The Role of Conglomerates in Chile*

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Abstract

In this article, I assess conglomerates in Chile have affected product market competition. The analysis starts with a review of the efficiency and rent-seeking for the existence of conglomerates. The prima facie evidence fails to find efficiency reasons for the existence of conglomerates in Chile, while it is compatible with rent-seeking explanations. For this reason, I analyze various rent-seeking explanations in detail. The evidence suggests that conglomerates in Chile enjoy and advantage in gaining political influence and market power and that this political influence and market power have the potential of distorting product market competition. I present a series of proposals to limit the rent-seeking dimensions of conglomerates.

Key words: *Conglomerates, Chile.*

JEL Classification: *D21, D40, D42*

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Resumen

En este artículo, evalúo cómo los conglomerados en Chile han afectado la competencia en el mercado de productos. El análisis comienza con una revisión de las explicaciones basadas en razones de eficiencia y de "búsqueda de rentas" para la existencia de conglomerados. La evidencia prima facie no encuentra razones de eficiencia para la existencia de conglomerados en Chile, mientras que es compatible con explicaciones basadas en la búsqueda de rentas. Por esta razón, analizo en detalle varias explicaciones relacionadas con la búsqueda de rentas. La evidencia sugiere que los conglomerados en Chile disfrutan de una ventaja en la obtención de influencia política y poder de mercado, y que esta influencia política y poder de mercado tienen el potencial de distorsionar la competencia en el mercado de productos. Finalmente, presento una serie de propuestas para limitar las dimensiones de búsqueda de rentas de los conglomerados.

Palabras clave: *Conglomerados, Chile.*

Clasificación JEL: *D21, D40, D42*

Business groups—legally independent firms operating across diverse industries and tied together in various formal and informal ways—are pervasive throughout the world (La Porta et al. (1999)), especially in emerging markets (Khanna and Yafeh (2007)). One specific form of business groups is the "family-controlled pyramid," i.e., a group with a pyramidal structure of intercorporate ownership and a family firm at the apex. As Morck et al. (2005) show, this is the most common form of a business group around the world.

In this respect, the situation in Chile is not unusual. In 1999, business groups dominated the business sector. The top 50 groups controlled over 73% of the publicly traded companies and over 90% of their assets (Lefort and Walker (2000)). In 2019, the situation was not very different. The top 25 business groups by market capitalization controlled 20% of the publicly traded companies with more than $100M of market capitalization and 63% of their value by market capitalization. If we exclude foreign-controlled companies, business groups represent 84% of the stock market capitalization of the Santiago Stock Exchange.[1] Most of these business groups are family controlled pyramids. Nevertheless, two groups (Sigdo Koppers and Camera Chilena de la Construción) do not have a family at the top of the pyramid.

[1] Calculations by the author as of the end of 2019.

In this article, we will try to assess the impact of the conglomerate form on the degree of product market competition in Chile. We will start the analysis with a review of the efficiency reasons (Section 1) and the rent-seeking ones (Section 2) for the existence of conglomerates. The prima facie evidence fail to find efficiency reasons for the existence of conglomerates in Chile, while it is compatible with the existence of rent-seeking reasons. For this reason, in Section 3 we analyze various rent-seeking explanations in details. The evidence suggests that conglomerate enjoy and advantage in gaining political influence and market power and that this political influence and market power have the potential of distorting product market competition. In Section 4, we present a series of proposals to limit the rent-seeking dimensions of conglomerates. Section 5 concludes.

1. Eefficient reasons for business groups

The economic literature has long struggled to explain why firms choose to become conglomerates (see, for instance, Bebchuk (2012), Khanna and Yafeh (2007), Morck et al., 2005). While there is not an established grand theory, there is a long list of reasons why firms tend to organize themselves in groups. We will start here by reviewing these reasons, dividing them between "efficient" reasons (i.e., reasons that increase production efficiencies) and "rent-seeking" reasons (i.e., reasons that, while benefitting the group itself or its owners, do not add to production efficiency, but just enable the group or its owners to capture a larger share of the economic surplus).

Before doing so, it is important to distinguish between three related but different questions. The first is why firms operating in different industries are owned together in the form of a conglomerate. The second is why conglomerates take the form of pyramids in many countries, with several public-traded subsidiaries in the group. The third is why there tends to be just one family at the top of these pyramids. The first question has been greatly debated also in the U.S. context (for a survey see Maksimovic and Phillips (2013)). The second question is not debated in the U.S. context, because Franklin Delano Roosevelt in the 1930s greatly penalized multi-layer pyramids from a fiscal point of view, leading to their demise as an organizational form in the United States (Morck (2005)). Finally, the costs and benefits of family ownership are greatly debated also in the United States (for a survey on this topic, see Villalonga et al. (2015)).

In what follows, we will focus mostly on the first question, with only occasional references to the second and third. When we address the first question, we will use the terms conglomerate and business group interchangeably. When we address the second question, we will refer specifically to pyramids. In addressing the third, we will add the term "family-controlled pyramid."

1.1 Internal Capital Markets

One of the primary reasons for the existence of conglomerates is the presence of information asymmetries in financial markets, which make external financing more expensive than internal financing. It is not a coincidence that Myers and Majluf (1984), the seminal paper on this topic, was partly motivated by the Ph.D. dissertation of Nicholas Majluf (1978), a Chilean who was looking for a rationale for conglomerate mergers. In the presence of higher costs of external finance, a conglomerate can avoid paying the costs of financing externally by pooling cash flow across firms. A conglomerate can also engage in "winner picking," diverting resources allocated to marginally profitable investments towards the most profitable ones (Stein, 1997).

In the United States, industrial firms are de facto prohibited from owning banks, so the U.S. discussion on conglomerates ignores this aspect, which is paramount in all the other countries, where many conglomerates (especially the large ones) own a bank. If we ignore the possibility of abuses (which we will discuss momentarily), the presence of a bank in a group does not add another rationale for why groups exist, it simply strengthens the internal capital market argument.

1.2 Internal Laboral Markets

Informational asymmetries in the labor market can also justify the existence of conglomerates. If individual performance is not easily observable outside a firm, but can readily be observed inside a firm (and inside a group of firms), a conglomerate has an advantage in reallocating talents to the highest value use. It is the same idea of costly external finance, applied to the labor market. As for the external financial rationale, the labor market rationale is strongly dependent upon underdeveloped and inefficient labor markets. Both these rationales, especially the labor market one, are progressively losing their strengths as digital platforms aggregate more information that facilitates matching (e.g., the success of dating apps).

Note that the expectation of an inefficient labor market can easily lead to one. If the pool of managerial talents is small, most managers would prefer to do their careers internally, avoiding the external job market. Doing so makes the pool of available talents even shallower, generating a negative spiral that can keep the market underdeveloped for a long time.

1.3 Economies of Scale

Economies of scale are often invoked to justify the existence of conglomerates. Economies of scale, however, arise from the increased quantity produced of one single product. By definition, conglomerates produce different products, so none of the traditional economics of scale would work here. Thus, unless we identify the nature of the economies of scale at the group level, assuming the existence of these synergies is tantamount to assuming the result, i.e., assuming what we try to explain.

