corporations in general.

²⁵ Council for Economic and Fiscal Policy, Government of Japan, Press Conference of Minister Takenaka regarding the Feb. 28, 2005 meeting. Available at <http://www.keizaishimon.go.jp/minutes/2005/0228/interview.html>.

before the end of his term in September 2006, there will be increased pressure on the DBJ to narrow the scope of its activities. The Bank's PFI and corporate turnaround activities are the most obvious candidates for downsizing, given the frenzy of activity carried out by private actors in these areas today. The newly established reform office is to map out a reform plan by autumn, although a protracted postal privatization battle in the Diet is likely to postpone debate and buy the DBJ some time.

This situation faced by the DBJ can be compared to the much weaker political pressures in Korea, until 2006, for the downsizing or partial privatization of KDB. Even with the attainment of full economic recovery, KDB's public policy role in facilitating the privatization of public enterprises such as the Korea Electric Power Corporation (KEPCO) and in supporting Korean reunification endured for some time. Debt guarantees are often necessary initially in privatization of public utilities, due to high debt/equity ratios inherited by privatized subsidiaries from their public parent companies. Reunification would require KDB to play a development role once again and respond to greater borrowing demands than it does today, given the grossly underdeveloped state of the North Korean economy.²⁶

However, even under such conditions, the Korean Government is expected to form a task force right away to reform the KDB and other state-owned banking institutions. The task force is anticipated to come up with guidelines for the sale of part of their assets to private institutions and propose measures to retool their functions as early as by the end of the year. This is a very different route of reform than that taken in Japan for the DBJ. KDB is under criticism for its excessive investments in corporate restructuring and will also likely be forced to eliminate its stakes in private companies. The reform plan comes in response to calls from politicians and civic groups that the government should limit the role of state-run banks so as to avoid harming private players. Critics have claimed the Korean state-run banks played a greater role in corporate restructuring after the financial crisis in the late 1990s. The measure is based on the recognition that the banks' increased power is posing a serious challenge to private players. The government has also been under criticism for using the banks as a tool to increase its control in the banking sector. Financial deregulation and borderless investments are becoming the key words in the financial sector in Korea, and in this context, Korean government officials are now arguing that state-run banks now need to play a different role. Thus, like in Japan, big changes for Korea's national development bank appear to be on the horizon.

Conclusion

The ubiquity of private capital flows today calls into question the "catalyzing" role of development banks. One of the original rationales for development banks, as noted above, was to provide financing in an era of relative shortage of long-term capital. As one early researcher on development banks notes, they were meant to be financial intermediaries in the creation of capital markets by showing confidence in a firm's or a

²⁶ KDB Annual Report. While mitigating political pressures for reform, expectations of reunification are likely to require the Government to maintain strong control over the bank and limit the bank's capacity to form regional alliances and mergers or to commercialize along the lines of DBS. Accordingly, politics is also likely to constrain KDB's ability to fully realize its articulated objective of becoming a leading bank in Northeast Asia by 2011.

project's viability, inviting participation from other investors to share in the financing.²⁷ Global and mobile capital, however, is no longer as scarce as in the past, and that catalytic role is becoming less important, as the PFI examples illustrate. The spread of markets for convertible bonds issued by developing countries and their private firms has also mitigated any shortage in long-term finance, as long as the firm's or country's credit ratings are good. Increasingly, private financial institutions see opportunity outweighing risk in providing long-term financing for projects aimed at economic development.

Currently, this new scrutiny is balanced by the lack of expertise in private financial institutions in development project financing, and by the relative financial underdevelopment of some regions. As a result, public development banks have found new niches for themselves despite pressures to exit.

The ways in which the Development Bank of Japan (DBJ), Korea Development Bank (KDB) and Development Bank of Singapore (DBS) responded to new business opportunities since the latter 1990s suggested that development banks remained potent instruments of public policy in East Asia through 2005. However, the likelihood of remaining economically and politically salient in the longer term varies significantly from bank to bank, with Japan's DBJ facing the greatest challenge in demonstrating its continued relevance. At present, the DBJ is caught in a cross-fire: on one side are politicians seeking for its active role in continuing to bear risk on behalf of the private sector and provide loans to SMEs when private banks are reluctant to do so; on the other side, the Koizumi administration mounts a challenge to the bank's continued status as a 100 percent government-owned entity. The Koizumi forces now appear to have one. And, in Korea, similar pressures are also building on the KDB. Privatization of these two national development banks would represent a seachange in both countries.

