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Regulatory Measures to Dismantle Pyramidal Business Groups: Evidence from the United States, Japan, Korea and Israel

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Abstract

Large business enterprises, from the railroad barons of nineteenth century America to Amazon and Google today, are often perceived as important for economic performance and, at the same time, as potential abusers of their political and economic power. In this study, we compare the experiences of four countries that implemented policies to curb the influence of one type of large corporate entities – pyramidal business groups: The US in the 1930s; Japan during the American occupation (1945-1952); Korea following the Asian crisis (late 1990s); and Israel in the last decade (2010-2018). Novel regulatory measures, applied consistently in the US and Japan, where the extreme political circumstances were very favorable to economic reform, led to the demise of pyramidal business groups in these countries. Israel, where the reforms did not follow a severe crisis, also used specifically-designed regulatory tools over a decade-long period, resulting in a significant decline in the number and size of business groups. Korea, after experimenting with variety of regulatory measures, chose to rely primarily on corporate governance-focused reforms to curb the influence of the chaebol, but with limited effects; groups continue to dominate the Korean economy. Our findings point to the importance of specifically-designed regulatory tools, applied consistently over time, against the backdrop of a pro-reform political climate.

Keywords: business groups, pyramids, corporate governance, controlling shareholders, concentration of economic power

JEL Classifications: G38, K22, N20

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1. Introduction

In many countries, large business entities are perceived as important players in the economy. General Motors, Nokia, Samsung and the tech giants of today have all contributed to innovation and growth at different time periods. Nevertheless, over time, some business entities might become too large by accumulating considerable economic power that allows them to hamper competition and exert considerable influence on politics and regulation. Accordingly, public sentiment toward big business, which is often initially favorable, tends to shift as the influence of large business entities increases. This process may lead governments to introduce new laws, including measures aiming at breaking up, or curbing the influence of, large business entities. An early example of this process is the changing public attitude toward the railway tycoons in America of the 1880s: the negative sentiment toward them was reflected in the appearance of the term "robber barons" in the mid-1880s; the decade ended in the introduction of antitrust legislation in 1890. A more recent example is the rise of public discourse regarding possible measures to restrain the influence, or even break up, tech giants like Amazon, Google or Facebook. In both of these examples, business ventures in a new industry, or using novel technology, accumulate so much power that the public perception of them shifts from that of paragons to that of potential threats.

Within this framework, this paper examines the interaction of public sentiment and government policy toward one type of large corporate entity - pyramidal business groups. As described below, these entities too are often perceived as mechanisms for promoting economic development; yet, as their size and influence increase, their perception may change, and they can become targets for regulation aimed at breaking them up or limiting their influence on the economy.

Business groups—clusters of fully-owned (private) and partially-owned (listed, or publicly-traded) firms under common control—are ubiquitous around the world and have intrigued scholars for decades. Control-magnifying, or pyramidal, business groups—tiered structures where an apex firm controls multiple tiers of subsidiaries—let a small number of powerful individuals or families (e.g., the Lee, Tata, Wallenberg and Slim families) dominate many Asian, Continental European and Latin American economies (e.g., Claessens *et al.*, 2000; Faccio and Lang, 2002; Colpan *et al.*, 2010). These individuals or families need only have a large enough equity stake to control the apex firm; the vertical control structure of the

group—the separation between control and cash flow rights—magnifies this into control over large corporate empires.

Research has explored different aspects of business groups. Strategy scholars view the prevalence of diversified business groups in many emerging economies as a response to institutional voids — underdeveloped financial, labor or intermediate goods markets, inefficient or corrupt judicial systems, or missing innovation-supporting mechanisms that firms in business groups can bypass. This effect is arguably important in early stages of development, but less so in developed economies (e.g., Khanna and Yafeh, 2007; Morck, 2010). By contrast, the downsides of business groups persist long after the economic benefits associated with them are gone: Legal and finance researchers have emphasized the resource misallocation and corporate governance problems associated with the separation of ownership and control in pyramidal group affiliates, where the controlling shareholder often has decision-making power far exceeding her equity stake, or cash flow rights (e.g., Bebchuk, Kraakman and Triantis, 2000). Furthermore, excessive political power (through rent seeking or lobbying) and monopoly power (possibly exercised through collusion, entry deterrence, predation and more) enable "entrenchment" by groups and are likely to render them socially undesirable in advanced stages of economic development (Morck et al. 2005; Khanna and Yafeh, 2007). The formulation of public policy vis-à-vis large business groups is therefore a major issue in many countries in which the social costs associated with them tend to exceed the benefits.

This paper does not address the question whether business groups should be prohibited or otherwise become the target of government regulation. Rather, taking as given the decision to use regulatory measures to target business groups, we explore the political circumstances, regulatory strategies, and market conditions that allow governments to succeed in limiting the economic power of business groups. We focus on four countries that, in different periods, have adopted public policies to limit the potentially excessive influence of business groups: The United States in the 1930s, Japan in the immediate postwar years, Korea in the 1990s, and Israel in the last decade. Naturally, as out sample consists of only four countries (non-randomly selected), our conclusions should be viewed as tentative conjectures.

Chronologically, the first example of public policy targeting business groups is the United States in the 1930s. US business groups, developed in the early decades of the twentieth century, came to own shares in multiple companies which, in turn, controlled additional tiers

of subsidiaries. Pyramidal groups with partially owned affiliates achieved substantial magnification of economic and political power and controlled over half of all non-financial corporate assets in America in the early 1930s. These groups became a major policy concern and were perceived as a menace to capitalism and democracy, no less (Roosevelt, 1942). The extreme political and economic circumstances generated by the Great Depression enabled President Roosevelt and a sequence of Democratic administrations to introduce an array of regulatory measures designed to curb the influence of holding companies and their subsidiaries. President Roosevelt regarded standard antitrust enforcement as insufficient for the task at hand; instead, he introduced novel, specifically-designed measures to reduce the concentration of economic power. These included outright restrictions on the number of levels in pyramidal groups in specific industries (most notably, public utilities) and on their scope of activities. The goal of these measures was to limit these groups' economic power, rather than to reduce minority shareholder expropriation. Other measures included tax incentives to downsize groups and reduce their number of pyramidal levels, as well as restrictions on the scope of activities of investment and holding companies. The array of reforms directly targeting groups, applied consistently for more than a decade, eventually eroded US pyramids which, by and large, disappeared from the economic landscape of corporate America (Kandel et al., 2019). Restrictions of the scope of activities of financial institutions (e.g., through the Glass-Steagall Act of 1934) and on the ability of financial institutions to become controlling shareholders, facilitated the transition to the present-day US corporate ownership structure of stand-alone firms (not group affiliated) and dispersed ownership.

The second case of a policy targeting business groups is Japan in the late 1940s, under the U.S. occupation. Pyramidal groups, called *zaibatsu* (literally, financial cliques), came to dominate the modern sectors of the Japanese economy starting in the late nineteenth century and especially in the years preceding World War II. While these groups were perceived as agents of economic development that overcame institutional voids in the early stages of Japan's industrialization (e.g., Morck and Nakamura, 2007), the substantial economic power of family-controlled pyramidal groups in Japan made the *zaibatsu* dissolution one of the major policy objectives of SCAP (the Supreme Command of the Allied Powers in Japan). The American occupation authorities regarded the groups not only as beneficiaries of the War, but also as one of the causes of social inequality in Japan and the rise of militarism in the 1930s. In addition, the economic power of the groups was deemed detrimental to competition. The policy measures used to dissolve Japan's pyramidal groups were extreme:

The American occupation authorities established the Holding Company Liquidation Commission (HCLC) specifically for the purpose of dismantling groups. More than one third of all assets in the Japanese economy changed hands by decree, as the HCLC confiscated the shares held by group member firms and their controlling families. The HCLC attempted to generate a dispersed ownership structure by distributing the ex-*zaibatsu* shares to company employees and residents of the communities where *zaibatsu*-owned plants were located.[1] The result was a phenomenal success in some important respects: holding companies, prohibited as part of the American reforms for fifty years, disappeared from the landscape of corporate ownership in Japan, as did the controlling families of the groups. However, the dispersed ownership generated by decree through the American occupation reforms proved short lived; cross-holdings of shares by corporations and banks generated a uniquely Japanese form of corporate ownership, sometimes referred to as the *keiretsu* system, a very far cry from the democratic ownership structure that the American reformers had in mind (Hadley, 1970; Yafeh, 1995; Morck and Nakamura, 2005; Franks, Mayer and Miyajima, 2016). Unlike the US reforms, the American occupation reforms created an environment where financial institutions, and in particular large commercial banks, could play a major role in corporate ownership and governance.

In Korea, much like pre-war Japan, pyramidal, family-controlled business groups known as *chaebol* were associated with Korea's rapid industrialization in the 1960s and 1970s, filling up institutional voids under the auspices of a developmental government (e.g., Amsden, 1992; Chang, 2003). However, the groups' rapid expansion in the 1990s, often debt-financed using subsidized loans primarily from government-owned financial institutions, was perceived as one of the main reasons for the economic crisis of 1997-1998. The crisis produced what proved to be a temporary shift in Korean politics towards a relatively "liberal" (less pro-big business) regime. The perception of the large groups changed from that of paragons of Korea's rags to riches story to that of entities associated with "reckless behavior" and "moral hazard" (carelessness in using cheap money supplied by the government). Yet, the government did not adopt reforms to break up all business groups. The advent of the Law and Finance paradigm in the mid-1990s led to a profound change in the academic discourse on the Korean *chaebol* (Khanna and Yafeh 2007, Table 3), instilling the perception that the large wedges between control and cash-flow rights in Korean pyramids facilitated minority

[1] See Hadley (1970), Ch. 1 for a discussion of the influence of policy measures to reduce the concentration of economic power in the US of the 1930s on the formulation of policies in Japan during the American occupation period.

expropriation and raised serious corporate governance concerns. Accordingly, although Korea has experimented with various anti-big business policies in different time periods, the major policy tools (designed jointly with the IMF) used to regulate the *chaebol* in the aftermath of the 1997-1998 crisis were corporate governance oriented. This was based on the premise that it was the opaque corporate governance of the groups which should be changed in order to make the *chaebol* less crisis-prone, more transparent and more accountable to minority shareholders and to the Korean public (Coe and Kim, 2002). Consequently, a series of corporate governance reforms was introduced in the early 2000s without an attempt to dismantle business groups. Political support for these policies, however, proved to be short lived, possibly as a result of the lobbying power of the major business groups, resulting in policy changes and reversals over time. Perhaps because of the focus on governance-related tools, or because of the lack of policy consistency over time, the results in Korea were disappointing: Not much has changed in corporate Korea since the turn of the twentieth century and the largest groups, Samsung, Hyundai LG and others, still dominate the Korean economy. In fact, the shares of group affiliates in the (now much larger) Korean economy have increased over the last two decades. Importantly, while the largest business groups have become even larger, smaller ones have shrunk.

