FOREIGN BANKS IN KOREAN ECONOMY

Working Paper #609

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1. Introduction

Lessons from studies on the determinants of foreign direct investments, primarily in the manufacturing industry since Hymer/Kindleberger, has created a general assumption that foreign investors in the banking industry should also possess some kind of quasi-monopolistic rent in order to compensate for the disadvantages of being a foreign firm. In view of this, advanced managerial and/or marketing know-how, information creativity, privileged access to financial, human and information resources have been the top-listed items.

In the service industry, carrying on established relations with manufacturing multinationals from the same country is believed an additionally important advantage of foreign firms vis-a-vis local competitors.

This paper addresses this issue and, by looking into the case of foreign banks in Korea, will discover that foreign firms can easily find a profitable opportunity in underproduced economies where excessive demand for products or services exist. Excessive demand makes industry less competitive, and local suppliers less efficient, thus foreign firms do not need all the luxuries of competitive advantage, but can be sufficed with a slight advantage over the local marginal supplier(s).

In some economies where local firms are heavily loaded with inherited burdens (e.g. bad debts), government regulations, or strong interest groups' (e.g. labor unions) requirements, foreignness itself may constitute a sufficient advantage. In either case, the entry of foreign suppliers would increase the welfare of the consumers through increased product availability and alternatives.

In the following section, determinants of entry and the growth of foreign banks in Korea will be analyzed. In section 2, we will investigate the
consequences of foreign bank entries in terms of changes in market share and competition structure. The final part summarizes and concludes this study.

2. Determinants of Entry and Growth

Since the Chase Manhattan Bank obtained a license to establish its branch in Seoul in 1967 for the first time in Korea's modern history, many other foreign banks have followed suit. Consequently, this corps of foreign bank branches has gradually emerged as very important financial institutions, proving themselves able to multiply, expand, and demonstrate high profitability very quickly.

During the last twenty-some years (1967-1988), a number of foreign bank branches has increased eleven-fold from 5 to 55, and the average asset of the branches increased 549 times from .4 billion to 219.4 billion won, which amounts to 23.75% per annum growth in real terms (<Table 1>).

<Table 1> about here

U.S. banks have the largest number of branches, 19, followed by Japanese banks with 10. It is interesting to note, however, that neither Italian nor Swiss banks have any presence in Korea.

<Table 2> about here

Representative offices have also impressively increased in numbers; 4 in 1970, 17 in 1980, and 23 in 1988 <Table 1>. One-half of them are Japanese. Parent banks in this neighboring country may efficiently handle major Korean business themselves, and need no one other than representatives that will
assist them. Representative offices reflect a low-risk/low-return management strategy of the respective parent banks, or serve as instruments in learning local business environments before shifting to a branch form of organization. Many of the representative offices in Korea have actually become branches.

In the international banking community, reverse changes are not now exceptions. For example, Wells Fargo decided to withdraw from Korea in early 1989. International banks in general have slowed expansions as they have completed global banking networks, after a great deal of effort in the 1960s and '70s. On the other hand, network maintenance is more and more costly, while a funding requirement could be more adequately accommodated through the well-established interbank market.

Morgan Guaranty degraded its operation in Seoul from a Branch to a rep office in August 1986 for the first time in foreign banking history in Korea. Rep offices have advantages over branches because of decreased operating costs, although still maintaining their basic function of arranging local wholesale business and offshore financial transactions. This can well explain the logic behind the move of some banks like Morgan Guaranty, that have well-established reputations in wholesale and merchant businesses.

Despite such downscaling of a few exceptional banks, foreign banks in Korea have generally been prospering, and the market is still very lucrative. Considering that the Korean government has a strict entry regulation, and, in addition, Korean domestic financial business can be operated offshore without local presence, the attractiveness of the Korean banking market to foreign banks could easily exceed what is reflected in Table 1.