The most obvious source of economies of scale in conglomerates is the existence of fixed administrative costs, which can be amortized on a broader set of products. For example, many firms in a conglomerate might need the service of an experienced patent lawyer, but none of the individual firms might have enough work to support a full-time patent lawyer: by dividing the cost of the patent lawyer, a conglomerate experiences lower average costs.

Note, however, that for this argument to make sense, no good patent lawyers should be available on the market. If there are, each firm could buy lawyers' services on the market, and there would be no economies of scale. Only if the market for patent lawyer services is missing, a conglomerate has a comparative advantage, because it has the scale to pay for the training of a lawyer in patent law and for retaining them in-house after the training, amortizing the cost of recruiting and training them. In sum, this form of the economies-of-scale hypothesis requires underdeveloped and inefficient labor markets, making it the same as the efficient internal labor market hypothesis.

1.4 Leverage a Scarce Resource

Business groups can also arise as a way to leverage a scarce resource, which cannot be transferred. As for economies of scale, this explanation can be convincing only if we are able to point out what this critical resource is.

An often-mentioned critical resource is entrepreneurial talent. To justify the existence of conglomerates, this talent cannot be industry-specific but must be portable across sectors. What is this talent, then? If it is a non-domain-specific innate skill, we should observe business groups everywhere in the world, since this skill should be equally distributed in the world population. Since we do not observe business groups in all countries, we should conclude that entrepreneurial talent is either an acquired skill or a skill specific to some institutional environments.

Two possibilities come to mind: either some reputation that might overcome the lack of contract enforceability in developing countries or some political connections. The first explanation seems suitable only for developing countries, while the second pertains to the rent-seeking theories of groups, which we will discuss in Section 2.2.

1.5 Improved Corporate Governance

The separation between ownership and control (Berle and Means (1932)) intrinsic to publicly traded firms generates important agency costs (Jensen and Meckling (1976)). In the United States, the last forty years have seen the rise and the diffusion of alternative corporate governance arrangements to mitigate these costs. Private equity funds, for instance, control a portfolio of diversified firms to improve their performance (Baker and Smith (1998)). In some sense, these private equity funds are similar to conglomerates. The main differences are i) the temporary nature of the arrangement (private equity funds have a predetermined life, generally ten years), ii) the hand-off approach vis-a-vis operating decisions maintained by private equity funds; 3) and the presence at the top of the conglomerate of experienced managers with a consolidated track record, not family members.

The rise of these "business groups" in the United States highlights the existence of some corporate governance benefits. The combination of concentrated ownership, massive use of leverage, and high-power incentive schemes can help mitigate the agency costs of the separation between ownership and control. One question that is not fully resolved is why this combination of concentrated ownership, leverage, and high power incentives necessitates a private equity fund at the top. In the early 1980s, at the beginning of the LBO wave, it was conceivable that the techniques to run a firm under those extreme conditions were not well known, and thus, only a small number of boutique firms knew how to do it. Almost forty years later, this hypothesis is untenable. Thus, the most plausible explanation is that individual LBO firms need a private equity fund at the top to mitigate the costs of financial distress. Those costs do not include only bankruptcy costs, but the cost of operating a firm under the severe risk of bankruptcy. When a firm risks going under, employees are reluctant to come and work for the firm and are eager to leave. Customers might be reluctant to buy, and suppliers to supply goods on credit.

In sum, the role of a private equity fund at the top of a group is to reassure the various stakeholders that highly levered but economically viable firms will survive idiosyncratic financial shocks. Their role is to provide financial resources to portfolio companies under a financial shock if and only if they are economically viable, as KKR did with RJR Nabisco in the early 1990s (Andrews (1992)). To play this role, private equity fund managers should have access to significant amounts of liquid resources and should be highly incentivized to deploy these resources only if they can be profitably employed (i.e., they do not have other financial or non-financial interests to keep the firm alive). Since limited liability constrains the power of incentive schemes, the general managers of a private equity fund should post a bond, in the form of a large amount of their own capital or their reputation, which they will lose in case of failure. Private equity fund managers generally post their reputation: if they mismanage their funds, they will have a hard time raising future funds, losing millions in future fees.

It is not easy to map the family holdings at the top of a family-controlled pyramid into a private equity fund. First, control is allocated based on bloodline, not skills. Second, the vertex of family-controlled pyramids is not as cash-rich as private equity funds. Third, unlike private equity fund managers, family members have many non-economic reasons to keep failed firms in the pyramid alive.

1.6 Can Efficiency Reasons Justify Chilean Conglomerates?

While the costly external finance rationale might have applied to the United States in the 1960s, and it may still apply to many developing countries today, it is hard to imagine that it might be relevant to the United States or even Chile today. In fact, Khanna and Palepu (2000) document that in the 1990s, the accounting profit premium enjoyed by Chilean companies belonging to a conglomerate declined as economic reforms further developed Chilean capital markets, suggesting that as Chile finalized the formation of efficient capital markets, this rationale might have disappeared.

There is some evidence in Chile for the “internal labor market” rationale. Huneeus et al. (2021) find that following an international shock, there is more labor reallocation among firms in the same group than among unaffiliated firms, particularly among top workers. In spite of this evidence, it is hard to imagine this can be a first-order effect in Chile. First, the Chilean labor market is fairly developed. Second, the managerial labor market is fairly integrated also with the rest of Latin America, especially the Spanish-speaking part. Thus, the pool of talents is not so small.

When it comes to economies of scale, a possible relevant economy of scale for Chilean firms is access to international capital markets. Chile is a relatively small country, with an economy that is not very diversified. As a result, the Chilean equity market contains a significant amount of risk that can be diversified internationally. If by tapping international capital markets a Chilean firm can significantly reduce its cost of capital, then we might have an important economy of scale, since a minimum size is needed to tap the international capital markets. Can this rationale explain the existence of Chilean conglomerates?

Once again, this hypothesis relies on financial frictions: is it costly for the marginal investor in the international capital market to invest in small Chilean companies? Historically, when American equity markets were dominated by individual investors, this assumption made much sense. You would not expect individual investors to pay the information costs and invest in small Chilean companies. Today, however, equity investing is dominated by institutions, in particular index funds. If individual investors buy Chilean index funds or international equity funds that invest in Chile, they do not need to know about the small companies included in the index, and they will invest in them automatically. Of course, indexation does not eliminate all the frictions. Very small Chilean companies would still be excluded from the index. Yet, the scale level at which these economies are realized is much lower, and Chilean companies do not necessarily have to diversify to achieve this scale.

The minimum scale argument is more realistic for the international bond market. It is unlikely that a small Chilean company, even if publicly traded, could access the international bond market. Even if it does, Calomiris et al. (2022) find an increased willingness of international investors to purchase emerging market bonds included in bond indexes, which require a minimum face value of $500 million. That level will cut out all but the largest Chilean companies.

Yet, we do not see why financial institutions cannot arbitrage this difference by issuing bonds in the international markets and lending the proceeds in the Chilean market. This is just an application of the general finance insight that financial intermediaries can more effectively exploit every financial arbitrage by themselves without requiring a change in the ownership structure of non-financial companies.

Prima facie, the corporate governance rationale seems more convincing for Chile. Chilean business groups can be seen as private equity funds, where the family at the top puts its wealth at risk. Obviously, the family at the top also puts its reputation at risk, but this reputation is less of a constraint than for typical private equity funds since these families are not in the business of raising multibillion-dollar funds every two or three years like private equity partners do.