Amid a cartel-like arrangement in the earlier pre-crisis period, Japanese banks had relatively weak incentives to innovate and an implicit government guarantee minimized lending risks. Despite the shift of emphasis in financial administration away from 'financial system stability' to 'financial system vitality' in Japan recently, the degree of government support that remains in place for nation's banks is arguably atypical for a 'healthy' economy. The government's willingness to continue to bear risk on behalf of the private sector via the DBJ and other means stunted the development of more sophisticated financial assessment skills by private banks and discouraged the private sector from bearing the kinds of risks typically borne by private banks.²⁸ Even Japan's top-performing banks remain weak with respect to taking and properly pricing risk, relying instead on the government. For the many years when corporate lending demand was weak, private Japanese banks failed to aggressively seek opportunities to tap into *latent* loan demand. The private banking sector relied instead on the DBJ to seek out businesses and sectors with growth potential on their behalf. Thus, reform might be seen as a welcome step.

²⁷ Kane, (1975).

²⁸ It is important to acknowledge that even in the US, government-sponsored enterprises such as Fannie Mae and Freddie Mac played critical roles in innovation—in fact it was due to these entities that the secondary market for home mortgages developed. This development, in turn, made mortgage lending less risky for banks. Thus, I do not wish to argue that there is no appropriate role for the DBJ in the areas noted earlier in the paper. The important factor to keep our eyes on is whether the DBJ is able to withdraw from these new markets it is creating at appropriate times and therefore place a time limit on government subsidization of risk.

The government's scaling back of the role of government-backed financial entities in Japan and its planned realignment of public financial institutions in October 2008 are likely to significantly influence the pace and magnitude of deepening of the Japan's financial sector. The DBJ is to become a stock company in October 2008, and the government is to fully divest its stake in 5-7 years. At that point, the government guarantee would disappear and the DBJ would operate under the Banking Law, just as a private banks. It is expected to secure funds by borrowing from other private-sector lenders and taking deposits from corporate customers. As with postal privatization, however, the actual legislation enacted includes no specific timelines or management blueprints. Politics continues to play an important role in determining the timing of these changes hereafter. Therefore, political economic analysis of this process of privatization merit further research.

Appendices

Table 1 Evolution of raison d'être and targeted industries: Development Bank of Japan

Period	Government priorities	Areas of emphasis
Early 1950s	Reconstruction of the economy	Electric power, coal mining, ocean shipping, iron and steel
Late 1950s to early 1960s	Catching up with advanced economies	Synthetic fibers, refineries, nuclear power generation, electronic computers, machinery, electronics, petrochemicals, automobiles, textiles, ocean shipping
	Reduction of regional disparities	Regional development
Late 1960s to early 1970s	Promotion of social development	Urban development, private railroads, modernization of distribution systems, residential land development
	Welfare considerations	Pollution prevention, welfare facilities
	Further industrial development	New technology, computers, oil refineries, nuclear power generation, equipment
Late 1970s to early 1980s	Energy security	Development of alternative energy, energy conservation
	Promotion of new industries	Technology development, information processing, communications
	Improvement in living standards	Urban development, regional development
Late 1980s to early 1990s	Promotion of structural adjustment	Reorganization of industrial structure, improvement of facilities for imported products, inward FDI, R&D
	Promotion of industrial development	Promotion of information-related industries
	Improvement in the quality of life	Improvement of social & industrial infrastructure, improvement of resort areas
Late 1990s and early 2000s [Reorganization into DBJ in 1999]	Improvement in livelihood and lifestyle infrastructure	Improvement of urban transportation, physical distribution systems, information & telecommunications infrastructure, and living standards & social welfare-related facilities
	Response to global environmental problems	Environmental degradation countermeasures, appropriate energy use

	Creation of dynamic socioeconomic structures, reform of economic structure, the development of self-reliant local economies	Internationalization, reform of industrial structure, development of new technology, fostering of new businesses, and regional revitalization
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Table 2
Public financing: A comparative perspective (1999)

	DBJ (Japan)	EIB (Europe)	KW (Germany)	U.S.	
				Federal credit program + GSEs ²⁹	Federal credit program ³⁰
Lending, etc.	¥1.6 trillion	27.8 billion euro	43.4 billion euro	\$421 billion	\$74.2 billion
GDP	513.7	79,341	19,824	92,992	
GDP ratio	0.3%	0.3%	2.2%	4.5%	0.8%

Sources: DBJ website <http://www.dbj.go.jp/english/faq/faq01.html>, citing disclosure documents WEFA “World Economic Outlook,” Deutsche Bundesbank Monthly Report, US Department of Commerce “Survey of Current Business,” US Office of Management and Budget “Analytical Perspective,” etc. Note: The figures are for fiscal 1999 (4/99-3/00) in the case of Japan, and for calendar 1999 for EIB and KIW, and for fiscal 1999 (10/98-9/99) for the U.S.