What are the factors enticing such incessant new entries of foreign banks into the Korean banking market? What allows each of them such impressive growth after entry? Before we try to identify some important explanatory variables, let's examine some of the previous studies.
Fieleke (1977) has investigated the reasons why American banks go abroad. Using data from 18 countries, his regression result shows that American direct investments to host countries is very important, while each country's GNP, international trade, and branch profitability are not important explanatory variables for overseas branch networks. This study backs up the general understanding that providing financial services to the operations of nonfinancial multinational clients is the most important motivation for banks going abroad.

Goldberg and Saunders (1980) analyzed economic factors as well as regulatory factors that influenced the entry decision of American banks in the U.K. during the 1961 and 1978 periods and their growth after entry. In the home country, American regulations on capital outflow (for example, the Foreign Direct Investment Regulation, the Voluntary Credit Restraint Program) are proven to have some repressive effects on entry and growth, while the host country or U.K. regulatory policy does not seem to be very effective, even in 1973 when it was considerably fortified.

The most important economic factors were found to be the American banks' need to provide trade-related financing, and the growth rate of U.K. domestic banking business. Eurodollar interest rates also had a strong influence in 1960s, according to the study.

Referring to the results of these existing studies, we estimate the determinants of foreign banks' entry and growth in the Korean market by the following regression model:

\[
\ln A_t = \alpha + \beta_1 \ln P_{t-1} + \beta_2 \ln DI_t + \beta_3 \ln FI_t \\
+ \beta_4 \ln (I/Y)_t + \beta_5 \ln R_t + \beta_6 \ln L_t + e_t
\]
The dependent variable, i.e. the size of foreign bank branches may be taken as either the number of branches or the aggregated scale of their assets. The latter was chosen here.¹

A foreign bank's new entry to a market would incur some trade creation effects, or bring about some new business that existing banks were not able to procure, but the major portion of their business is the one that substitutes that of the existing banks, i.e. a trade diversion effect. Consequently, the total asset scale of all foreign bank branches at a given point of time is not much relevant to the number of branches. This is also the reason that we consider entry and growth at the same time.

The above model basically assumes that six factors are important in determining foreign banks' entry and growth in the Korean market. First, profit (P) maximization is the most important, if not the only objective in bank management. The high profitability of existing foreign bank branches in Korea makes entry attractive to prospective foreign banks, and provides an incentive to expand the operations of existing foreign branches in the market. This variable, (P), is estimated by net earnings/total assets taken from year-end balance sheets of each of the foreign bank branches.

Second, banks are very much concerned with long-term expected profit growth and profit opportunities in the future as well as short-term profitability. In evaluating this long-term profitability, the prospects of the local economy and the economic growth of Korea will be very important. Assuming that loan demand and its prospects in the domestic market will have a high correlation with the local capital investment rate, our second

¹Asset data in this research are taken from various issues of Research and Statistics Monthly, The Bank of Korea.
explanatory variable is the domestic investment rate (DI), a widely used index in economic forecasting.

Third, foreign banks can extend relations with their clients by following these multinationals when the latter invest in Korea. Affiliates of the multinationals may also reduce transaction costs by maintaining relations with the branches of the bank from the same country that well understand their financial position and needs.

Therefore, direct investments of foreign firms to Korea (FI) can serve as an important variable in explaining the entry and business expansion of foreign banks in Korea. Foreign multinationals' direct investments mean increased business activities of foreign enterprises, and can be identified as an indicator of potential demands in the future for the services of foreign banks in Korea.

Fourth, in addition to domestic financial business in Korea, expectations of future increases in international financial business will be important to foreign banks in determining entry or operation scales in Korea. To represent this factor, the proportion of imports (I) of Korean GNP (Y) is used. By using the proportion, price or inflation effects will be eliminated, and this will allow us to better focus on trade increase effects. Therefore, this variable represents the growing importance of international trade in the Korean Economy.