While appealing, this analogy with PE does not fit the Chilean business groups' data very well. Subsidiaries in Chilean business groups are not highly leveraged as portfolio companies in private equity funds, and their managers are not so highly incentivized. The lack of a pre-determined time horizon and the access to plenty of financial resources through group-owned banks also hurt Chilean group incentives to finance portfolio companies only when they are viable. In fact, they might have an incentive to continue financing even when they are not viable to avoid negative reputational spillovers on the rest of the group.

Even if Chilean business groups were true analogs of private equity funds, as the private equity model is spreading around the world, it is not obvious what the comparative advantages of traditional Chilean groups are vis-à-vis private equity groups today. Notice that private equity groups select the leaders on the basis of past successes, while family control pyramids choose them based on bloodline. Thus, on average the former structure should be much more efficient than the latter.

In sum, none of the efficiency reasons for the existence of conglomerates, with the possible exception of the internal labor market, seems to apply well to Chile. We now consider rent-seeking explanations.

2. ENT-SEEKING REASONS FOR BUSINESS GROUPS

Besides efficiency reasons, the economic and business literature has identified many rent-seeking reasons for the existence of business groups. We are now turning to those.

2.1 Financial Benefits

In the previous section, we discussed the various efficiency reasons why a conglomerate might enjoy some benefits on the cost-of-capital front. Here, we are going to review why some financial benefits may come from exploiting minority investors, depositors, or government guarantees.

The first such advantage is the implicit government guarantee enjoyed by large companies, the famous too-big-to-fail. This benefit, however, comes with size, not with having a diversified group. It is an open question whether the political cost of letting a big firm fail is larger if this firm is concentrated in one sector or if it is diversified across sectors. On the one hand, a large firm concentrated in a single sector will generate a more than proportionally larger disruption in that sector. On the other hand, a smaller disruption across sectors will involve more voters. The answer depends upon the nature of the sector and its interconnectedness with other sectors. For example, the banking sector is interconnected with all the other sectors, and thus large firms in that sector (i.e., large banks) are traditionally considered too-big-to fail.

Conglomerates can also exploit the implicit government guarantee on bank deposits very effectively. By lending too much and too cheaply to their affiliates, banks belonging to conglomerates are more prone to failure. This is one of the main reasons why the United States severely restricts industrial firms from gaining any control over banks.

Finally, pyramids can take advantage of their minority investors by transferring value from companies where they have fewer cash flow rights to companies where they have more, a phenomenon first identified by Zingales (1994) and later labeled "tunneling" by Johnson, La Porta, Lopez-de-Silanes, and Shleifer (2000).

2.2 Financial Benefits

The most obvious rent-seeking reason why business groups might arise is to facilitate collusion (explicit or implicit) and increase market power. This facilitation can occur through three distinct channels. First, common ownership, a point first raised some years ago by Rotemberg (1984) and emphasized recently by Azar et al. (2018). Since business groups bring competitors under the control or influence of a single entity, firms belonging to a business group will compete less aggressively against each other.

Second, is the so-called multi-market contact hypothesis. This hypothesis was first advanced by Edwards (1955) and later formalized by Bernheim and Whinston (1990). The idea is that sellers' ability to raise and sustain prices above the competitive level increases when sellers interact in other markets. These other markets can be geographically distinct markets for the same product or the same geographic market for different products, as will occur with conglomerates. Edwards (1955) emphasized the increased ability to collude formally provided by a conglomerate, while Bernheim and Whinston (1990) have a game-theoretic model showing how the pooling of two (or more) incentive-compatibility constraints makes it easier to sustain "cooperation" (i.e., tacit collusion). Note that the more numerous the contact points are, the greater the incentives to collude. Interestingly, there is not much empirical research on this point. Nevertheless, by using FTC line-of-business data Scott (1982) finds that profits in concentrated industries are significantly higher when multimarket contact is high.

The third reason is that conglomerates might reduce the number of entrants in a market. They might reduce the entrant because the conglomerate itself would have most likely entered the market if it was unable to buy an incumbent. This effect is particularly important in sectors that require significant capital and specific expertise. Yet, the most important effect is probably the ability of a conglomerate to jeopardize the entry of other independent firms. To enter the market, a novel firm needs to pool many resources: energy, financing, technology, managerial expertise, etc. If these inputs are supplied in imperfectly competitive markets, an incumbent in any of these input markets can easily jeopardize entry into the output market by refusing to provide their services. But will an incumbent use its market power to prevent entry into another sector? An independent supplier would always prefer to exercise its market power through higher prices than through reduced supply. However, a supplier part of a conglomerate will act strategically and compare the profits lost by not supplying the input with the reduced probability that the new entrant will enter and compete away part of the conglomerate's profits in the output market. Thus, refusing to supply might be the profit-maximizing strategy for a conglomerate. This effect is true in general, but it is particularly true when a conglomerate owns a bank. The incentive of a bank to finance possible entrants in an industry where these entrants will compete with firms belonging to the conglomerate is significantly reduced (see Saidi and Streitz (2021) and De Franco et al. (2022)).

Note that this effect might work even when conglomerate firms do not ever deny services to anybody, as long as new entrants fear this might be the case. For example, a new brewery company might fear that Banco de Chile will not provide financing because Banco de Chile is controlled by the Lukisc Group, which owns CCU, a large brewery. This fear might discourage entry or induce the new entrant to accept very expensive financing from another bank, which is perceived as the only alternative. In both cases, entry is jeopardized without Banco de Chile doing anything: the mere possibility is sufficient to produce distortions.

This explanation can account for a feature observed in many markets: once the top industrialists create their own conglomerates, all the other entrepreneurs organize themselves in conglomerates. The reason is that, when they are organized in a conglomerate form, the largest incumbents have the ability and the incentives to use their control of critical resources (energy, technology, financing) to block new entrants by withholding supply of those critical resources. To protect themselves against this risk, new entrants need to be present in multiple markets contemporaneously in order to secure independent access to those resources to survive. As a result, they structure themselves as a conglomerate.

The conglomerate structure of Chilean industry might also explain why the often-repeated mantra that national industry concentration does not matter as long as the country is open to foreign competition might not hold in Chile. If the three main conglomerates get a hold of exclusive import rights from the main international producers, they can easily maintain a collusive equilibrium even in the presence of foreign competition, especially in a small country like Chile, where foreign competitors are not willing to invest major resources to penetrate.

2.3 Political Power

The political power of a group comes from three sources. First, it is its ability to pay for campaign donations and lobbying. Second is the ability to mobilize consensus in favor or against a candidate or policy. Third is the ability of a business group to reward or punish politicians, regulators, and judges from a financial and reputational point of view.

Since Chile is a country with low corruption and a strong rule of law, we limit ourselves to acquisitions of political power in this context. The political game is played differently in countries where corruption is rampant and physical violence diffused (see, for example, Dal Bo et al., 2006).

When there are legal restrictions to campaign financing, there are no economics of scale in campaign financing, since all firms beyond a minimum threshold have equal ability to finance candidates. For lobbying, there are no legal restrictions. Still, the amount of money firms spend on lobbying is not prohibitive. In the United States, the top lobbyists in 2020 were Blue Cross Blue Shield ($23M), Facebook ($20M), and Amazon ($19M). While significant, the amounts spent are not out of reach for most large firms. Thus, the first source of political power does not justify why firms need to grow past a certain threshold.