²⁹ Government sponsored enterprises (GSEs), such as the Federal National Mortgage Association (Fannie Mae), and Freddie Mac, provide indirect support, including the purchase of private-sector claims.

³⁰ Policy-related finance and guarantees are provided under this program.

Table 3
Public financial sector's share of outstanding loans (1999): Japan, Germany, and the U.S.

	Japan	Germany ³¹		U.S.	
			Special financial institutions	Federal credit program + GSEs	Federal credit program
Balance of lending by government financial institutions	¥151 trillion	2,388.5 billion euro	459.8 billion euro	\$3.6 trillion	\$1.2 trillion
Total public/private sector loan balance ³²	863	53,173		17.4	
Government sector's share	17.5%	44.9%	8.6%	20.7%	6.9%

Source: DBJ website <http://www.dbj.go.jp/english/faq/faq01.html>, citing Bank of Japan "Financial and Economic Statistics Monthly;" Deutsche Bundesbank Monthly Report; U.S. Federal Reserve "Flow of Funds Accounts of the United States;" U.S. Office of Management and Budget "Analytical Perspective," etc.

Notes:

- 1 The US federal credit program includes guarantees.
- 2 The figures are for fiscal 1999 (4/99-3/00) in the case of Japan, for calendar 1999 for Germany, and for fiscal 1999 (10/98-9/99) for the United States.

Table 4 Key characteristics of the Development Bank of Japan

Establishment	1954 as the Japan Development Bank (JDB); assumes functions of the JDB & North East Finance of Japan (<i>Hokuto Koko</i>) Oct. 1, 1999
Shareholder	Japanese Government 100%
Mission	Providing policy-based financing and project support that contributes to the Japanese economy
Assets	¥17,250 billion (\$143 billion) as of March 2003
Offices	19 (Japan), 6 (Overseas Representative Offices)
Employees	1,370
Rating	AA- (S&P), A2 (Moody's)

³¹ The figures represent totals for special financing institutions (KFW, etc.) + state banks and savings banks.

³² The figures for Japan are based on Financial and Economics Statistical Monthly. The figures for Germany include agency loans. The figures for the United States are based on the balance of liabilities in the non-financial sector.

Additional examples of innovative projects undertaken in the past year by the DBJ

Setting up a greenhouse gas reduction fund, along with a number of other major companies including Toyota and Sony, to buy global warming gas emissions rights from foreign businesses. JBIC is also involved in this. These companies wish to offset compliance burdens once the Kyoto Protocol goes into effect. The rationale given is that embarking on greenhouse gas emission reduction projects in developing countries is risky and the chance of failure is relatively high.³³

Jointly establishing, with Mitsubishi Corporation (a trading house), a 15 billion yen fund to help engineers at major Japanese electronics makers set up their own businesses in what have been termed “carve-out deals.” The fund is supposed to help utilize the talent and know-how latent in Japanese manufacturers by allowing the former employer of an engineer going into business to gain a stake in that engineer’s new firm in exchange for financial and other support.³⁴ Essentially this is a venture capital fund.

Cooperating with Chiba Kogyo Bank to start a rehabilitation business focused on assisting hospital operators.³⁵ Given the rapidly aging society, this can be viewed as aiding the public interest. The two banks have established as their first project an attempt to rehabilitate a hospital in Chiba that is saddled with heavy debts and experiencing difficulty in management improvement due to conflicts of interest of its president (owns some of the hospital’s properties). In this case, the two banks will give syndicate loans and extend a committed line of credit. The banks teamed up with consulting firm KMPG Health Care Japan Co, to analyze the hospital’s finances and operations and then work out a plan to reduce debts and carry out cost-cutting measures.

A syndicated loan agreement with a number of other financial institutions to help finance the reconstruction of housing units for Japanese lawmakers in Tokyo. This project will make use of special-class stock issued by a special-purpose company, in an attempt to clarify risk-sharing among financial institutions and conventional companies, and is expected to help lure more financial institutions into the project. The role played by the DBJ in clarifying risk-sharing among financial institutions is a notable departure from former practices under the main bank system when a single private bank assumed a disproportionate portion of the risk, as well as rewards.