Financial services related to international trade can be provided directly by the home country, not necessarily through the branch offices. However, these practices can be greatly restricted by the home country's or the Korean government's foreign exchange regulations, and can be an inappropriate way of doing business in an industry where face-to-face interaction is very important in reality.
Fifth, foreign banks should, after all, be able to acquire permission of entry from the Korean government. Recognizing that the Korean government pursued reciprocity strictly in allowing the entry of foreign banks\(^2\) and the scope of business carried on in its market, total assets of Korean commercial banks held overseas (R) is chosen as a proxy variable to denote Korean government regulations.

Sixth, foreign banks have greatly contributed to the financing of the economic development and balance-of-payments deficits of Korea by bringing in capitals from abroad. These financial institutions have functioned as a major channel of foreign capital flows through onshore as well as offshore business intermediations, and this, of no doubt, was their prime contribution to the national economy. So, our last choice of explanatory variables is Korean borrowings from abroad (L).

The regression results are as follows (standard errors in parentheses):

\[
\ln A_t = -6.21^* + 0.43^{**} \ln (P_{t-1}) + 0.20 \ln DI_t + 0.11 \ln FI_t + 0.37 \ln (I/Y)_t + 0.35^{**} \ln R_t + 0.43^{**} \ln L_t \\
(2.51) \quad (0.07) \quad (0.39) \quad (0.09) \quad (0.46) \quad (0.12) \quad (0.16)
\]

Corrected \( R^2 = 0.99 \), F-Value = 176.75**, S.S.E. = 0.326.
(* and ** coefficients significant at the 5 percent and 1 percent level respectively (two tail test)).

\(^2\) For example, in 1977-78 exceptionally large numbers of foreign banks received approval to enter the market pursuant to the Korean government's policy of expanding the country's banks abroad. As many as 19 foreign banks launched into the Korean market while the country's banks established 17 branches and subsidiaries during this period.
From this result, we can conclude that the domestic investment rate (DI), the foreign investment in Korea (FI), and the increases in foreign trade-related financial business (I/Y) are not very important in explaining foreign banks entry and growth in the Korean financial market. A strong demand for financial services made the foreign bank branches unnecessary to resort to, and limit themselves to a special relationship with multinationals from the same country, which can explain the insignificance of variable FI.

Both DI and I/Y variables turned out to have relatively limited importance, probably because the foreign branches are more concerned with short-term loans rather than long-term investment loans, and because their assets are not only related to foreign trade, but consist of diverse portfolios.

Answers to our questions cannot be found in traditional wisdom, but rather from the fact that the Korean market has been lucrative for foreign banks (P), and from some policy variables such as the Korean government's regulation (R) and the country's foreign borrowings (L).

3. The Consequences of the Entry

Korean commercial banks had been government-owned until very recently, and instrumental in promoting the country's export-oriented economic development. The commercial banks' role in economic development, not the efficiency or development of the commercial bank industry itself was the concern of the government policy-makers.

It was only after the mid-'80s that development of a financial sector and improvement of allocative efficiency were publicly recognized as very important on their own merits, as well as critical to further development of a real Korean economy.
Despite the recent privatization of these banks, they are still under pressure to act more in the public interest than for private profit-oriented motivations. As a result, each of the local commercial banks still has a very high bad debt ratio and suffers from very low profitability.

While the foreign banks have their own share of regulations, the rules are more clearly defined and limits are much more lenient than regulations on their local counterparts. Since the country has always had excessive loan demand and a tightly-controlled money supply, foreign banks could easily find their market niche in this seller's market. Foreign banks even required the local bank's guarantee before applying for commercial loans, which reduces their loan risks effectively to zero.

These foreign banks, as international banks with global networks and unlimited access to resources are better geared to the needs of large Korean firms that are becoming increasingly significant players in the international economy. In general, foreign banks have been taking advantage of less stringent regulations and ever-stronger loan demands in the market, as was observed in the previous section.

