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Japan's Keiretsu and Korea's Chaebol

One of the distinguishing characteristics of the Japanese economy is the prominence of *keiretsu,* large corporate groups each centered around a major commercial bank. Many of Japan's blue-chip companies, such as Nissan Motor, Mitsubishi Electric, and NEC, belong to one of these groups. Such corporate groupings are not an industrial structure unique to Japan, however. For example, many leading companies in Korea, such as Samsung, Hyundai, and Daewoo, also belong to large and diversified groups known as *chaebol.*

This *Weekly* compares the key institutional features of keiretsu and chaebol and finds that despite some similarities there are critical differences between the two types of groupings. Japan's keiretsu appear to be primarily market-driven organizations that achieve at least two objectives. First, they reduce the information gap between borrowers and lenders—a problem that is likely to be more severe during periods of rapid growth—and thereby facilitate the flow of funds to the corporate sector. Second, keiretsu serve as a mutual insurance scheme that helps stabilize the operating performance of member firms. Korea's chaebol, in contrast, appear to be more creatures of government. In particular, the Korean government's export promotion and industrial policies favored diversification of existing firms into targeted industries.

Japan's keiretsu

Major keiretsu groups typically consist of firms in diverse industries centered around a so-called main bank; hence, they are sometimes called "financial keiretsu." The precursors of today's keiretsu were called "zaibatsu," and they wielded significant influence in the Japanese economy, especially toward the end of World War II. The four large zaibatsu groups (Mitsubishi, Mitsui, Sumitomo, and Yasuda) controlled about one-fourth of the total paid-in corporate capital at the end of the war; in finance, their combined share was as high as 50 percent. To reduce the concentration of economic power in Japan, the Allied Forces dissolved the zaibatsu groups after World War II.

There are currently six large financial keiretsu in Japan (the "Big Six"): Mitsui, Mitsubishi, Sumitomo, Fuyo, Sanwa, and Dai-Ichi Kangyo. The first three originated from zaibatsu; the latter three were formed after the war, each around a main bank respectively of the same name. The postwar ex-zaibatsu groups thus differ from their prewar counterparts in one crucial respect: The prewar zaibatsu were controlled by holding companies closely held by founder family members, but the postwar keiretsu are more diffusely owned and loosely structured around a commercial bank.

Although no single clear-cut criterion defines a given firm's membership to any one particular keiretsu, group-affiliated firms generally share three characteristics. First, firms within a given keiretsu tend to hold interlocking shares. Second, close consultation is maintained by keiretsu firms on various business concerns and policies of mutual interest. Third, and most importantly, firms in financial keiretsu tend to rely heavily for financing on the main commercial bank and other core financial institutions, such as insurance companies and trust banks. These financial institutions generally hold equity in the firms to which they lend (subject to a legal maximum).

While keiretsu are less dominant in the Japanese economy today than the zaibatsu were, their presence is still substantial. Almost half of the 200 largest firms in Japan are members of one of the major keiretsu. Collectively, firms belonging to the Big Six account for roughly 40 to 55 percent of sales in the natural resources, primary metal, industrial machinery, chemical and cement industries, and for about 4 percent of the labor force, 15 percent of capital, and 15 percent of sales in the economy as of the late 1980s.

Economic rationale of keiretsu

Economists have offered a number of explanations for the raison d'être of keiretsu. One hypothesis is that keiretsu firms jointly maximize profit by sharing information, reducing transactions costs, and capturing economies of scope through coordination of investment and production decisions. If these considerations are important, keiretsu firms should be more profitable than non-affiliated firms. The evidence suggests the very opposite, however: Keiretsu firms tend to have lower rates of profit (see, for example, Nakatani, 1984). The relatively lower profits may be due in part to the fact that group firms tend to make significantly higher interest payments than independent firms with similar financial structures and risks.

According to an alternative hypothesis, keiretsu represent a system of mutual insurance where group firms assist one another in times of business hardship. Such assistance is usually provided by the group's main bank. The higher lending rate charged by the group's main bank can then be thought of as an insurance premium. The evidence seems consistent with this hypothesis: Although group firms earn lower profits than independent firms, they tend to exhibit less variability in operating performance.

An additional benefit of maintaining long-term relationships with a main bank within a keiretsu is that it reduces the degree of information asymmetry between the lender and corporate borrower relating to, for example, the expected profitability of an investment or its riskiness. Such information asymmetry gives rise to moral hazard problems that constrain firms' ability to tap external financing and thus leads to underinvestment. Moreover, the degree of moral hazard is likely to be more severe during periods of rapid growth when firms are relatively more dependent on external financing to undertake profitable investment. Keiretsu can thus be understood as an organizational response to mitigate moral hazard problems which may constrain firms' access to outside financing.