In general, the ability to mobilize consensus is proportional to the size of a group, size measured in terms of workers, profits, and resources. Workers bring votes, profits bring resources to the coffers of the local authorities, and other critical resources (like earthmovers after an earthquake) can be mobilized to generate consensus. Nevertheless, in a small country, where most markets are limited in size, achieving a large size almost inevitably means becoming a conglomerate.

The third source of corporate power is directly linked to being diversified. The ability to reward and punish depends crucially on being present in many different parts of the economy. Consider for instance the ability to ostracize (and thus ruin the career of) a regulator. In principle, a lawyer can work in many sectors, but if a conglomerate has a significant presence and a significant influence in all the major sectors where a talented regulator can work, the power to ostracize them is much bigger. The same can be said for the power to reward in nonmonetary ways. Sometimes there are restrictions to revolving doors in the same industry. Even when there are no restrictions, the move of a central banker to the board of one of the banks they used to regulate is frowned upon. It is much better if they are offered the same lucrative position in an unrelated business. The substance is the same if the unrelated business is part of the same group, but the optics are saved.

Not only are diversified groups more able to influence the political system, but they are also more able to extract benefits from the state. The best political deals are often triangulation and more diversified groups can triangulate better.

2.4 Can Rent-Seeking Reasons Justify The Existence of Chilean Conglomerates?

We start by analyzing the rent-seeking financial benefits. During the 1981-82 crisis, most of the banks affiliated with a conglomerate failed and were taken over by the government. Thus, the implicit government guarantee for large banks is alive and well in Chile and can be a major source of comparative advantage for conglomerates that own a bank. We suspect the same too-big-to-fail problem applies to large conglomerates, regardless of the presence of a major bank in the group.

We cannot exclude the tunneling hypothesis either. While Chile does well in terms of the rule of law, historically, it has not done great in terms of protecting minority investors. As Dyck and Zingales (2004) argue, a good indicator of this ability to tunnel is the premium paid in control block transactions. Chile, with a 15% block premium, does not perform very well on this front. It is true that the Dyck and Zingales (2004) data are from the end of the 1990s, yet lacking more recent evidence of the contrary, we cannot rule out tunneling as a potential explanation for Chilean business groups.

The risk that conglomerate might facilitate collusion is particularly severe in Chile, where many of the businesses controlled by conglomerates are very highly concentrated to begin with. As Matamala (2015) writes "En las farmacias, tres cadenas (Cruz Verde, Fasa y Salcobrand) concentran el 95% de las ventas. En los bancos, cuatro compañías (Chile, Santander, Estado y BCI) suman el 65% de las colocaciones. El transporte aéreo nacional está en un 74% en manos de una sola compañía (Lan). Tres proveedores de telefonía móvil (Movistar, Entel y Claro) se reparten el 97% del mercado. Dos productores de pollos (Súper Pollo y Ariztía) acumulan el 71% de las ventas. CCU y Capel acaparan el 69% de las ventas de licores. British American Tobacco Chile (BAT Chile) tiene el 95% del mercado de los cigarrillos. CCU, el 87% en las cervezas. Y la generación eléctrica se concentra en 74% entre Endesa, Colbún y Gener."

Finally, the political rationale for the existence of conglomerates seems particularly plausible in Chile, given the size of the country and the closeness of its elite (Zimmerman, 2019). As Braun (2019) said, "Chile is not a country, it is a country club."

This preliminary analysis suggests that rent-seeking rationales might be more relevant to explaining the diffusion of conglomerates in Chile than efficiency ones. For this reason, we move to analyze these in greater detail.

3. A DEEPER ANALYSIS OF THE RENT-SEEKING MOTIVES

As our conglomerate sample, we use the top 25 economic groups by market capitalization at the end of 2019 from "Ranking de Riqueza de Grupos Económicos" generated by the Universidad del Desarrollo.[2] Table 1 reports the names of these groups, their market capitalization, and whether a bank is present in the group.

TABLE 1
MAIN BUSINESS GROUPS IN 2019

GROUP	STOCK MARKET CAP. (BILLIONS CLP)	BANK
Luksic	7,979	Banco de Chile
Solari	4,711	Falabella
Matte	4,522	Banco BICE
Yarur	3,056	Banco BCI
Angelini	2,609	-
Ponce Leru	1,882	-
Paulmann	1,509	
Cueto	1,182	-
Saieh	1,084	Itau - Corpbanca
Said	912	ScotiaBank
Sigdo Koppers S.A	787	-
Guilisasti – Larraín	560	-
CChC	554	Bank Internacional
Fernandez Leon	554	Banco Consorcio
Security	527	Bank Security

2 https://ceen.udd.cl/estudios-y-publicaciones/ranking-de-riqueza-de-grupos-economicos/.

Claro	401	-
Swett	357	-
Bofill	356	-
Hurtado Vicuña	350	Banco Consorcio
CGE	344	-
Multiexport Foods	287	-
Calderon	280	Ripley
Vicuña	274	-
Navarro	256	-
Gras Diaz	164	-

3.1 Financial Benefits

As we discussed, one opportunistic source of financial benefits is related to the possibility that conglomerate banks have to charge less for loans extended to other affiliates of the group. For this to be true, a business group must control a bank. As Table 1 shows, 11 of the top 25 groups had an affiliated bank in 2019. Thus, exploiting financial benefits can be a reason for the existence of some Chilean business groups, but not for all.

A more formal test of this theory would compare the interest rate group banks charge to firms affiliated with the same group (related lending) with the interest rate the same firms pay for loans extended by non-group banks. If group-affiliated firms only borrow from group banks, then the test would have to be done comparing the rate with the rate that other non-affiliated firms in the same sector (and with the same characteristics) pay for their loans.

Given the confidentiality requirements, we were able to perform only a very rough version of the second test by using some survey data. For this purpose, we use the Longitudinal Survey of Companies (ELE), carried out every two years by the National Institute of Statistics and the Ministry of Economy.[3] The only form of risk control we have available is the size of the firm. Micro are firms with annual sales between $28K and $84K, Small1 between $84K and $175K, Small 2 between $175K and $875K, Medium between $875K and $3.5M, and Big above $3.5M[4].

[3] https://www.ine.cl/estadisticas/economia/ciencia-y-tecnologia/encuesta-longitudinal-de-empresas.

[4] The cutoffs are set in *unidades de fomento*, we translated them in dollar at an exchange rate of $35 per unidad de foment.

Figures 1 –3 report the results of our analysis, in which we dropped a category if there were fewer than three respondents in that category. Figure 1 suggests that there is no evidence that firms affiliated with a conglomerate are paying less for their loans. This comparison is rough since we are not controlling for the intrinsic risks of the two groups of firms, except for the component of risk correlated with size.

Very often, discrimination in credit takes place through availability, not rates. Thus, Figure 2 looks at differences in the number of banks that a firm needs to consult before accessing credit. If anything, firms affiliated with a conglomerate seem to consult more banks than firms not affiliated with a conglomerate. Yet, it is difficult to draw a conclusion. It is possible that firms that are part of a group are required by the parent company to consult with more banks to get a better rate. It is also possible that conglomerate firms, knowing they will get credit anyway from the affiliate bank, are more willing to shop around for a better rate. In contrast, non-conglomerate firms, fearing they will not get funded, accept the first offer they receive.