3.1 Market Share

Since the first entry in 1967, all the foreign banks have exhibited tremendous growth, expanding their market share significantly over the local

3. For example, they are compelled to lend more than 30% of their additional loans to small or medium-sized firms.
banks (<Table 3>). They account for more and more shares of the banking market, strengthening their market power every year. Their aggregate net earnings in 1988 was more than 75 times that of seven nationwide local banks altogether. More than one-half of foreign currency loans from all commercial banks have been dominated by foreign banks since 1980.

<Table 3> about here

Market share, however, peaked in 1985, particularly in foreign currency deposits. This change is partially due to changes in the government regulations. Since the country's turn to a trade surplus in 1986, the government reduced the ceilings of sweetened swap transactions that foreign banks were allowed against the Bank of Korea, restricted foreign currency loans (which were dominated by foreign banks), and introduced some regulations and deregulations on foreign bank activities to make them compete with local counterparts on nearly equal footing.

Another part of the declining market share of foreign banks in Korea may be due to the changes in their management strategies. The strategic focus of many leading international banks shifted around the turn of this decade, particularly after the 1982 Mexican rescheduling from asset-maximization or a growth-oriented one to a yield-maximization one. This trend is better illustrated in foreign banks than in local banks.

Still, foreign banks' market share in Korea is much higher than in most of countries, both developed and developing (<Table 4>). In Taiwan, German, and Japanese banking markets, foreign banks take much less market share in terms of deposits, loans, and assets. Actually, both developed countries,
Germany and Japan, give less to foreign banks than the two NICs, Korea and Taiwan.

<Table 4> about here

Market shares are shown in <Table 5> according to the regional origins of the foreign banks. In asset volume, American banks take approximately one-half, European banks 24.3%, and Japanese banks, 17.4% of the total foreign branch asset in 1987. In lending, American banks take the lion's share with 46.0% and 45.7% in 1985 and '87 respectively, Japanese banks made a big stride, helped by the increase in the number of branches, from 16.9% in 1980 to 23.1% in 1987, while European banks' aggregate share has declined from 32.4% to 25.6% during this period. As a natural consequence, American banks account for the largest portion of total foreign banks' net earnings with 62.6% in '85 and 53.1% in '87. Japanese banks and European banks took 10.7% and 19.6% in 1985, and 16.5% and 22.8% of the total foreign banks net earnings in '87 respectively. Shares of net earnings of these two groups are lower than their shares in assets and loan markets, implying lower profitability than American banks.4

<Table 5> about here

4. In most of the OECD member countries, foreign banks share in the total banks' assets is smaller than in the Korean market. (OECD, The Internationalization of Banking, Paris, 1983, p. 69)
3.2. Concentration

The Korean banking industry, as in many other countries, has been very oligopolistic due to government protection. This industry has been a major instrument for the implementation of the government's monetary policies. The purpose of this section is to examine the effect of foreign banks' entry and activities in Korea on the industry structure.

To see the changes in competitive structure and the degree of concentration in the Korean banking market, we are employing the following indices (Tschoegl, 1982).

First, CR5: the ratio of top 5 foreign branches in assets of total foreign bank branches.

Second, Theil's entropy measure adjusted for the number of firms (Jacquemin & Kemps, 1971):

$$\text{CRE} = 1 - \left[ \left( \sum P_i \times \ln \left( \frac{1}{P_i} \right) \right) / \ln N \right]$$