In contrast with the US, Japan and Korea, business groups in existence in Israel in the 2000s did not play an important role in the country's economic development; many emerged in the 1990s, when Israel was already a developed economy. Some groups were formed as part of an extensive privatization process in which a small number of highly-leveraged "tycoons" acquired assets previously owned by the state; other groups were formed by taking over assets previously held by families whose wealth had been eroded (Kosenko, 2007; 2019). The public attitude towards these "tycoons" and the firms they controlled, which had been highly favorable in the early 2000s, changed around 2010-2011, against the backdrop of a high cost of living and a "social protest" condemning the monopoly power of some group affiliates (e.g., in cellular communication and retail food). Although Israel did not experience a political or economic crisis as in the cases of the US, Japan and Korea, the global financial crisis of 2007-2008 precipitated the default of some group affiliates raising concerns about money invested in their securities by pension plans and other long-term savings instruments. Against this backdrop, a government-appointed committee proposed in 2012 a set of new policies designed to limit the concentration of economic power in Israel: (i) Limiting the number of levels in pyramidal groups (reminiscent of the restrictions on public utilities in the US); (ii) Prohibiting financial and non-financial activities in the same business group, i.e.,

prohibiting large groups from controlling both financial institutions (banks, insurance companies etc.) and non-financial businesses and (iii) Changing antitrust and privatization policies, so that they would no longer be based solely on industry-specific analysis, but rather take into account considerations of economy-wide concentration of power.

Although the time perspective we have on the Israeli reforms is shorter than the long-term perspective we now have on the other three countries, we find that the reforms in Israel, applied consistently over a period of nearly a decade, while not leading to the complete disappearance of pyramidal groups (yet?), as in the US and Japan, have had an impact which far exceeds that of the corporate governance reforms in Korea. We find that the number of groups in Israel in 2019 is much smaller than the corresponding number in 2012, before the onset of the regulatory changes; we also observe that the number of pyramidal levels and the control-cash flow wedges in surviving groups are smaller. At the same time, some families have managed to restructure their holdings in ways that allowed them to control the same number of businesses while complying with the new anti-pyramids legislation. The decline of the large business groups in Israel was driven not only by anti-pyramid legislation but also by supplementary measures that limited groups' ability to borrow. The decline in group size and in the number of affiliates makes surviving groups not only smaller than groups a decade ago, but also less likely to interact with each other across multiple markets, an effect which can enhance competition (Kosenko, 2019).

We conclude that, to successfully curb the influence of large corporate groups, it is important to design and use multiple regulatory measures which can address these structures and reduce the economy-wide (rather than industry-specific) concentration of economic power. Standard antitrust enforcement is unlikely to be adequate in restraining business groups whose activities span many industries. Minority protection and governance reforms cannot be a remedy for extreme monopoly power and political clout either. Importantly, reform measures should address the economic power of financial institutions; otherwise, dismantling business groups might result in the power shifting from families to banks and other financial institutions, as in the case of Japan. The cases of Korea and Israel suggest that creditor rights and efficient bankruptcy procedures are likely to play a role in facilitating the disappearance of inefficient business groups. Finally, we also stress the importance of the political environment in which a reform takes place, not only in having a supportive public opinion but also in the ability of policymakers to consistently apply policies to reduce the concentration of economic power over a long time period.

The rest of the paper is organized as follows. Section 2 contains a very brief review of the main themes in the literature on business groups. Section 3 describes the reforms designed to reduce the concentration of economic power initiated by the Roosevelt administration in the US of the 1930s and 1940s and the resulting changes in US corporate ownership. Section 4 presents the US-occupation reforms in Japan. Section 5 focuses on the limited effects of anti-*chaebol* governance reforms in Korea following the aftermath of the Asian crisis of the late 1990s. The case of Israel appears in Section 6, and Section 7 concludes. The Appendix illustrates the structure of prominent business groups in the four countries.

2. Business Groups – A Primer

In environments where market institutions are weak, transactions costs in product, capital and other markets can be substantial (Williamson, 1975). A business group is a mechanism of hierarchical resource allocation overcoming institutional voids and allowing coordinated development of multiple interdependent industries (Leff, 1976 and 1978; Morck and Nakamura, 2007). Coordination and resource allocation within business groups may include the operation of an active internal capital market (overcoming financial under-development), an internal labor market (overcoming country-level limits in training skilled labor), vertical integration (overcoming difficulties in contract enforcement or in guaranteeing stable supply chains), group-wide coordination and allocation of innovative talent and R&D resources (overcoming the scarcity of entrepreneurs or venture capital), and more (see Khanna and Yafeh, 2007; Morck, 2010).

With economic development and the emergence of market institutions, the costs of market transactions fall while those within business groups may become more costly. As the benefits associated with business groups in overcoming institutional voids decline, problems associated with group monopoly power and potentially inefficient allocation of capital and other economic resources become more apparent (Khanna and Yafeh, 2007). Large business groups can distort the allocation of economic resources and undermine investor protection by engaging in self-dealing or "tunneling". They might also distort the allocation of capital by, for example, using group resources or financial institutions to fund investments in mediocre within-group companies rather than giving priority to better outside opportunities (Alemida and Wolfenzon, 2006a). This is especially true in pyramidal business groups, which the controlling shareholder may use to establish a large corporate empire with a limited equity stake. The groups' ability to capture regulators and influence political processes is also

exacerbated in pyramidal groups (Morck and Yeung, 2004), facilitating entrenchment. In addition, because the private benefits to group controllers may continue to be substantial even when the social benefits no longer are, groups tend to persist and are unlikely to voluntarily dissolve (Almeida and Wolfenzon, 2006b; Colpan et al., 2010); Therefore, policies to curb the economic power and political clout of pyramidal business groups may be needed.

3. Anti-Pyramid Policies in the United States (starting around 1935)

Corporate America today is typically portrayed as consisting of "free standing" firms, which neither control nor are controlled by other listed firms (La Porta et al., 1999; Villalonga and Amit, 2009). New evidence, however, indicates that US corporate ownership as we know it today is a relatively recent phenomenon, dating back to the middle of the twentieth century: Kandel et al. (2019) show that, as late as the 1930s and early 1940s, 20-some business groups (which they define as at least three publicly traded companies under common ownership), much like those prevalent in today's emerging markets, dominated the US economy, controlling over half of the its non-financial corporate assets (Figure 1, reproduced from Kandel et al., 2019). These groups consisted of both diversified, family-owned pyramids (e.g., Du Pont), as well as public utilities-oriented groups, often with a dispresely-held apex holding company (e.g., Pennsylvania Railroad). As fractions of GDP, the revenues of the largest US business groups easily eclipsed those of leading US firms today and were comparable to those of large business groups in present-day emerging markets (Kandel et al., 2019).

Contemporary descriptions of US business groups correspond to them playing a role, at least initially, in overcoming institutional voids in financial markets, managerial expertise, and more (Kandel et al., 2019). However, with the onset of the Great Depression, concerns about excessive economic and political power wielded by groups became widespread. Financial scandals, such as the one surrounding the collapse of the Insull Group in 1931, exacerbated the anti-big business sentiment. President Roosevelt, expressed concerns that business groups menaced consumers, public shareholders and American values:

"*The first truth is that the liberty of a democracy is not safe if the people tolerate the growth of private power to a point where it becomes stronger than their democratic state itself. That, in its essence, is fascism -- ownership of government by an individual, by a group, or by any other controlling private power…. Among us today a concentration of private power without*

equal in history is growing. This concentration is seriously impairing the economic effectiveness of private enterprise…"[2]

Furthermore, Roosevelt emphasized that the existing regulatory toolkit (in particular, within-industry antitrust enforcement) was insufficient or inadequate:

"*The traditional approach to the problems I have discussed has been through the antitrust laws… But the existing antitrust laws are inadequate -- most importantly because of new financial economic conditions with which they are powerless to cope.*" (*Ibid*., p. 124).

Instead, a sequence of Roosevelt administrations introduced, as part of the New Deal, a series of reforms that eventually led to the demise of these groups and precipitated the appearance of the modern US corporate structure of freestanding firms. The following three reforms explicitly targeted pyramidal groups:

The Public Utilities Holding Company Act (PUHCA) of 1935, whose enforcement began in earnest in 1940, was designed to achieve the "…abolition of the evil features of holding corporations."[3] The Act targeted public utilities and prohibited pyramids of more than two tiers in this sector. It also forced groups to divest firms operating outside one industry (e.g., electricity or gas) or in non-adjacent states. Using official SEC lists of firms and groups needing restructuring between 1937 and 1950 to comply with the PUHCA, Kandel et al. (2019) report that 13% of all group affiliates (and 35% of all listed group affiliates) which were liquidated, acquired, or divested in this time period appeared on the PUHCA list. Only two public utilities groups remained by 1950, with only two pyramidal levels. Nevertheless, Kandel et al. (2019) also show that, while this Act was important for the demise of many public utilities groups, most US groups were not in public utilities and therefore not much affected by the PUHCA.

The intercorporate dividend tax, initially introduced in 1935 and hiked substantially by the early 1940s, applied each time subsidiaries distributed dividends to their parent, leaving pyramids with more tiers more severely taxed. Affiliates controlled with blocks exceeding

[2]"The New Deal: Message to Congress on the Concentration of Economic Power," April 29, 1938, published as Roosevelt (1942), p. 119.
[3] "Annual Message to Congress" (January 4, 1935): www.presidency.ucsb.edu/ws/index.php?pid=14890#ixzz1cwHQ1pUl.