FIGURE 1
INTEREST RATES COMPARISON BETWEEN CONGLOMERATE AND NON-CONGLOMERATE

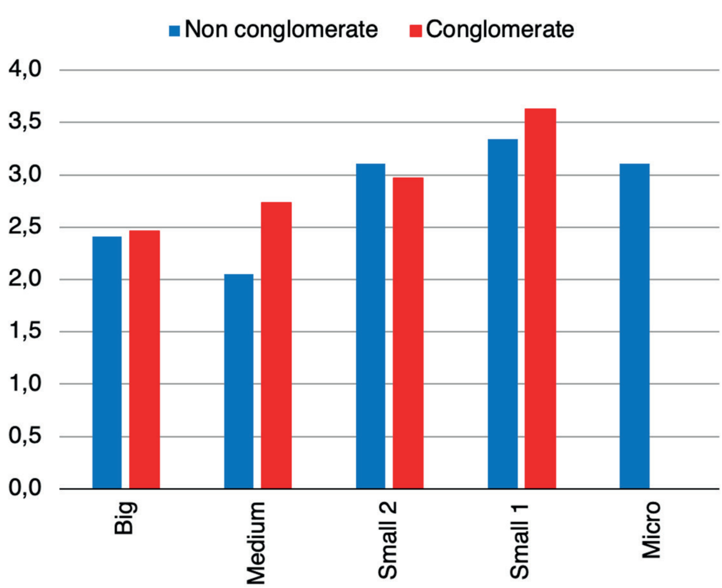


FIGURE 2
MEAN NUMBER OF BANKS CONSULTED FOR A CREDIT

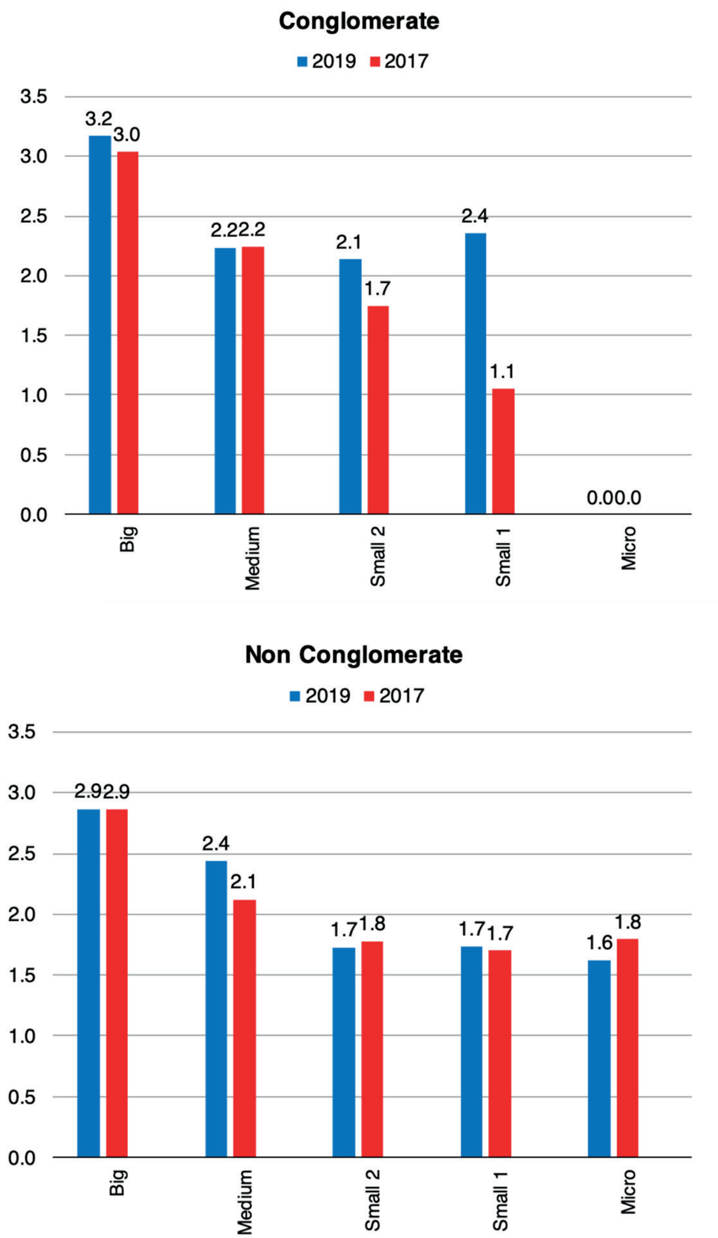
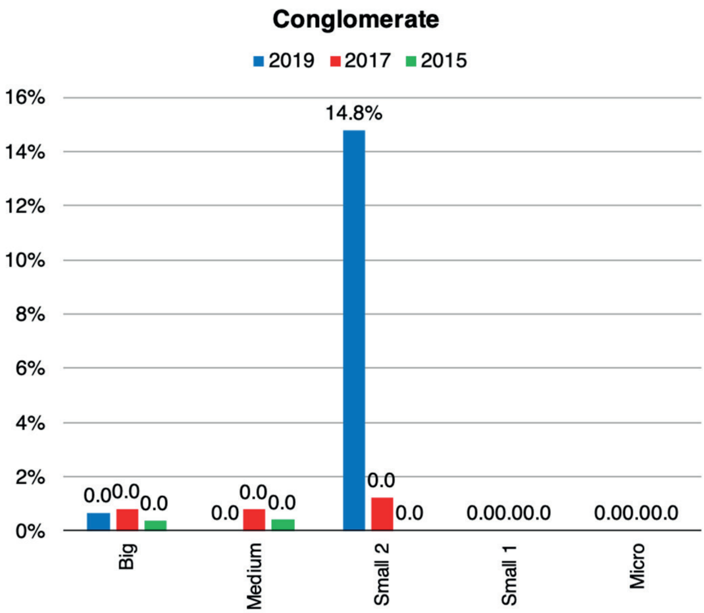
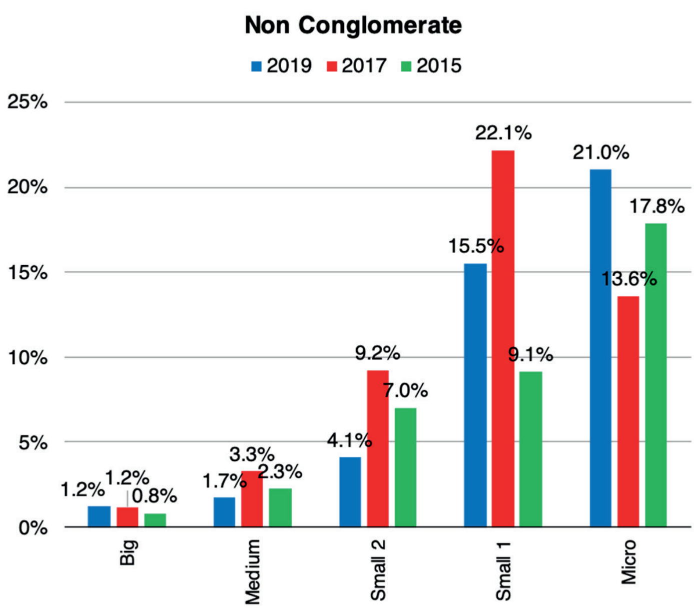


FIGURE 3
REJECTION RATE





Thus, the ultimate test is whether conglomerate firms are less likely to be rejected for credit. The evidence (Table 3) seems to confirm this hypothesis. With the exception of one group in one year, conglomerate firms have always had much lower rejection rates than non-conglomerate firms.