Third, Herfindahl-Hirschman index:

$$H^2 = \sum (P_i)^2$$

Fourth, Kwoka's (1977) Dominance Index:

$$D^2 = \sum_{i}^{n-1} (P_i - P_{i+1})^2$$

Fifth, Instability Index of market share used by Hymer and Pashigian (1962):

$$\text{IS} = \sum |P_{i,t} - P_{i, t-2}|$$

Here, $P_i$ stands for the proportion of ith bank's assets in total foreign bank assets, i.e., $P_i = x_i / \Sigma x_i$, and N represents the total foreign bank branches in Korea. The first four are static indices and the last one is a dynamic index.
All the indices of the above take any value between 0 and 1. The larger the value, the higher the concentration, and 1 represents a perfect monopoly. On the other hand, the lower the index, the more banks are available for the clients to choose from, meaning weak market power for a specific bank. The higher the instability index, the dynamic one, the more volatile is the market share during a specific period (2 years in our case), and the more disruptive the competitive structure and the more frequent the entries into and exits from the market (or industry).

<Table 6> about here

Part I in <Table 6> shows a concentration among five nationwide commercial banks (excluding relatively small and recently established Shinhan Bank and Koram Bank) and the Korea Exchange Bank. The Korea Exchange Bank has been established as a special purpose bank, but has changed over time to function as a simple commercial bank now. Due to the small size of samples, CR5 was not calculated. CRE, $H^2$, and $D^2$ show a similar trend: the level of concentration has increased during 1975-80 period, and then in '85 and again in '87 dropped to the level below 1975.

Part II in <Table 6> illustrates the level of concentration among foreign bank branches in Korea. During the 5-year period between 1980 and 1985, the top 5 branches have increased their aggregate share in total foreign bank assets as reflected in increases of both CR5 and $D^2$. On the other hand, both CRE and $H^2$ have declined, signalling that the level of concentration in total foreign bank branches is decreasing despite the strengthening influence of the top ranked branches. However, all the concentration indices indicate strengthened competition among them after 1985.
Part III in <Table 6> shows the degree of concentration in all commercial banks (including the Korea Exchange Bank). All regional banks and all the foreign bank branches are treated as one group respectively. All indices, with the exception of CR5 where the trend is conclusive, clearly show decreasing bank concentration from 1975 to 1980 and from 1980 to 1985, and again from 1985 to 1987. During these periods, keener competition among the foreign banks (as evidenced in II of <Table 6>) than that among the local banks (as evidenced in I) has substantially contributed to lowering the concentration in all commercial banks (shown in III). This trend appears clearer since the late 1970s when foreign banks in Korea started to increase in numbers and become active in the market.

All these concentration analyses indicate that the foreign banks' entry into the Korean banking market has resulted in an increased competition to relax the existing banking oligopoly.

The dynamic index, IS, shows that the first two years between 1981 and 1983 when the foreign banks' entry was very active, was more unstable than the previous two years, but over the long-run showing the Korean banking market gaining stability.

4. Conclusions

The development of the banking industry in Korea did not match the extraordinary growth of its real sector. Inefficiency, lack of innovations, and government interference in the Korean banking industry gave a wide leeway to foreign banks entering into an oligopolistic market.

The results of this study imply that the astonishing growth of foreign banks in Korea has been caused primarily by a strong demand for foreign capital from both public and private sectors of the Korean economy. In
addition, foreign banks have benefited by taking advantage of various incentives provided by the national government, rather than improving their profit margins through better management or efficiency against indigenous competitors in areas such as portfolio management, client relations or any other forms of modus operandi common to the commercial banking business.

As the country goes through a change in its foreign trade position from a deficit to a surplus, and the burden of foreign debt is alleviated so as to reduce the demand for foreign capital, the incentives and privileges provided by the Government to foreign banks are disappearing. All along the way the Korean government has successfully maintained the level of regulations and incentives, through frequent changes, to match with the financial role and contributions it expects from the banks. A well-known example of this is sweetening the swap rate that applies when foreign banks swap foreign currencies due from or due to affiliated banks for the local currency.

Because the foreign exchange market is still primitive, foreign banks are required to swap currencies with the central bank, The Bank of Korea. Right after the oil crisis when foreign capital was not sufficiently available at a reasonable cost to finance ambitious economic development and the trade deficit of the country, the foreign banks were provided with a profitable 300 basis points per annum base extra as swap margin in addition to the interest rate differential between the foreign (primarily American dollars) and local currencies. As the foreign currency situation improves over time, this swap margin has gradually contracted to the point where it is almost negligible at present.