85% were exempt from the tax. Accordingly, as the tax rate rose, Kandel et al. (2019) report a decline in the volume of intercorporate dividends (as a fraction of all dividends). They also find that, in groups surviving to 1950, the number of tiers fell and the fraction of intercorporate control blocks exceeding the 85% exemption threshold rose. Kandel et al. (2019) conclude that the intercorporate dividend tax contributed to the demise of US groups.

A third reform targeted the financial industry. The Investment Company Act of 1940, motivated in part by the need to limit the influence of Wall Street over corporate America (Roe, 1991) stipulated that a firm whose assets were predominantly shares in other firms (an investment company) could not interfere in the management of the firms whose shares it owned and would be subject to additional regulatory and reporting requirements. An exception was made for firms in which the investment company's stake exceeded 50%. Compliance with this Act may help explain the high intercorporate equity blocks (limiting the groups' scope of influence) in the few groups that remained in existence by 1950.

Other regulatory forces appear to have played a role in creating an environment hostile to pyramidal business groups. Within this context, the Glass Steagall Act of 1934 is worth mentioning as a force that may have prevented the rise of large financial institutions within business groups, an important issue in the other countries we study as well. In general, however, the empirical analysis in Kandel et al. (2019), and the discourse by contemporary observers cited therein, attribute only a limited role to standard (not anti-pyramidal group-specific) regulatory measures such as investor protection (the establishment of the SEC), antitrust and estate tax.[4]

As a result of this combination of regulatory measures, US groups, having peaked in the early-1930s, declined slowly through the late 1930s and more precipitously in the 1940s (Figure 1). Family-controlled groups became virtually extinct by 1950. A few groups with widely-held apex firms, mostly operating in a single industry, survived, but were reduced in size and had fewer pyramidal tiers than in earlier years. Kandel et al. (2019) posit that all three specifically-designed regulatory measures, augmented by more standard policies such as estate taxes (which affected family-controlled groups), and sustained by a political environment hostile to concentration of economic power, ultimately wore down US groups.

[4] For example, using detailed data on antitrust cases, Kandel et al. (2019) show that antitrust enforcement was not a major force in bringing about the demise of business groups, although the surge of antitrust prosecutions in the late 1940s may have helped sustain the anti-big business sentiment.

The Great Depression appears to have been important in locking the reforms in place. An important outcome of these New Deal reforms was thus the rise of focused (not diversified), free-standing firms with limited family control.[5]

One possible lesson from the US reforms of the 1930s and 1940s is the importance of consistently using multiple policy tools over a long time period. The US reforms included a prohibition on pyramidal structures (in the public utilities sector) enforced by a government agency (the SEC), tax rules that discouraged pyramidal structures, and limits on the ability of financial institutions to influence corporate management. Note that these reforms did not rely on investor protection or antitrust rules. Rather, the US adopted regulatory measures that were specifically designed to curb the influence of groups. The successful US experience in dismantling business groups also attests to the importance of political support for such ambitious reform moves, which can be more easily obtained in periods of extreme duress such as the Great Depression (and continued dominance of reform-oriented Democratic administrations). Finally, the time lag between the introduction of the US reforms (in the mid-1930s) and the demise of US groups about a decade later is consistent with evidence from other historical contexts of economic changes substantially lagging legal and regulatory reforms (Sussman and Yafeh, 2006; 2013).

4. Japan during the Postwar American Occupation Reforms

The economy of prewar Japan was dominated by large, diversified pyramidal business groups (*zaibatsu*) which controlled over a quarter of all capital assets in the economy and much larger shares in modern, heavy industries (Hadley, 1970). The leading four family-controlled groups included hundreds of affiliates and subsidiaries in a large number of industries. Coordination within the groups was achieved not only through a vertical control structure but also through extensive intragroup personnel and trade ties (Hadley, 1970; Yafeh, 1995; Morck and Nakamura, 2005).

Established in the 1880s, the *zaibatsu* gradually accumulated economic and political power through investment in heavy industry and close government ties (Morikawa, 1992). During World War II, the *zaibatsu* further increased their market power, played an important role in providing military equipment and supplies to the Japanese Imperial Army, and controlled

[5] Conglomerates, diversified entities with fully-owned divisions or subsidiaries, appeared in the US in the 1960s and 1970s and disappeared in the 1980s. Not only were the conglomerates short-lived, they were also much smaller than the pyramidal groups of the 1930s, see Kandel et al. (2019), footnote 16.

factories and other assets in Japanese-controlled Korea and northern China. Following Japan's defeat in 1945, the American occupation authorities (The Supreme Commander of the Allied Powers or SCAP) regarded the groups as an important part of the Japanese social structure which led to the war. The groups were implicated in the rise of militarism in Japan, not only through their direct involvement in heavy industry and military procurement, but also through the social tension between the powerful *zaibatsu* families and the military officers whose background was often rural and poor.[6] Accordingly, the market power of the *zaibatsu* and the tremendous wealth of the founding families made the *zaibatsu* dissolution one of the first and most important targets of American reforms in Japan. The objective was the creation of a competitive (less oligopolistic) market structure in Japan and the redistribution of the wealth concentrated in the hands of a few wealthy families:

"*Encouragement shall be given… to the development of…industry… organized on a democratic basis… To this end, it shall be the policy of the Supreme Commander… to favor a program for the dissolution of the large industrial and banking combinations which have exercised control of a great part of Japan's trade and industry*."[7]

The American occupation reform authorities targeted, first and foremost, the core *zaibatsu* firms, such as the holding companies and their first-tier subsidiaries in the four largest groups and in a few smaller ones. The steps taken by the occupation authorities were exceptionally harsh. Shares held by these firms in other group affiliates were transferred to the Holding Companies Liquidation Commission (HCLC) and then redistributed to new owners, primarily employees and local residents in the cities where *zaibatsu*-owned factories were located. The major holding companies were dissolved by decree and the formation of new ones prohibited by law. A second set of targeted firms was based on antitrust considerations. This set typically included large firms with some (loosely defined) monopoly power. In addition, shares held by "designated individuals" (members of the *zaibatsu* families) were transferred to the HCLC and redistributed as well. Consequently, a large number of firms had a significant number of their shares transferred from their original owners (designated firms and individuals) to the American occupation authorities and on to new owners.[8] In addition, some designated firms were to be reorganized, a term which usually meant shedding off

[6] Somewhat in contrast to the view that the *zaibatsu* families were regarded with apprehension by ordinary Japanese, Franks, Mayer and Miyajima (2016) argue that Japanese retail investors trusted the pyramids' controlling families to treat them fairly as minority shareholders.
[7] Hadley (1970), p. 6, reproduced from various original documents.
[8] Group affiliates in the sample used in Yafeh (1995) had, on average, 30% of their shares transferred to the HCLC (Table II, page 160).

subsidiaries or assets, as well as other measures of administrative reorganization. Finally, certain firms were forced (or allowed) to issue new stock and raise additional capital, either as a mechanism to overcome war-related losses or (more importantly) as a means of diluting the old ownership structure.

Although the shares transferred were resold by HCLC using several methods, preference was given, as noted above, to sales to firm employees and local residents, who could often purchase equity at predetermined (low) prices (Hadley, 1970).[9] These accounted for over half of all sales and were under close supervision in order to guarantee a post-reform diffuse ownership structure and to prevent re-concentration of capital ownership (Bisson, 1954; Miyajima, 1994).

The *zaibatsu* dissolution reform, which ended in 1950, was of enormous scale, with overall shares transferred to HCLC (and a few other government agencies) amounting for over 40% of all corporate assets in Japan at the time (Bisson, 1954). All holding companies were dismantled and prohibited by law, all controlling families stripped of their shares, and all prewar managers removed and prohibited from taking office. In 1949-1950, immediately following these reforms, shareholding by individuals reached an all-time high of approximately 70%.

Importantly, the *zaibatsu* banks were left nearly untouched by the American reforms. In 1948, when the SCAP considered breaking up the large prewar banks, fear that Japan might fall to Communist hands appeared more important than pro-competitive reforms.

This newly-created ownership structure, however, proved to be short lived: With the reopening of the Tokyo Stock Exchange in 1949, the fraction of shares held by individuals began to decline, whereas corporate and financial institutions began to acquire blocks of shares in the early 1950s. In the early postwar years, banks, which remained large but detached from their prewar groups, began offering corporate clients restructuring loans and, at the same time, started also acquiring equity stakes in borrowing firms, which were often ex-affiliates of the same prewar zaibatsu (Hadley, 1970). These equity stakes, initially limited by law to no more than 10 percent (the cap was later reduced to 5 percent) became substantial both because of the absence of significant non-financial block holders and because financial institutions related to the main lending banks could acquire equity stakes in borrowing firms

[9] Some shares were also auctioned off.

as well. Figure 2, reproduced from Aoki (1988), presents this trend. By the mid-1950s individual shareholding declined to its prewar level, and new cross shareholding arrangements (sometimes referred to as corporate groups or *keiretsu*) appeared. Although the pyramidal groups and the families that controlled them had disappeared, the ownership structure that emerged in Japan in the early 1950s was very different from the diffuse ownership structure that the American occupation authorities had envisioned.[10]

The Japanese case offers many interesting potential lessons. One possible interpretation of the events in Japan may be that the American occupation reforms and, in particular, the business group dissolution policies, created a governance vacuum of unaccountable management; the new cross shareholding arrangements which were formed starting in the 1950s can be viewed as a market correction for this vacuum (Yafeh, 1995). Another (related) interpretation presents the early 1950s as a period in which Japanese firms became vulnerable to hostile takeovers (as the reforms had removed block holders); the cross shareholding arrangements may have provided a long-term view or shielded management from market discipline (e.g., Morck and Nakamura, 2005).[11] Stated differently, reform measures that are executed quickly can backfire by creating governance problems; consistent policies over a long time period may be needed to allow business groups to downsize without creating strong governance shocks.

More broadly, one can conclude that measures to simultaneously address pyramidal ownership combined with a push for dispersed ownership may be too ambitious. Furthermore, it may be close to impossible to impose an ownership structure exogenously when other supporting institutions are missing.[12] In this vein, Franks, Mayer and Miyajima (2016) view the evolution of corporate ownership in Japan as evidence that, in and of themselves, pro-investor reforms need not generate a dispersed ownership structure, in contrast with the Law and Finance paradigm. The Japanese experience may also be interpreted as suggesting that the outcome of very large-scale ownership (or other) reforms may be hard to anticipate.