The CMF confirmed with us that it monitors related lending and finds no difference in the rates between affiliated and non-affiliated firms. The evidence above, however, suggests that there might be important differences in availability. Since the availability of credit is a very important competitive advantage, it would be important that the CMF monitor this aspect as well. At the same time, the CMF should monitor possible differences in the quantity of credit granted to affiliated firms versus non-affiliated firms.

Finally, there is another test the CMF should perform: whether there is any quid-pro-quo among conglomerate banks. It would be easy for the bank of Conglomerate A to lend at a favorable rate to a firm in Conglomerate B if the bank in Conglomerate B was returning the favor with a firm affiliated with Conglomerate A.

3.2 Multi-Market Contacts

If one of the main reasons why business groups exist is because multi-market contacts facilitate collusion, we should observe three phenomena. First, business groups should have several overlaps in their lines of business. Second, when these overlaps exist prices (or ideally mark-ups) should be particularly high. Third, these areas of multimarket contact should be more likely to be sanctioned by the Fiscalía Nacional Económica (FNE) for collusion.

Let's start with the first test. Once again, we use the Universidad del Desarrollo data to have an objective sample. We identified the main industries ourselves based on public sources, so we might have missed some smaller sectors of specialization. The results are reported in Figure 1.

TABLE 2

INDUSTRY DIVERSIFICATION OF MAIN BUSINESS GROUPS IN 2019[5]

Group	Industries
Luksic	Banking, Brewry, Cable Manufacturing, Fuel Distribution, Mining, Ports, Shipping, Transportation, TV, Wine
Solari	Airline, Banking, Media, Home Improvement, Retailing, Shipping, Transportation,Water
Matte	Banking, Construction, Communication, Electricity, Forestry, Tissue Paper
Yarur	Banking, Insurance
Angelini	Construction, Fisheries, Forestry, Gas distribution, Hotel
Ponce Leru	Mining
Paulmann	Retailing, Shopping Malls, Home Improvements.
Cueto	Airline
Saieh	Banking, Home Improvements, Retailing,
Said	Banking, Bottling, Shopping Malls, Real Estate
Sigdo Koppers	Chemestry, Construction, Explosive, Mining equipment, Transportation and logistic
Guilisasti-Larrain	Food, Wine
Cchc	AFP, Health, Insurance, Transportation and logistic
Femandez Leon	Banking, Mining, Telecomunication
Security	Banking and Insurance
Claro	Agriculture, Glass, Metal
Bofill	Agriculture, Food
Hurtado Vicuña	Banking
CGE	Electricity
Multiexport Foods	Agricolture
Calderon	Banking, Retailing. Shopping Malls
Vicuña	
Navarro	AFP, Software
Gras Diaz	Construction , Real estate

5 “Ranking de Riqueza de Grupos Económicos” does not have information about the specific companies of the conglomerate. All the information in the table is a result of our own investigation, based on public information. We could not identify any of the companies of the Vicuna group.

If we exclude Banking and Insurance, two sectors with natural synergies, and Retail and Shopping Malls, two other sectors with natural synergies, there does not seem to be a lot of overlapping among industries present in Chilean groups. The most remarkable one is Banking and Retailing, where the Solari, Saieh and Calderon Groups are all present.

It is very difficult to identify tacit collusion. A sign consistent with tacit collusion is high prices (at least high relative to costs). For this purpose, we use Numbeo, the world's largest cost-of-living database, to compare the prices of some basic items in Chile and in surrounding Latin American countries (excluding Argentina, since inflation makes the revelation of prices more difficult there).[6] We do this in Table 3. The prices were collected in April 2022.

When translated into dollars, prices of items purchased in supermarkets are on average 10% more expensive in Chile than in the rest of Latin America. This difference might reflect higher distribution costs in Chile. Yet, items sold in department stores are 13% cheaper in Chile vis-à-vis the rest of Latin America. While this evidence is consistent with possible collusion, it is certainly not evidence sufficient to infer collusion.

It is worrisome, however, that the Fiscalia Nacional Economica has recently found evidence of collusion in the supermarket sector. The Chilean Competition Tribunal (TDLC) found that between 2008 and 2011, Cencosud (Paulmann), SMU (Saieh) and Walmart, which together control 92.5% of the supermarket category in Chile, "consciously adhered to a common scheme that substituted the risks of competition for a practical cooperation between them", in order to "regulate the market" and "prevent a price war".[7]

Interestingly, this scheme was discovered by accident when the FNE was investigating collusion between fresh chicken producers. The investigations revealed that "the supermarket chains constantly monitored the prices at which their competitors were selling fresh chicken to the public, through their internal staff and through external companies specifically hired for this purpose."[8] The extreme concentration of the sector facilitates collusion even in the absence of multimarket contacts, but the combination between the two is very concerning.

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6 https://www.numbeo.com/cost-of-living/

7 https://www.fne.gob.cl/en/tdlc-acoge-requerimiento-de-la-fne-sancionando-a-cencosud-smu-y-walmart-por-colusion-en-el-mercado-de-la-carne-de-pollo-fresca/

8 https://www.fne.gob.cl/en/tdlc-acoge-requerimiento-de-la-fne-sancionando-a-cencosud-smu-y-walmart-por-colusion-en-el-mercado-de-la-carne-de-pollo-fresca/

TABLE 3

PRICES IN CHILE VS. REST OF LATIN AMERICA (IN US$)

Supermarket Items	**Average**		**%**
	Chile	**Latam**	**difference**
Milk (regular) (1 liter)	1.08	0.98	10%
Loaf of Fresh White Bread (500g)	1.10	1.42	-23%
Rice (white) (1kg)	1.34	1.19	13%
Eges (regular) (12)	2.75	1.77	55%
Local Cheese (1kg)	8.93	5.48	63%
Chicken Fillets (1kg)	5.04	4.80	5%
Beef Round (1kg)	9.10	6.91	32%
Apples (1kg)	1.64	2.41	-32%
Banana (1kg)	1.30	1.16	12%
Oranges (1kg)	1.52	1.31	16%
Tomato (1kg)	1.53	1.43	7%
Potato (1kg)	1.04	1.17	-11%
Onion (1kg)	1.25	1.19	5%
Lettuce (1 head)	1.01	0.79	28%
Water (1,5 liter bottle)	1.14	0.91	25%
Bottle of Wine (Mid-Range)	5.18	7.78	-33%
Domestic Beer (0,5 liter bottle)	1.36	1.16	17%
Imported Beer (0,33 liter bottle)	2.15	1.97	9%
Cigarettes 20 Pack (Marlboro)	5.18	3.34	55%
Department Store Items			
1 Pair of Jeans (Levis 501 Or Similar)	48.37	47.948	1%
1 Summer Dress in a Chain Store	27.65	36.224	-24%
1 Pair of Nike Running Shoes (Mid-Range)	55.95	76.016	-26%
1 Pair of Men Leather Business Shoes	71.34	72.219	-1%

Source: https://www.numbeo.com/cost-of-living/

3.3 Family Cross-Directorship

One of the major concerns about the complicated and non-transparent structure of ownership is the possibility of common ownership that might reduce, if not eliminate, the incentives of rival firms to compete. As we stated earlier, it was impossible for us to analyze the structure of ultimate ownership. Thus, this problem might exist, but we have no evidence. What we could analyze was the possibility of interlocking directorships.