A decrease in incentives and privileges seems to change profitability and the pattern of growth to some extent, but not sufficiently enough to turn these banks off to doing business in Korea. As far as the financial market
and system in Korea remains short of allocative efficiency and excessive demands for capital and loans remain unfulfilled by intermediation activities through indigenous financial institutions, foreign banks will still find this market fast growing and extremely rewarding as it has been in the past.

The entry of foreign banks into the Korean commercial banking market has increased competition and decentralized the market power of each bank. As the merging or acquisition of Korean banks is almost impractical, and as the banks pursue profitability rather than market share, such a decentralization trend is expected to gain acceleration. The significant deregulation on foreign banks' operations in Korea, allowing any banks to participate in any lucrative business, will most probably allow the banking market to be more competitive, and increasingly decentralized. This will benefit both borrowers and lenders and all other kinds of clients of the banks. A dramatic drop of the CP underwriting fee from 1.5% to 0.5% during the first half of 1986 serves a good example.
**Table 1**  Growth of Foreign Banks in Korea

<table>
<thead>
<tr>
<th>End of Year</th>
<th>Branches</th>
<th>Average Assets of Foreign Branches</th>
<th>Representative Offices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967</td>
<td>5</td>
<td>.4</td>
<td>2</td>
</tr>
<tr>
<td>1970</td>
<td>6</td>
<td>2.5</td>
<td>4</td>
</tr>
<tr>
<td>1975</td>
<td>9</td>
<td>28.9</td>
<td>8</td>
</tr>
<tr>
<td>1980</td>
<td>33</td>
<td>98.7</td>
<td>17</td>
</tr>
<tr>
<td>1985(^2)</td>
<td>53</td>
<td>181.6</td>
<td>19</td>
</tr>
<tr>
<td>1988(^2)</td>
<td>55</td>
<td>219.4</td>
<td>23</td>
</tr>
</tbody>
</table>

Real growth in assets from end-1967 to November 1988: 31.2%

1) in billions won
2) as of November 1988.

<Table 2> Foreign Banks in Korea by Origins

(as of August 1988)

<table>
<thead>
<tr>
<th>Regions</th>
<th>Branches</th>
<th>Rep Offices</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>North America</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.A.</td>
<td>19</td>
<td>3</td>
<td>22</td>
</tr>
<tr>
<td>Canada</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Asia</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>10</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>2</td>
<td>--</td>
<td>2</td>
</tr>
<tr>
<td>Singapore</td>
<td>3</td>
<td>--</td>
<td>3</td>
</tr>
<tr>
<td>India</td>
<td>1</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.K.</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>France</td>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>West Germany</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Middle East</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>--</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Jordan</td>
<td>--</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Australia</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>55</td>
<td>23</td>
<td>78</td>
</tr>
</tbody>
</table>
<Table 3> Market Shares$^{1)}$ of Foreign Bank Branches in Korea

(As of year-end, %)

| Net Earnings (Foreign Banks/Nationwide Banks) | 1975 | 1980 | 1985 | 1988$^{2)}$
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Currency (won)</td>
<td>1.5</td>
<td>2.0</td>
<td>2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Foreign Currency</td>
<td>7.5</td>
<td>6.5</td>
<td>38.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Total</td>
<td>2.2</td>
<td>2.3</td>
<td>3.5</td>
<td>2.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Loans</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Currency</td>
<td>4.2</td>
<td>8.2</td>
<td>10.2</td>
<td>10.7</td>
</tr>
<tr>
<td>Foreign Currency</td>
<td>29.5</td>
<td>65.1</td>
<td>81.4</td>
<td>60.2</td>
</tr>
<tr>
<td>Total</td>
<td>6.4</td>
<td>19.5</td>
<td>18.8</td>
<td>16.4</td>
</tr>
</tbody>
</table>

Notes: 1) Shares in deposit and loan markets are proportions of foreign branches in all Korean Commercial banks including seven nationwide commercial banks, ten local banks and all foreign banks in Korea.