Indeed, available evidence suggests keiretsu firms do not tend to cut back on investment as sharply in response to a cash shortfall as do firms without close bank ties. This is consistent with the view that monitoring by the main bank helps avoid information problems leading to underinvestment. There is also evidence that the close bank-industry tie within keiretsu confers greater flexibility in financing: Group firms are less prone to curtail investment during bouts of financial distress, suggesting that by virtue of possessing inside information on member firms, the main bank can provide timely help when they are suffering a temporary setback (see *Weekly Letter*, March 29, 1991).

Korea's chaebol

The chaebol groups in Korea consist of diversified business firms with a concentrated ownership structure. As with Japan's financial keiretsu, Korea's chaebol contain many firms that are horizontally rather than vertically diversified. In most cases, immediate family members of the entrepreneur who started the group hold controlling interest in most of the group companies. The ownership and control structure of chaebol thus resembles the zaibatsu of the pre-war period in Japan more than the post-war keiretsu. (In fact, "chaebol" and "zaibatsu" are, respectively, Korean and Japanese readings of the very same Chinese ideograms for "financial combine" or "clique.")

While keiretsu have declined in importance over time in the Japanese economy, Korea's chaebol have increased. The ratio of the combined sales of the top 10 chaebol, consisting of about 150 companies, to Korean GNP rose from less than 15 percent in the early 1970s to slightly over 40 percent in the mid-1980s. The total sales to GNP ratio of Samsung, on of the three largest chaebol, rose from less than 1 percent in 1965 to over 14 percent in 1984.

Role of the government

The emergence and growth of chaebol is closely linked to heavy government intervention in Korea's economic development. In its bid to accelerate Korea's transition from an agrarian to an industrialized economy, the government adopted a strategy of supporting the growth of existing firms, rather than encouraging the formation of new firms. Government policy therefore created a bias toward a horizontally integrated group structure. The rationale behind this policy was that growth through diversification of existing firms would economize on scarce entrepreneurial talent and technical knowledge.

In the early 1960s the government also initiated a series of development plans fostering key sectors by granting them preferential access to credit at below-market interest rates. In the initial phase, the government targeted the growth of the export sector, particularly in light manufacturing, by directly linking the provision of subsidized credit and export volume. This policy created an incentive for existing firms to branch into various export-producing manufactures and other export-related businesses, and to establish a general trading company specializing in the marketing of exports and imports. This process of diversification led to the initial rise of most chaebol groups in Korea.

The focus of Korea's industrial policy shifted to heavy and chemical industries in the early 1970s. Again, the combination of policies favoring diversification of existing companies into new targeted industries and preferential access to cheap credit favored the further growth of chaebol groups. The average number of firms in each chaebol approximately doubled between the early to late 1970s, as the groups expanded into more capital-intensive activities. Taking advantage of cheap credit in the 1980s, the chaebol began diversifying into businesses not explicitly targeted by government policy, such as consumption goods production and real estate investment.

The relatively greater role of government policy in the formation and growth of chaebol is obvious in a key organizational difference from Japan's financial keiretsu: Commercial banks in Korea by law are not allowed to be a part of chaebol groups. To a large extent, therefore, the government has been the main conduit of finance to chaebol firms. For example, until the early 1980s, the government was the majority share holder (25 to 35 percent) of all major commercial banks in Korea and effectively controlled all significant lending decisions. Due to the dominant role of the Korean government in the allocation of credit, banks have had less discretion and relatively little incentive to monitor lending compared to main banks in Japan's financial keiretsu.

Conclusion

Compared to Japan's keiretsu, direct government policy appears to have played a much more important role in the rise of Korea's chaebol. This difference has important consequences for risk-sharing in the credit market. In Japan, it is the main bank that monitors borrowers as a quasi-insider to keiretsu member firms. In Korea it is the government that controls the flow of credit and consequently functions as the *de facto* monitor of corporate borrowers.

There are signs of loosening ties among keiretsu firms in Japan, as the deepening and internationalization of financial markets have eroded the role of main banks. The prospect for a loosening of chaebol ties and weakening of their role in Korea seems more mixed. The Korean government, through regulatory measures, has sought to diffuse the concentration of ownership within chaebol by pushing for greater sales of equity shares in public securities markets. However, Korea is likely to maintain its development strategy of promoting targeted industries and relying on preferential financing in the near future. Given their past role as the conduits of this policy, chaebol groups will likely loom large in Korea's efforts to join the ranks of a fully industrialized economy.

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References

Nakatani, Iwao. 1984. "The Economic Role of Financial Corporate Grouping." In *The Economic Analysis of Japanese Firms*, ed. M. Aoki. New York: North-Holland.

Hong, Wontack, and Park Yung Chul. 1984. "The Financing of Export-Oriented Growth in Korea." In *Pacific Growth and Financial Interdependence*, ed. A.H.H. Tan and B. Kapur. Sydney: Allen and Unwin.

Song, Byung-Nak. 1990. *The Rise of the Korean Economy*. Hong Kong: Oxford.

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