[10] Interestingly, only in the aftermath of the *zaibatsu* dissolution did the Japanese financial system become bank-based with household savings primarily in the form of bank deposits and bank loans as the main source of corporate funding (Hoshi and Kashyap, 2001; Franks, Mayer and Miyajima, 2016). In prewar Japan, companies were often equity-financed and households appeared to have been willing to invest their savings in the stock market.

[11] It is not completely clear who the potential bidders would have been; it is also not clear why a similar shift to dispersed ownership in the United States did not induce the formation of Japanese-style cross-shareholding arrangement as an anti-takeover mechanism.

[12] A similar conclusion can be drawn, perhaps, from the voucher privatization program in Czechoslovakia after the collapse of Communism.

In addition, the case of Japan suggests that any attempt to address the concentration of economic power should probably include measures to prevent a high influence of financial institutions on companies' management—as has been done in the US (first through the Glass Steagall Act which prevented the rise of large, universal banks, and later through the Investment Companies Act and other measures that prohibited bank directors from serving on companies' boards)—and in Israel (where business groups were forced to separate financial and non-financial operations, see below). In Japan, to a certain extent, family ownership was replaced by dominant financial institutions. Another possible lesson from the history of Japan is that, after the end of the American occupation period (in 1952), there was no government effort to pursue the occupation authorities' anti-big business policies; in this respect, Japan resembles Korea (described in the next Section), where political support for reform measures appears to have been short lived. Finally, the *zaibatsu* dissolution experience in Japan implies that extreme policy measures can only be implemented under extreme political circumstances, in this case, foreign occupation following a prolonged and costly war.

5. Korea in the aftermath of the East Asian Financial Crisis

Large business groups, the *chaebol*, have dominated the Korean economy since the onset of industrialization in the mid-1960s, coordinating investment across sectors, operating internal capital and labor markets, and in other ways making up for the institutional voids of impoverished Korea of the 1960s. Continued government support (subsidized government loans, tax benefits, government contracts, government-coordinated bailouts, etc.) enabled the largest groups, such as Samsung, Hyundai, and LG, to control significant parts of the Korean economy.

Attempts to regulate the *chaebol* date back to the 1970s, with concerns about the concentration of economic power in Korea appearing soon after the emergence of the *chaebol* (Ministry of Strategy and Finance, 2013). Over the ensuing decades, policymakers have experimented with a variety of regulatory measures targeting business groups, including restrictions on cross shareholding and reciprocal shareholding within groups (dating back to 1986), a ban on holding companies, inter-corporate dividend taxation (from which the receiving companies were exempt if their equity stakes were high enough, much like in the US of the 1930s, see Lee, 2019), restrictions on group control of banks and on the use of the group financial institutions' voting rights, restrictions on debt guarantees issued by group members (introduced in the 1990s, before the crisis) and more. Nevertheless, it appears that these measures have not been used consistently, or as part of any coordinated attempt to

weaken the powerful Korean groups. For example, over time, a large number of exemptions have been added to the restrictions on cross- and reciprocal shareholding; the rules governing the use of voting rights held by group-controlled financial institutions have been relaxed over time and eventually abolished in 2009 (See the Ministry of Strategy and Finance, 2013, for these and additional examples; see also Lee, 2019).

The outbreak of the Asian financial crisis in 1997 and its spread to Korea, until then considered an Asian "tiger," changed the public perception of the country's dominant business groups. The groups' expansion and extremely high leverage, combined with a notion of being "too big to fail," were perceived as some of the main reasons for the financial crisis of the 1990s, the subsequent collapse of several major groups (e.g., Kia, Daewoo), as well as the collapse of the Korean economy, which was forced to seek assistance from the IMF (see, for example, Kim and Kim, 2008). The groups' image changed from that of the heroes of Korea's spectacular growth since the 1960s to that of "crony capitalists." In addition to the financial crisis of 1997-1998, recurring evidence on group involvement in financial scandals often involving corruption (through ties to politicians), as well as in blatant cases of expropriation of minority shareholders by the controlling families, tarnished the groups' image.[13]

The post-crisis changes in the public discourse and the political changes in Korea following the crisis (somewhat resembling the rise of Democratic administrations in the US of the 1930s) brought about a reform movement targeting Korea's business groups. The post-crisis reforms, initiated during the presidency of Kim Dae Jong with the strong support of the IMF (as part of the IMF bailout program) did not seek to dismantle business groups or ban them altogether. Rather, their apparent goal was to address the groups' perceived failures. Thus, the reforms focused primarily on increased transparency in accounting and management, improved corporate governance and accountability of the *chaebol* owners and management, and restrictions on related-party guarantees and other measures that could be used to provide capital to inefficient businesses and to tunnel resources from minority shareholders to the groups' controlling families. These policy choices were based on the observation that many

[13] Corruption scandals involving the largest Korean business groups are too numerous to list here. For a partial list of *chaebol*-related scandals, see, for example, https://asia.nikkei.com/Politics/South-Korea-grapples-with-cycle-of-corruption-and-pardons and https://en.wikipedia.org/wiki/Chaebol. The literature on minority shareholder expropriation in Korean business groups (before and after the crisis) is immense; notable contributions include Bae, Kang and Kim (2002); Joh (2003); Baek, Kang and Park (2004); Baek, Kang and Lee (2006); Bae, Cheon and Kang (2008). See also Khanna and Yafeh (2007), Table 3.

unprofitable *chaebol* affiliates were maintained for reasons related to the interests of the controlling family at the expense of minority shareholders.

The increased corporate transparency was accompanied by reduced barriers to foreign investors, who increased their equity stakes in Korean listed companies three-fold between 1996 (13%) and 2006 (37%, see Kim and Kim, 2008).[14] Somewhat counter-intuitively, these reforms lifted the ban on holding companies, prohibited in Korea until 1999, in order to simplify the groups' complex ownership structure; the introduction of holding companies was accompanied by regulations stipulating minimal control blocks at various pyramidal levels so as to prevent extreme divergence between control and cash flow rights and possibly limit the formation of large corporate empires.[15] A requirement for the boards of large companies to consist of 50% independent directors was introduced in 2001 (although the extent of these individuals' independence remained in doubt). Laws allowing derivative law suits and class action were introduced and some institutional investors (such as pension funds) have gained prominence since the turn of the 21st century (Kim and Kim, 2008).[16] In addition, some observers argue that the media (or parts of it) has become more independent of the *chaebol* in the post-crisis period, although this claim is controversial and not supported by any concrete evidence. Additional corporate governance reforms of various types are still being discussed in Korea even today, including forced reductions in the control-cash flow wedges in listed group affiliates, limits to intra-group trade, further caps on the voting power of financial affiliates and family-controlled foundations and more.[17] In addition to this array of governance-related measures, the government has ceased its explicit support of the *chaebol* through subsidized loans and implicit loan guarantees although large companies, typically group-affiliated, are major beneficiaries of other government policies such as R&D subsidies even today.

There were other post-crisis policy objectives. One was to improve financial stability through a reduction in leverage, a major weakness of Korean groups in the pre-crisis years. To a large

[14] The figures refer to all listed firms, not only group affiliates, although, as of 2017, affiliates of the largest ten business groups accounted for more than half of the *Kospi* Index (Samsung affiliates alone account for 28%, see http://www.businesskorea.co.kr/news/articleView.html?idxno=17589).

[15] At each pyramidal level the minimal control block had to exceed a certain threshold, reaching 100% at the fourth level (from the top).

[16] Cho (2003, Table 12.6) provides additional information on improved minority shareholder rights and accounting reforms.

[17] See a Bloomberg report from August 2018: https://www.bloomberg.com/news/articles/2018-08-26/korea-unveils-proposed-changes-to-chaebol-conglomerate-rules .

extent, this objective has been achieved.[18] Another objective, pursued by the Korean Fair Trade Commission (FTC), emphasized the unfair business practices used by the *chaebol* which the FTC tried to reduce. The post-crisis reforms included also a failed attempt to focus the groups' operations by inducing asset (affiliate) swaps between them; this did not achieve much and the groups remained highly diversified (Kim and Kim, 2008).[19] Finally, there were also reforms which did not target the *chaebol* directly but may have had an indirect effect, such as changes in the bankruptcy law (allowing for an orderly resolution of the insolvency of some weak *chaebol*) as well as attempts to encourage FDI (and potential competition, perhaps, see various chapters in Haggard et al., 2003). As noted above, much like the US in the 1930's, the policy objective in Korea was to reduce the concentration of economic power; unlike post war Japan, there was no explicit objective in Korea to entirely dissolve the groups (Lim, Haggard and Kim, 2003).[20]

Despite this array of regulatory reforms designed to curb their influence, the Korean economy is still dominated by the large business groups, whose names continue to be embroiled in political and governance scandals (including the impeachment of former President Park in 2016). The potential political and economic power of the *chaebol*, as well as the potential for conflicts between the controlling families and minority shareholders, are still very much a feature of the Korean economy. Figure 3 (using official statistics from the Korean Fair Trade Commission) presents the top ten groups' shares in Korea's GDP in 2001, 2008 and 2018. Korea's business groups have increased significantly in size since the Asian crisis and the onset of the reforms, both in absolute terms and relative to Korea's GDP; this increase is, of course, heavily influenced by the spectacular growth of several very successful groups (and firms within them): Between 2001 and 2017 Korea's GDP increased by approximately 170% in nominal terms; Samsung's assets increased during this time period by 570% (driven primarily by the phenomenal success of Samsung Electronics) and Hyundai Motors by over 600%. Yet other large groups like LG or SK have increased substantially as well. Indeed, between 2008 and 2018, the largest (and possibly most efficient) groups grew fast relative to

[18] The average leverage (debt to assets) ratio of Korean group affiliates, which was around 0.8 in the mid-1990s, declined to about 0.5 in the early 2000s. Nevertheless, non-group firms also experienced a decline in their leverage ratios around the same time period (authors' calculations).

[19] Conceptually, and to the extent that the groups did exchange some assets, the result of this reform might have reinforced the groups' monopoly power in industries in which they were dominant.

[20] As far as we know, there are no official documents or protocols describing the precise objectives of the government anti-*chaebol* policies of the late 1990s and early 2000s.

smaller groups, leading to increased concentration.[21] It is also interesting to note that the identity of the top ten groups has remained remarkably stable over the two decades since the crisis, with Samsung continuously at the top of the list. Seven of the ten largest groups in 2001 are included in the list of the largest ten *chaebol* in both 2008 and 2018.