Section 8 of the U.S. Clayton Act prohibits any person from simultaneously serving as an officer or on the board of directors of competing corporations. A similar law has existed in Chile since 1973 (Decree-Law No. 211 of 1973) and was strengthened in 2016 (Law No. 20,945). Given the group structure of Chilean corporations the risk of interlocking directorship, however, is greater. If one member of family A serves on the board of one company of conglomerate B and one member of family B serves on the board of a company of an affiliate of conglomerate A, we might have a de fact interlocking situation, while not de jure. For this reason, we decided to analyze how diffuse this problem is.

For each group, we identified a patriarch and we determined the next generations (including spouses) up to today by using a combination of a genealogy website,[9] Wikipedia, and newspapers.

We then used the CMF database of all directors in companies supervised by the CMF, with information, albeit sporadic, starting in 1961.[10] We matched the identification number (RUT) of the family member with the RUT number of people on the board of directors of the companies supervised by the CMF.[11] We could not find any cross-directorship.

We then looked at whether two members of distinct "conglomerate" families served together on the board of a third company. The only example is CCLV, Contraparte Central S.A, whose board seems to be the "who is who" of Corporate Chile.

At the end of 2021, the FNE filed a case for infringement of the prohibition of horizontal interlocking against Hernán Büchi and Juan Hurtado Vicuña. Hernán Büchi is contemporaneously director of Banco de Chile, Consorcio Financiero, and Falabella, which compete in banking and insurance products (Banco de Chile, Consorcio, and Falabella), and the supply of stock broker services (Banco de Chile and Consorcio). Juan Hurtado Vicuña is contemporaneously director of Consorcio Financiero and Larraín Vial, which compete in the

9 http://www.genealogiachilenaenred.cl/Default.aspx

10 https://www.cmfchile.cl/portal/principal/613/w3-article-25004.html

11 It appears that in some cases the RUT number of directors was entered by hand, resulting in some typos and thus in some undercounting.

supply of stockbroker services.[12] Our analysis of the CMF database suggests these are isolated cases and not the tip of an iceberg.

3.4 Revolving Doors

One advantage of large and diversified business groups is that they can offer better positions to politicians and bureaucrats after they step down from public service. To test whether this is the case in Chile, we analyze the board positions taken by all the Economics, Finance, Mining, Public Work, and Environment ministries since 1990. To these, we also add the heads of SERNAC, the IRS, and the FNE. In total, these are 140 people.

As Table 4 shows, we find that roughly 20% of the ministries end up on a board of a major company within two years of their resignations and 29% within five years. Roughly half of these positions are on the board of a company affiliated with one of the top conglomerates, while the rest is divided between boards of public sector companies and other private boards. Thus, if a ministry wants a life in the private sector, the top 25 conglomerates are the main game in town.

TABLE 4

REVOLVING DOORS AMONG MINISTRIES

	Public sector	**Top 25 Groups**	**Others**	**Total on boards**
in 2 years	7.1%	11%	1.4%	19%
in 5 years	8.6%	15%	5.0%	29%

The problem is even more pronounced when we look at the very top economic bureaucrats: central bank governors and the heads of the Superintendencia de Bancos e Instituciones Financieras de Chile (SBIF) and the Superintendencia de Valores y Seguros (SVS), in total 29 people. As Table 5 shows, almost all of these people end up on a board within two years of stepping down from their positions. These positions are either with a state-controlled com-

12 https://www.fne.gob.cl/en/fne-presento-primer-requerimiento-por-participacion-simultanea-de-un-director-en-empresas-competidoras-contra-hernan-buchi-banco-de-chile-consorcio-y-falabella/.

pany or with a top-25 group. In fact, in the majority of cases, these bureaucrats go to work for an affiliate of a top-25 group. Thus, these groups are the main (only) private employers of top bureaucrats.

TABLE 5

REVOLVING DOORS AMONG MINISTRIES

Institution	**% on boards**	**% on board public institution**	**% board top 25 groups**	**% board connected to a bank**	**Total individual**
Central Bank	92%	38%	62%	69%	13
SBIF	88%	25%	50%	50%	8
SVS	75%	50%	50%	50%	8

These numbers are only the tip of the iceberg. First of all, they ignore all the other positions (employees, advisors, consultants, etc.) that ministries and regulators might have taken in business groups after they stepped down. Second, it ignores the positions taken by lower-level bureaucrats. Finally, it ignores the other side of the revolving doors. For example, in 2014 four key ministries of the Bachelet government were previously working for companies in the Luksic group (Leiva, 2021). Only a large group can have this kind of influence.

3.5 Campaign Financings

Campaign financing is a problem in all Western democracies. In this respect, Chile is not necessarily worse than most other democracies. This is not a consolation. The distortions to competition that electoral campaign financing by corporations can bring are severe, especially in countries like Chile where large corporations are specialized in sectors that are heavily dependent upon government regulation, like mining, fishing, banking, and retailing.

Even the U.S. Supreme Court, which is very protective of the right of corporations to exercise their First Amendment Right to free speech, recognizes the dangers of quid-pro-quo in corporate direct contributions to candidates (McCutcheon, 134 S. Ct. 1434, 1441 (2014)). In Chile, the evidence of quid-pro-quo corruption intrinsic to campaign financing is very strong.

In 2021, the Public Prosecutor's Office secured a conviction for bribery of Jaime Orpis, a former senator, Marta Isasi, a former congresswoman, and the company Corpesca (Angelini Group). Isasi and Orpis received payments from Corpesca "to favor the interests of the company in the performance of their duties as a representative of Congress, during the discussion of a bill to regulate the fishing industry, enacted in 2013."[13] Interestingly, while both Orpis and Isasi served a jail sentence, Corpesca paid a very small fine (US$670,000), and – as of this writing-- the favorable new law has not been reformed.

In 2015 it was revealed that SQM (of the Ponce Lerou group) contributed between US$ 1 to US$ 10 million during each electoral campaign. This meant that "hypothetically the contributions by SQM represent an amount equivalent to fully funding the campaign of between 7 and 70 Congressional deputies."[14] One of the largest beneficiaries of these payments was Senator Pablo Longeira Montes. It was revealed that in 2010 Senator Longeira discussed with the then general manager of SQM Patricio Contesse the text of several new laws, leading to changes favorable to SQM.[15]

Following these scandals, in 2016, Chile's Congress reformed campaign financing introducing a significant amount of public funding in exchange for improvements in the transparency and accountability of political parties. It is still too early to assess the impact of this reform on the political power of business groups.