In conjunction with Mizuho Corporate Bank, agreed to lend to a major real estate company, Mitsui Fudosan Company, to enable the company to establish a privately placed investment fund exclusively targeting nursing homes for the elderly. So, the DBJ is also playing a role in helping establish the market for realty investment funds with an exclusive focus on particular types of property.

³³ “35 Firms to Set Up Greenhouse Gas Reduction Fund” *Nikkei Net Interactive* (November 8, 2004). One could also argue that this scheme simply supports the efforts of Japanese business to avoid costly compliance with the Kyoto Protocol.

³⁴ “Mitsubishi, Gov’t Plan Fund to Support ‘Carve-out’ Schemes” *Nikkei Net Interactive* (October 30, 2004).

³⁵ Chiba Kogyo Bank Launches Hospital Rehabilitation Business (April 22, 2005) *Nikkei Net Interactive*.

Bibliography

- Amyx, Jennifer (2004). "What Motivates Regional Financial Cooperation in East Asia Today?" Asia Pacific Issues Paper (February). Honolulu: East West Center.
- Amyx, Jennifer (2005a) "East Asia: Development Banks Face New Challenge" Oxford Analytica (May 10, 2005)
- Amyx, Jennifer (2005b) "Japan: government to assume less private risk" Oxford Analytica (April 8, 2005).
- Amyx interviews with current and former Development Bank of Japan officials, 2004-05.
- Bruck, Nicholas , "Role of Development Banks in the Twenty-First Century" *Journal of Emerging Markets*. Vol.3, No.3. Fall/Winter 1998.
- Calder, Kent W. (1993) *Strategic Capitalism: Private Business and Public Purpose in Japanese Industrial Finance* (Princeton, NJ: Princeton University Press).
- Council for Economic and Fiscal Policy, Government of Japan, Heisei 17-nen 4-kai Keizai Zaiei Shimon Kaigi Giji Yoshi" (Summary of the minutes from the 4th meeting of the Council for Economic and Fiscal Policy in 2005"
- Council for Economic and Fiscal Policy, Government of Japan, Press Conference of Minister Takenaka regarding the Feb. 28, 2005 meeting. Available at <http://www.keizaishimon.go.jp/minutes/2005/0228/interview.html>.
- Council for Economic and Fiscal Policy, Government of Japan, "Seisaku Kinyu no Komponenteki Kaikaku ni Kan suru Kihon Hoshin" (Fundamental aims relating to fundamental reform of policy finance" (Oct. 7, 2002).
- Council for Economic and Fiscal Policy, Government of Japan, Seisaku Kinyu Kikan no Tohigo ni Mukete" (Toward the reorganization of policy finance institutions) (Feb. 29, 2005).
- Development Bank of Japan Annual Report DBS Bank Group Annual Report
- Development Bank of Japan, Business Restructuring Department (April 2004) "Business Rehabilitations Support Programme". Unpublished documents received onsite from DBJ officials.
- Hamilton-Hart, Natasha (2002) *Asian States, Asian Bankers: Central Banking in Southeast Asia* (Ithaca, NY: Cornell University Press).
- Kane, Joseph (1975) *Development Banks: An Economic Appraisal*. Lexington, MA: Lexington Books.
- Koppell, Jonathan (2003) *The Politics of Quasi-Government: Hybrid Organizations*

and the Dynamics of Bureaucratic Control. NY: Cambridge University Press.

Korea Development Bank Annual Report

Nam, Sang-Woo and Kim, Dong-Won, “The Principal Transactions Bank System in Korea” in Masahiko Aoki and Hugh Patrick, eds. *The Japanese Main Bank System: Its Relevance for Developing and Transforming Economies*(NY: Oxford University Press, 1994), pp. 450-493.

Nihon Kaihatsu Ginko-shi (History of Japan Development Bank) (Tokyo: Nihon Seisaku Toshi Ginko, 2002).

Nikkei Net Interactive articles.

Websites of DBS Group, Korea Development Bank, and Development Bank of Japan.

Varma, Jayanth (2003) “. “Putting 'Private Finance' Back Into The Private Finance Initiative.” India Infrastructure Report 2003. Accessed at <http://www.3inetwork.org/reports/IIR2003/html/chapter7.html>.

The World Bank (1993) *The East Asian Miracle*. New York: Oxford University Press.