In view of these facts, it is difficult to argue that the anti-*chaebol* measures taken in Korea over the last two decades have had a fundamental impact on the economic power of the large business groups or on the extent of competition. This could be a reflection of the choice to use primarily governance-related tools to induce reforms with limited objectives; it could also be a reflection of the *chaebol*'s political influence and the limited power of pro-reform "liberal" presidencies, who could not enforce reform-oriented policies over long periods of time (conservative presidents in Korea tend to be far more reluctant to confront the large business groups).[22] In contrast with the US of the 1930s, Korea lacked continuous political support for anti-big business policy measures and it continues to be an example of group dominance ("The Republic of Samsung"), despite considerable hostility toward the *chaebol* in the public discourse.

6. Israel, 2012-2018

Although certain types of government-controlled business groups had existed in Israel in earlier decades[23], the rise of new business groups in the 1990s took place in an economically and institutionally developed economy. A sequence of market oriented reforms and privatization campaigns led to the rise of a few individuals (families) who acquired privatized state assets and created diversified, pyramidal business groups. In addition, some new groups were formed by taking over the assets of "old" families whose founders had passed away or whose wealth had eroded (Kosenko and Yafeh, 2010). As a result, the concentration of economic power in Israel in the early 2000s (as measured by control over public corporations**)** was high by international standards (Figure 4). Business groups with easy

[21] According to the Korean FTC data, the value of the combined assets of the largest ten groups in 2018 was 3.7 times larger than the value of the assets held by the next 20 groups; the corresponding ratio in 2008 was only 2.2.

[22] Other than President Kim Dae-jung in the period immediately following the crisis, the commitment of other Korean presidents to confront the *chaebol* appears to have been limited. Some regulations which limited the growth of the groups were in fact abolished during regime of the relatively liberal President Roh Moo-hyun. A recent (June 22, 2019) article in the Economist describes the declining zeal of the current President, Moon Jae-in, in confronting the *chaebol*: https://www.economist.com/asia/2019/06/22/south-koreas-left-wing-president-loses-his-zeal-to-humble-big-business

[23] Kosenko (2007) describes the evolution of business groups in Israel starting in the 1950s, when ownership in the nascent, quasi-socialist, Israeli economy was blurred, involving government, national Jewish institutions (e.g. the Jewish Agency) and labor unions.

access to credit markets became diversified and their interactions often reflected a web of social connections (e.g., interlocking boards of directors) and multi-market contacts. Groups, had significant stakes in financial services (e.g., insurance), telecommunication services, supermarket chains, food production and manufacturing companies, as well as many other businesses, though not in Israel's booming high tech sector. Figure 5 shows that, at their peak, in 2007-2008, thirty-some business groups controlled approximately 75% of the market capitalization of the Tel Aviv Stock Exchange (excluding many high tech companies which are cross-listed on NASDAQ). Of these, ten groups were especially influential. In the first decade of the twenty-first century, groups continued to grow through leveraged and often unrelated acquisitions; several groups invested in newspapers and TV channels in an apparent attempt to shape public opinion.

The performance of group-affiliated companies, however, was not better than that of stand-alone firms; their growth rates and profit rates, as well as their R&D outlays, were relatively low. Moreover, group affiliates—including holding companies at the apex of some groups—were highly leveraged, a weakness which was exposed with the onset of the 2007–2008 financial crisis. The alleged "magic touch" of some of the controlling shareholders could not prevent a precipitous decline in the value of some of the groups' financial and real estate investments, often in the US or Eastern Europe. The dramatic decline in the market value of some of the highly-leveraged business groups' shares and bonds raised concerns about retirement savings invested in these securities, thereby highlighting the significant exposure the public's long-term savings to the largest business groups. At the same time, concerns (that ultimately did not materialize) about a credit freeze and a wave corporate insolvencies led some of the largest groups to lobby for a government bailout (which was declined).

In 2010, the government appointed a committee consisting of senior government officials and regulators to propose measures to address, much like in the United States 80 years earlier, the concentration of economic power, including its impact on the financial sector, investor protection, and competition. The committee submitted its final policy recommendations in 2012, in the aftermath of a popular "social protest" against Israel's high cost of living, including the high prices of certain goods and services in sectors dominated by groups. These recommendations resulted in the enactment of "The Law for Promotion of Competition and Reduction of Concentration" of 2013. The Law included three main features: (i) A limitation on the number of levels in pyramidal groups, which had to be reduced to no more than three

by 2017 and to no more than two by the end of 2019;[24] (ii) A separation of financial and non-financial activities, so that groups operating in both sectors had to divest one by the end of 2019; (iii) A change in the application of antitrust, privatization and other regulatory policies, which would no longer be based solely on industry-specific analysis, but rather take into account considerations of economy-wide concentration of economic power. The Law further formalized the policy stipulated by the Bank of Israel and imposed strict limitations on the exposure of banks and other financial institutions to group-affiliated borrowers. The Bank of Israel and other regulators also tightened the restrictions on the extent to which banks and other financial institutions could extend leveraged loans and other forms of credit using the equity of an existing or an acquired firm as a form of collateral.[25] Interestingly, the decision to prohibit certain pyramidal structures differed from the committee's interim recommendations, which had focused on far-reaching corporate governance reforms to address conflicts between controlling and minority shareholders arising from the wedge between cash flow and voting rights.[26]

Figure 5 indicates that business groups have declined considerably in importance in the Israeli economy over the last decade. The number of groups, defined as three or more listed companies under common control, declined from a peak of 34 in 2008 to 13 in 2019.[27] Most of the groups in existence as of the end of 2019 are small, focused entities with affiliates in related industries. Accordingly, the number of publicly-traded group affiliates declined from 114 in 2012, just before the promulgation of the Law, to 72. Furthermore, the number of levels in pyramidal groups has been reduced to two. The phenomenon of four, five or more levels in "tall" pyramids has completely disappeared (although the average size of the control blocks in remaining group affiliates has not changed). Not surprisingly, as a fraction of the total market capitalization of all Tel Aviv Stock Exchange firms (excluding cross-listed companies), the market value of listed group affiliates declined from over 70% in 2010 to about 30% as of the end of 2019.

[24] The restriction of the number of pyramidal levels applies only to public companies and to private companies that have publicly-traded debt.
[25] Bank lending to holding companies in the early 2000s may have supported the growth of pyramids; the banks benefitted from this practice by winning lucrative loan contracts to group affiliates controlled by the holding companies they financed.
[26] Corporate governance-related regulations in the interim recommendations included various measures to empower minority shareholders, for example through special majority voting schemes (Bebchuk, 2011).
[27] Of these, one consists of listed firms controlled by a private equity (PE) fund. Although satisfying the definition of three listed companies under common ownership, this "new group" is unlikely to survive in the long run, as PE funds tend to sell their portfolio firms after a number of years.

At first sight, it might seem that the Law was the direct cause of these dramatic changes in the role of business groups in Israel. Upon a closer look, however, a more nuanced picture emerges. First, some of the decline predates the 2013 Law. Second, 37 listed group-affiliated companies were directly affected by the Law, both through the requirement to reduce the number of pyramidal levels (28 firms) and through the requirement to separate financial and non-financial activities (nine firms). The reduction in the number of pyramidal levels was achieved primarily through delisting or merger with other group companies (21 cases, or about 60% of the population of group affiliates). In these cases, group-affiliated companies remained in the groups but delisted, or went private (as noted above, private, fully owned affiliates are not counted in the number of allowed pyramidal levels as long as they do not have publicly-traded debt). In those cases, the controller used their own "deep pockets" to acquire the equity stakes held by minority shareholders. Such internal restructuring clearly addressed some minority protection concerns and could be construed as a one-time tax on the wealth of the owner. Yet, at least in the short run, it did not have an effect on the economy-wide concentration of economic power. After all, the same family continues to control the same businesses.

Business groups that sold companies to third parties post-2013 did so mostly in connection with their financial distress. Credit constrained groups and controllers, that, in view of the new regulatory requirements and changing public atmosphere, found it more difficult to raise new capital either from the banking system or from bond and equity markets, ended up ceding control to creditors, who took over a number of ailing group companies. The largest group, IDB, which was on the verge of financial distress in 2013, was sold as a group to a new controlling shareholder (the group is currently on the verge of bankruptcy again). This might suggest that the most notable post-2013 changes cannot be solely attributed to the restrictions imposed on pyramidal business groups; financial distress faced by highly leveraged business groups and the related measures that were taken to limit credit supply to business groups and strengthen creditor rights also played a role.[28] This points to the importance of creditor protection and efficient bankruptcy procedures in reducing the concentration of economic power by imposing limits on intra-group 'propping' or related-party guarantees and facilitating the demise of insolvent groups.

[28] These were accompanied by several changes and reforms in the bankruptcy code, which facilitated the resolution of cases of business group insolvency. For further details, see also a recent report by the Israel Securities Authority (in Hebrew): http://www.isa.gov.il/GeneralResearch/179/Documents/Holding_structure_developments_in_the_Israeli_capital_market.pdf

In addition to group affiliates taken private or taken over by creditors, in a few cases, especially those involving fairly large companies affected by the requirement to separate financial and non-financial activities, ownership became dispersed with no new controlling shareholder (e.g., the Paz Oil Company). In one recent sale (of the Phoenix Insurance) the buyers were private equity funds. Nevertheless, it is hard to argue that the anti-concentration measures have generated a dispersed ownership structure in former group affiliates, or led to a corporate governance vacuum (as in postwar Japan). Also, limits on equity holdings by financial institutions (bolstered by the committee) ensured that financial institutions did not become dominant players in former group affiliates.

In conclusion, Israel has experienced a significant decline in the prevalence of the business group structure. Surviving groups are smaller than in the past, with much less economic power; they are also less likely to face each other in multiple markets, a feature which could support collusive practices (Kosenko, 2019). In common with the US and Japan, Israel has used structural measures specifically prohibiting pyramidal ownership, rather than corporate governance tools, which were initially favored by policymakers. Israel has also adopted measures to prevent financial institutions from controlling non-financial companies. Of course, the effect of regulatory measures used in Israel was magnified by tailwind from the financial crisis, some of the groups' high leverage rates, and policies limiting the exposure of financial institutions to business groups.