2) As of November 1988.

Source: Balance Sheets of Individual Banks, Various Years.
The Bank of Korea, Research and Statistics Monthly, Various Issues.
<Table 4) Foreign Banks' Market Share in Various Countries
(As of end-1987, %)

<table>
<thead>
<tr>
<th></th>
<th>Korea</th>
<th>Taiwan</th>
<th>Germany</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposit</td>
<td>2.49</td>
<td>1.5</td>
<td>1.3</td>
<td>0.5</td>
</tr>
<tr>
<td>Loan</td>
<td>18.59</td>
<td>5.2</td>
<td>4.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Asset</td>
<td>16.57</td>
<td>5.4</td>
<td>8.0</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: Shares in the following categories:

Korea, Taiwan, and Germany: commercial banks

Japan: Nation-wide banks, including city banks, regional banks, trust banks, and long-term credit banks.

Lee (1988), pp.21
<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th></th>
<th>1985</th>
<th></th>
<th>1987</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assets</td>
<td>Loans</td>
<td>Net Earnings</td>
<td>Assets</td>
<td>Loans</td>
<td>Net Earnings</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>44.7%</td>
<td>43.4%</td>
<td>54.3%</td>
<td>51.6%</td>
<td>46.0%</td>
<td>62.6%</td>
</tr>
<tr>
<td>Japan</td>
<td>16.5</td>
<td>16.9</td>
<td>14.0</td>
<td>15.0</td>
<td>23.4</td>
<td>10.7</td>
</tr>
<tr>
<td>Other Asia</td>
<td>1.8</td>
<td>1.8</td>
<td>2.4</td>
<td>3.4</td>
<td>3.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Europe</td>
<td>31.5</td>
<td>32.4</td>
<td>23.9</td>
<td>26.4</td>
<td>22.3</td>
<td>19.6</td>
</tr>
<tr>
<td>Others</td>
<td>5.5</td>
<td>5.5</td>
<td>5.4</td>
<td>3.6</td>
<td>5.2</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Balance Sheets of Individuals Banks, Various Years
### Table 6: Changes in Concentration of the Korean Banking Industry

<table>
<thead>
<tr>
<th></th>
<th>I (5 Nationwide + KEB)</th>
<th>II (Foreign Bank Branches)</th>
<th>III (All Commer. Banks + KEB)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'75  '80  '85  '87</td>
<td>'80  '85  '87</td>
<td>'75  '80  '85  '87</td>
</tr>
<tr>
<td>CR5</td>
<td>--         --</td>
<td>0.310  0.330  0.304</td>
<td>0.797  0.737  0.784  0.742</td>
</tr>
<tr>
<td>CRE</td>
<td>0.441  0.482  0.368  0.314</td>
<td>0.339  0.217  0.219</td>
<td>0.461  0.352  0.297  0.263</td>
</tr>
<tr>
<td>$H^2$</td>
<td>0.197  0.200  0.193  0.190</td>
<td>0.042  0.041  0.038</td>
<td>0.162  0.157  0.143  0.136</td>
</tr>
<tr>
<td>$D^2$</td>
<td>0.030  0.030  0.026  0.021</td>
<td>0.001  0.004  0.002</td>
<td>0.025  0.023  0.003  0.011</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>'79-'81</th>
<th>'81-'83</th>
<th>'83-'85</th>
<th>'85-'87</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS</td>
<td>0.05</td>
<td>0.07</td>
<td>0.04</td>
<td>0.03</td>
</tr>
</tbody>
</table>

*Note: Based on year-end assets*
References