7. Conclusions

The four historical cases discussed here suggest several possible lessons for other countries, where measures to curb the influence of large businesses may be considered. First, it appears important to use multiple policy tools, consistently over a long time period, as has been done in the US and Israel. Second, the experiences of the US, Japan and Israel point to the importance of using regulatory forces introduced specifically to curb the influence of groups (US, Japan, Israel) rather than traditional investor protection measures or antitrust tools (used in Korea). Antitrust enforcement cannot adequately deal with corporate entities spanning multiple industries; and corporate governance reforms cannot address the monopoly power or rent seeking abilities of big businesses. The changes in corporate ownership in Japan after the end of the American occupation, and the reversal of anti-big business policies in Korea with the changing political environment may indicate the importance of policy consistency; the US may have had more effective reforms partly because anti-pyramids measured were applied

over a long time period by three consecutive Democratic administrations. Finally, and perhaps most obviously, ambitious reform moves require considerable political support. This may be relatively easily obtained in periods of extreme duress or crises; policymakers in countries contemplating reforms in other periods, including perhaps measures to curb the influence of large tech companies today, should perhaps try to form stable, pro-reform coalitions prior to initiating any moves.

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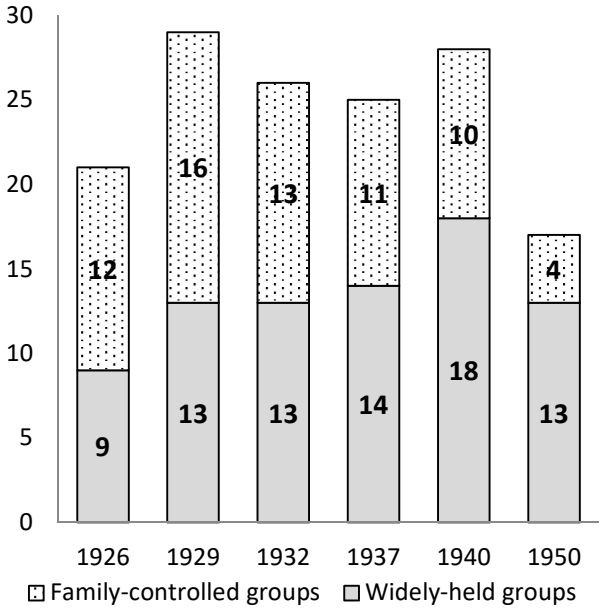
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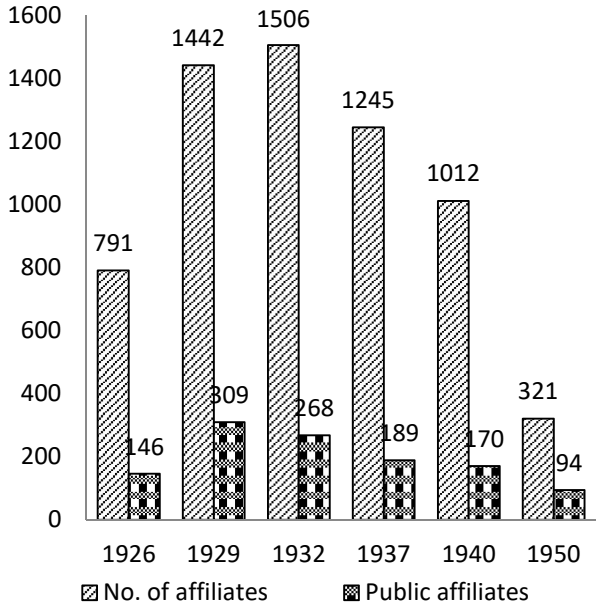
Figure 1: US Business Groups and Group Affiliates, 1926-1950[29]

Source: Kandel at al. (2019)

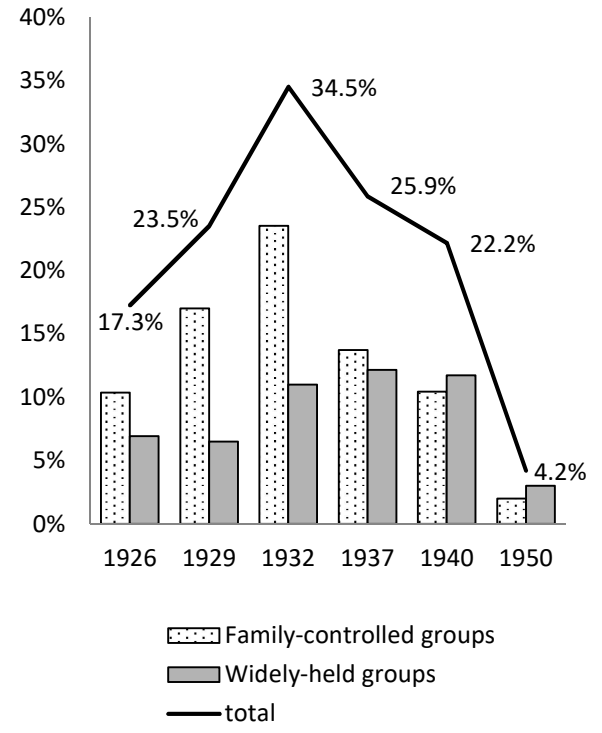
Panel A. Number of controlled and widely-held groups by year.



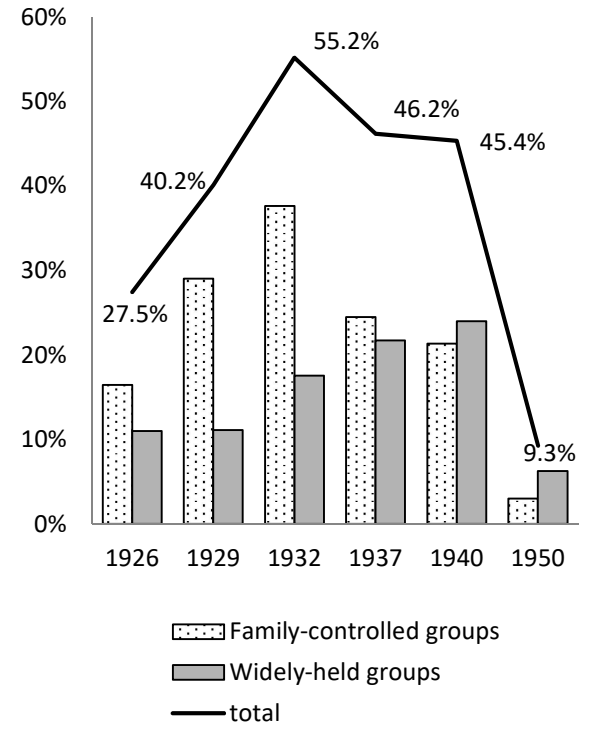
Panel B. Number of group affiliates, total and listed, by year



Panel C. Fraction of total corporate assets held by controlled and widely-held groups, by year



Panel D. Fraction of non-financial corporate assets held by controlled and widely-held groups, by year



[29] Controlled groups have a family or an individual controlling the apex firm; in widely-held groups, the apex firm is diffusely held

Figure 2: Distribution of stockholding in all listed non-financial companies by type of investor in Japan, 1949-1986

Source: replication from Aoki (1998) p. 117

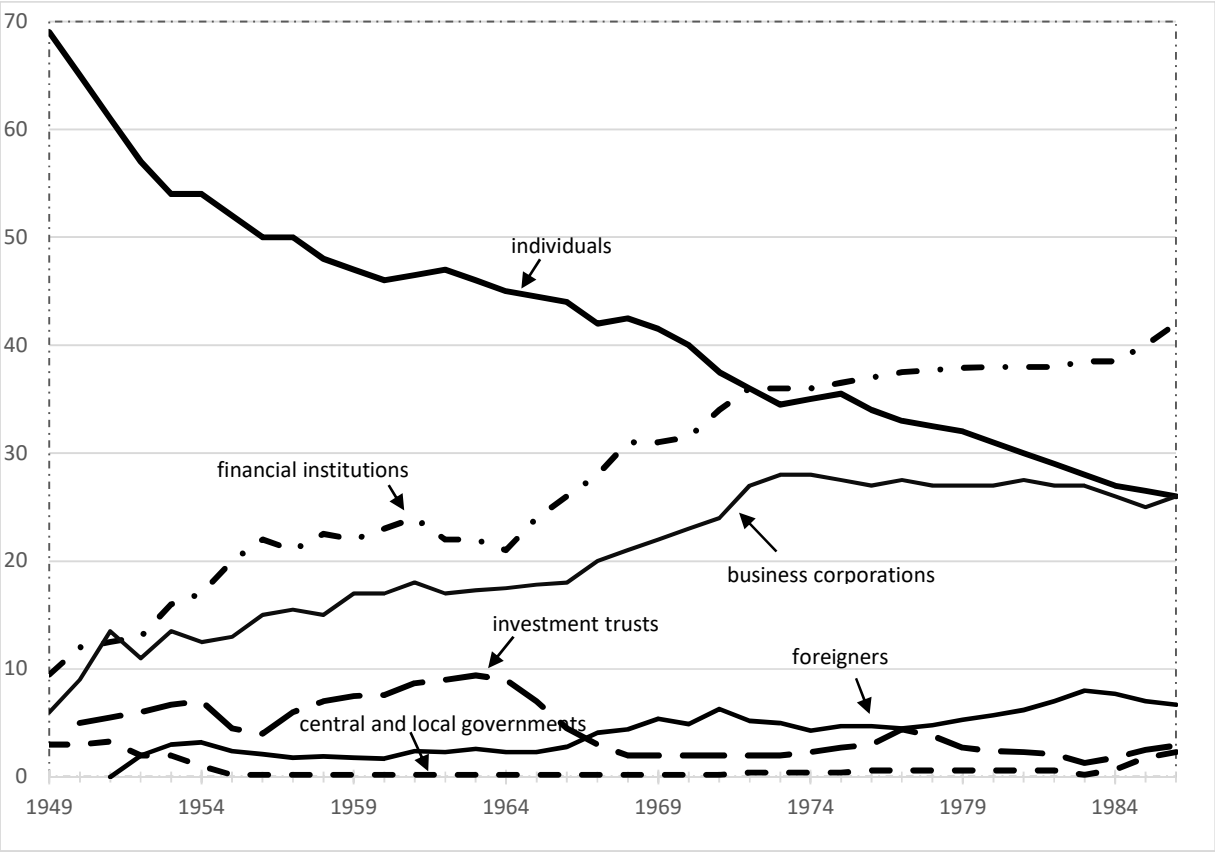


Figure 3: The Share of Korea's Ten Largest Groups in GDP, 2001-2018

Source: Korea Fair Trade Commission

Groups appear according to their rank (Assets to GDP(%)); the bar representing the second largest group, for example, may refer to different groups in different years; the 2008 data include major infrastructure groups that do not appear in other years.

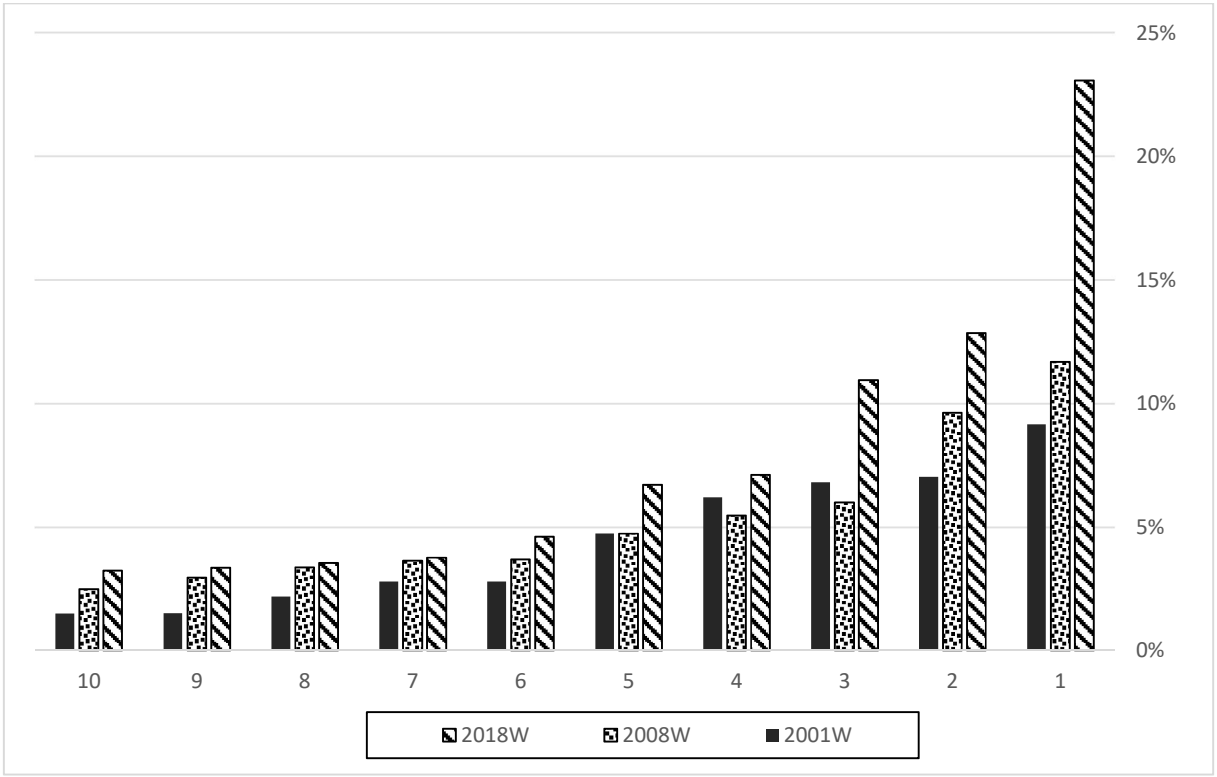


Figure 4 – Concentration of Economic Power: Israel vs. Other countries

Share in Total Market Cap held by the Ten Largest Families/BGs

Source: Kosenko (2007). The calculation for Israel refers to 2005 with the denominator excluding cross-listed firms and Teva Pharmaceutical Industries which was gigantic, at the time.

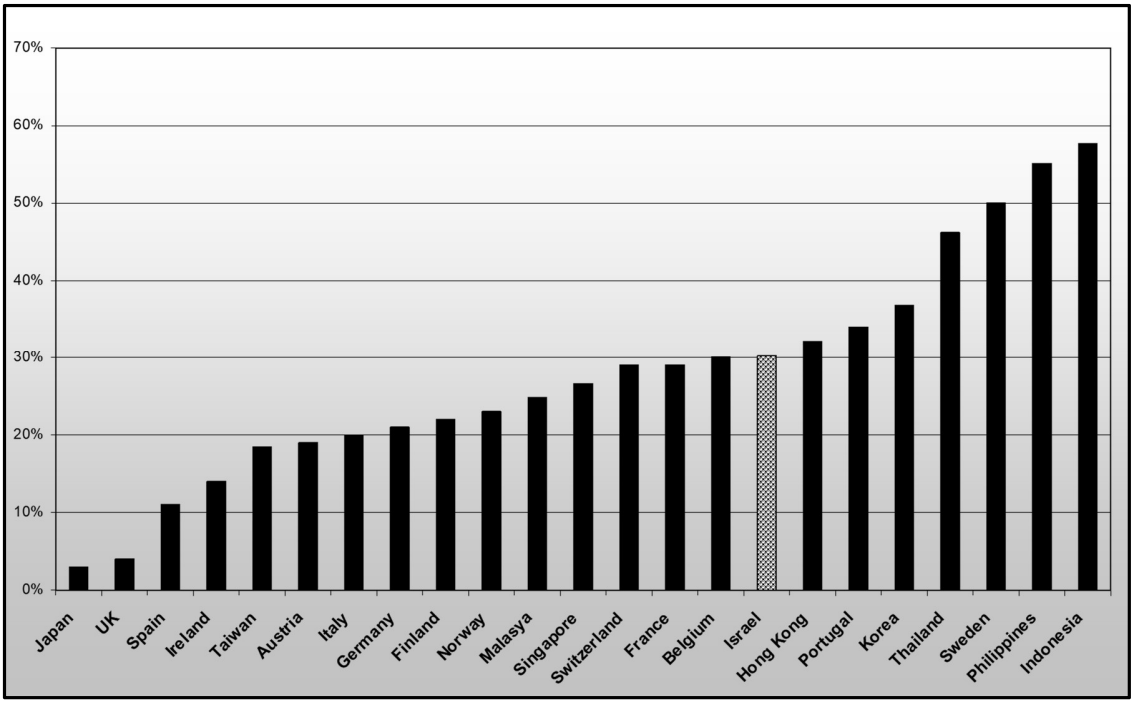
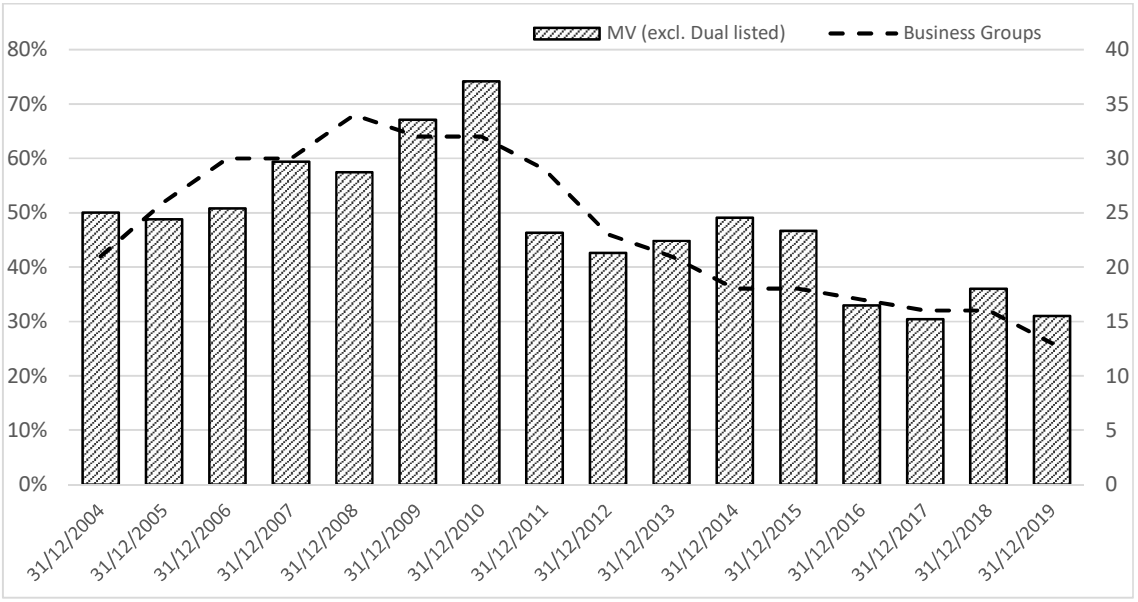
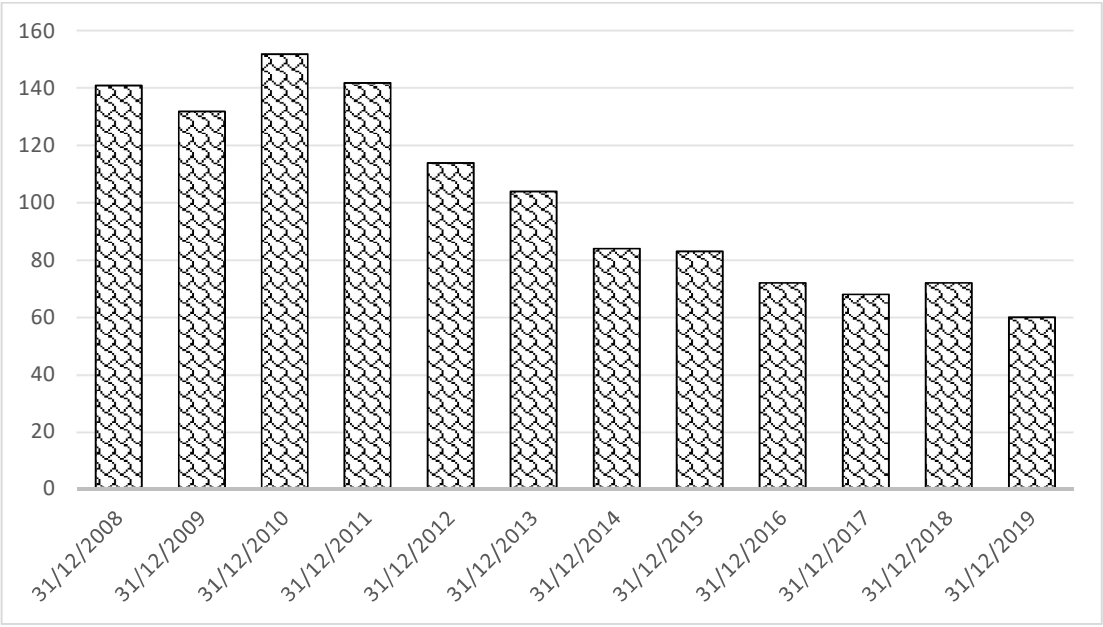


Figure 5: The Number of Business Groups in Israel (right axis), their Share in Total Market Cap (left axis)[30] and the Total Number of Group Affiliates (bottom panel)

Source: Authors' calculations



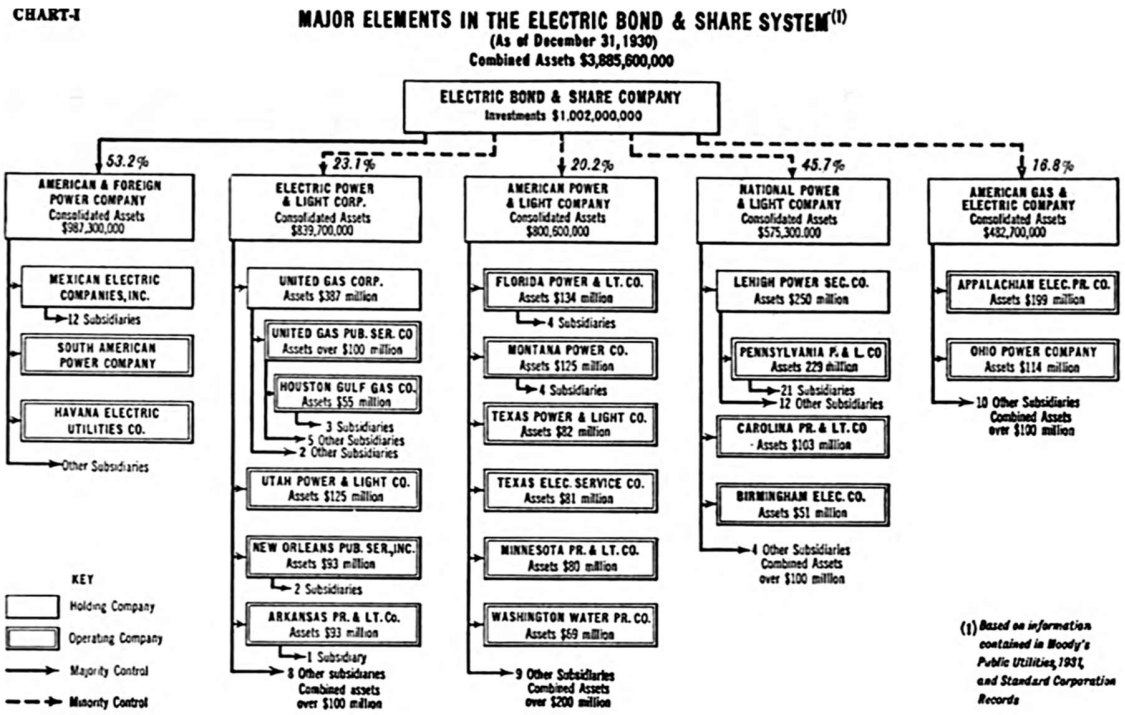


[30] The denominator is the market value of all firms listed on the Tel Aviv Stock Exchange, excluding the value of firms cross-listed on foreign stock markets.

Appendix: Pyramidal Groups in the US, Prewar Japan, Korea and Israel

Electric Bond and Share, 1930

Source: Berle and Means (1932)



The Mitsui *Zaibatsu*, 1928

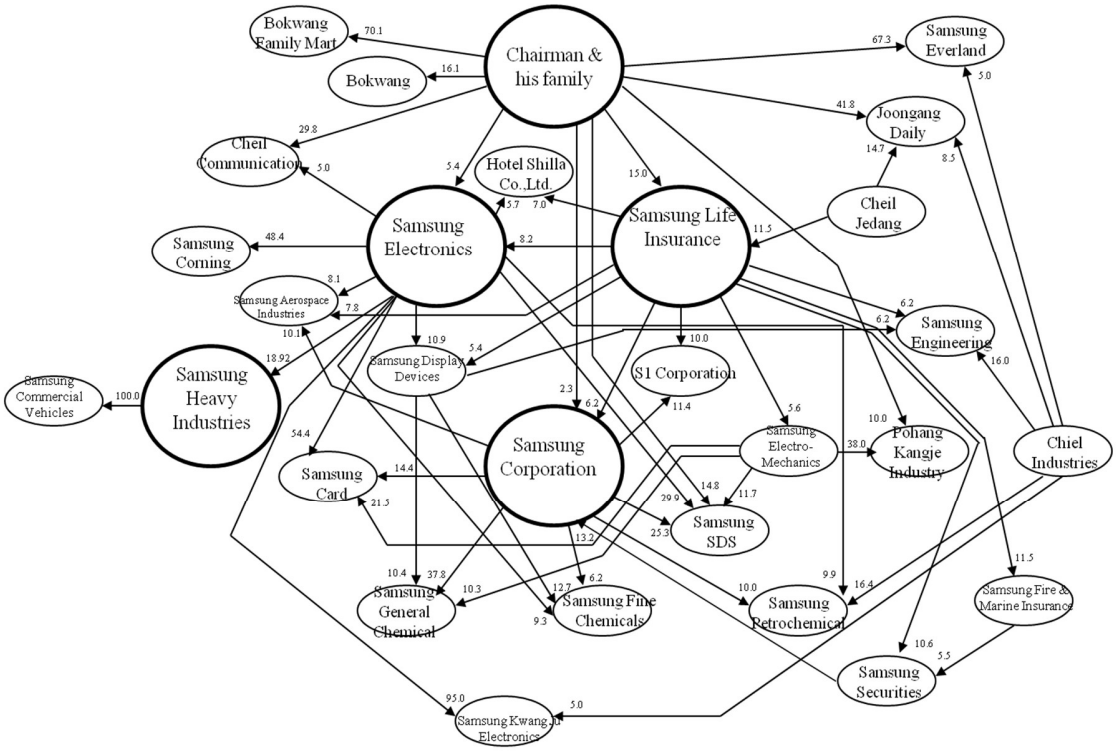
Source: Morck and Nakamura (2005)

(Thousands of Yen; %)

			Paid-up Capital	Ratio of stockholding by Mitsui line enterprises
Mitsui Gomei (Headquarters)	First-rank Subsidiary Companies	Mitsui Bussan	100,000	100.0
		Mitsui Life Insurance	500	50.0
		Mitsui Bank	60,000	67.5
		Mitsui Trust Bank	7,500	47.5
		Mitsui Mining	62,500	100.0
		Toshin Warehousing	11,500	100.0
		Sub-Total	242,000	90.2
	Second-rank Subsidiary Companies	Oji Paper Manufacturing	48,683	24.0
		Hokkaido Colliery and Steamship	43,674	19.7
		Kanegafuchi Cotton Spinning	28,596	5.4
		Shibaura Electric Machine Manufacturing	20,000	56.3
		Taiwan Sugar Refining	38,100	6.1
		Gunze Silk Reeling	11,717	3.9
		Electrical Chemical	17,500	6.9
		Onoda Cement Manufacturing	18,600	9.9
		Mitsukoshi Department Store	11,000	
		Tropical Industries	5,525	39.1
		Taiwan Colonization and Tea Manufacturing	–	–
		Dai Nippon Celluloid Manufacturing	10,000	27.9
		Sub-Total	253,395	17.3

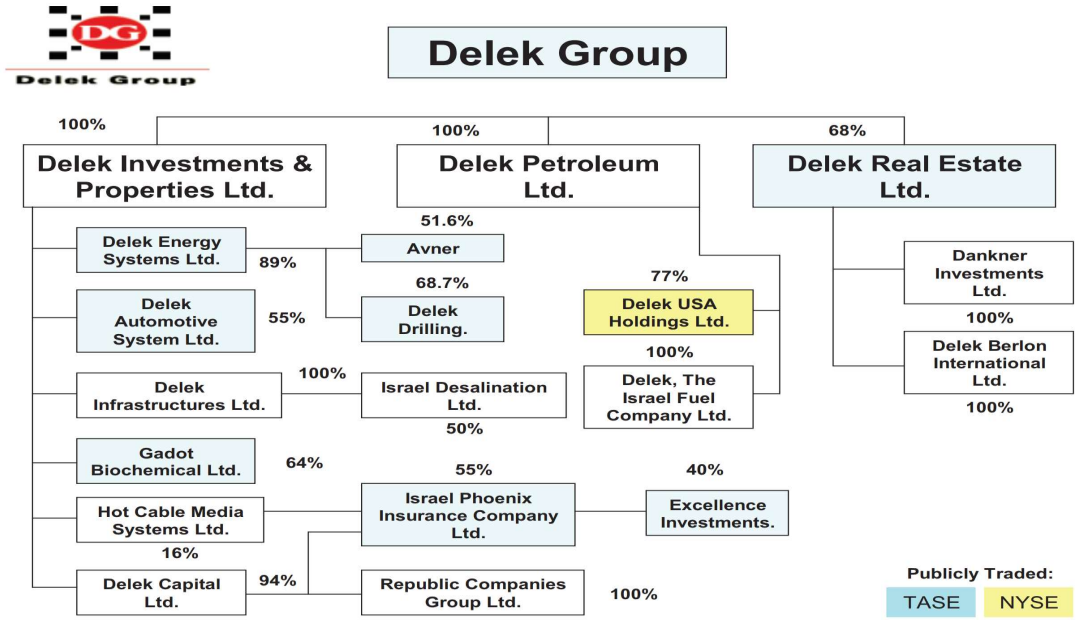
The Samsung Group in the early 2000s

Source: Chang (2003)



The Delek Group (Israel) around 2006

Source: Kosenko (2007)



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