3.6 Other Legal Forms to Gain Influence

During the 2013 presidential campaign, Natalia Compagnon, married to Sebastian Davalos, the son of then-presidential candidate Michelle Bachelet, secured a bank loan for 6,500 million pesos (around $11 million at the time) to buy land on behalf of a company (Caval) that Compagnon half owned and had only 6 million pesos in equity.[16] The loan was secured after a meeting with Andronico Luksic, Banco de Chile vice-president and member of the family that controls the bank. The land was resold thirteen months later at a 46% higher price.[17] In resigning from the position of director of the Foundations of the Presidency in his mother's government, Sebastian Davalos declared he had

[13] https://www.bakermckenzie.com/-/media/files/insight/publications/2022/03/antibribery-and-anticorruption-review-chile.pdf?sc_lang=en&hash=BCC13E9FF315195B56CAA89C7521F481.

[14] https://www.latercera.com/noticia/politica/2015/04/674-626181-9-ponce-revelo-aportes-anuales-a-campanas-de-hasta-us-10-millones.shtml.

[15] https://www.latercera.com/diario-impreso/los-correos-y-la-propuesta-de-contesse-que-se-transformo-en-ley/

[16] http://static.emol.cl/emol50/documentos/archivos/2016/01/20/2016012015158.pdf.

[17] Ibid.

done nothing illegal and in fact, after three years, all charges against him and his wife were dropped.[18] The legality of the transaction was also reaffirmed by Eric Parrado Herrera, Superintendent of Banks and Financial Institutions (SBIF), in a Parliamentary Hearing.[19] Yet, he added: "Esta transacción no reflejó el adecuado nivel de prudencia que el banco debe observar en la realización de sus actividades de negocio."[20]

The fact there was nothing illegal in this scheme is exactly the source of the problem. This was not a standard loan, as reiterated by the SBIF superintendent. The very fact that a meeting with the bank vice-president was needed and that Bachelet's son was present at that meeting suggests that it was not a standard loan, as was the fact that Santander had earlier rejected an application for the same loan.[21] That it was not a standard loan is reiterated by the fact that the daughter-in-law of the president made a return of 370 times the invested capital in thirteen months.[22]

This is exactly the kind of soft power a conglomerate can provide. The combination of future job offers, loans, and business opportunities gives large Chilean business groups a legal way to reward and punish key politicians and regulators. It is certainly a coincidence that, around the time this loan was negotiated, four key people of the Luksic group entered the Bachelet Government (see supra in Section 3.7). Yet, it illustrates that conglomerates have a possibility of arranging sophisticated quid pro quo, not available to individual firms. This additional power has the potential of blocking new entries and distorting competition.

4. Recommendations

In spite of the large literature on business groups, the literature on the political power of business groups is only in its infancy (Callander et al., (2022); Cowgill et al. (2021)) and so is the set of tools to assess this power. Furthermore, any systematic evidence would require access to data that is often not collected and, if collected, was not available to us. Finally, some effects like entry deterrence might occur without groups ever abusing their power, but only

18 https://www.bbc.com/mundo/noticias-america-latina-42553987

19 http://static.emol.cl/emol50/documentos/archivos/2016/01/20/2016012015158.pdf.

20 "This transaction does not reflect the appropriate level of prudence that the bank must observe in conducting its business activities." Ibid at page 129.

21 http://static.emol.cl/emol50/documentos/archivos/2016/01/20/2016012015158.pdf.

22 The land was sold at 390,000 UF in February 2015, after having being bought at 267,786 UF in early January 2014, where 267,518 UF came from the Banco de Chile loan and 268 UF of invested capital. Since we could not find any mention of the interest charged, we use as 8% (the average industrial and commercial lending rate, see Chapter VIIII) over a period of thirteen months.

threatening to do so (see Section 2.2). Thus, our conclusions here are necessarily tentative. It would be easier to hide behind the classic "more research is needed." Yet, this is not an academic paper and our mandate was to provide an assessment of the situation and the opportunities for improvements. Thus, in this section, we will provide the best assessment and recommendations possible given the evidence at our disposal.

In transparency and the rule of law, Chile is substantially better than its Latin American neighbors and it has been constantly improving in the last couple of decades. Nevertheless, there are margins for improvement. In particular, Chile should shed some developing-country institutions and embrace institutions more typical of an advanced economy. Let's start with the presence of large conglomerates. The efficiency rationale for their existence in today's Chile is very weak. In the past, the creation of internal capital or labor markets might have been a good reason, but not anymore. It is hard to see Chilean groups as some form of private equity funds since the top management is strictly hereditary. The composition of business groups is peculiar too. While Chile's economy is light in manufacturing and heavy in mining and fisheries, the business groups accentuate this imbalance. They are mostly dedicated to the exploitation of natural resources and the management of local services (from electricity to retail distribution and banking). These are all regulated sectors, where foreign competition has to play by the local rules, often shaped by the Chilean groups themselves. Last but not least, while some groups have ventured abroad, an overwhelming fraction of their assets are in Chile. All these factors seem to point in one direction: the critical resource that gives these groups a comparative advantage is the connections with the political establishment. The scandals that exploded in the last decade seem to confirm this view.

The other source of comparative advantage for some business groups is access to a captive bank. While regulation seems to prevent groups from benefitting themselves through lower interest rates, it seems ineffective in preventing favoritism in terms of access to credit. This dimension is very important, especially when it comes to new entries. If banks are reluctant to lend to new entrants, especially to new entrants that compete in the same line of business as affiliated companies, product market competition will be jeopardized. Last but not least, there is anecdotal evidence (but more can easily be collected if there is a political will) that groups could use banks to ingratiate themselves with politicians and regulators, strengthening their political power.

4.1 Separation of Banks From Industry

Many Western countries (including the United States) have a strict separation between banking and commerce. This separation has many justifications:

from financial stability to product-market competition (Kreiner, 2000). Most importantly, the only efficiency-based defense for letting industrial firms control banks relies on the underdevelopment of external capital markets, which does not apply to Chile. Given these considerations and the evidence presented in the previous sections, the case for an ownership separation between banking and commerce is strong.

How could such a separation be implemented? The first step would be a prohibition of cross-directorship so that any director, manager, or controller of an industrial firm could not sit on the board of a bank and vice versa. Then, one could pass a norm sterilizing the voting rights of any investor who owns more than a certain threshold of a bank (let's say 5%) and has more than a 5% share in any non-financial company with revenues above a certain threshold (let's say $20M). The combination of these two norms should be sufficient to isolate the governance of banks from the governance of other firms, without forcing a divestiture. If conglomerates want to keep banks in their portfolio, without exercising any control, we do not see it as a problem.

4.2 Taxation

If pyramidal business groups are not efficient but are mainly rent-seeking then an argument can be made to introduce a form of Pigouvian taxation, to reduce the negative externalities produced by these pyramids. The obvious area of application is corporate taxation.

The structure of corporate taxation, as commonly applied in most countries, tends to favor pyramids, rather than penalize them. If investors were to pay corporate taxes at the statutory rate at every level of a pyramid, the pyramidal form would be prohibitively expensive from a tax point of view. In most countries, business groups have succeeded in getting some exemption from this taxation. If company A owns more than a certain threshold of company B, company A gets a credit on the corporate taxes paid on the dividends B pays to A. The lower this threshold is, the more tax-advantaged pyramids are.

In the United States, this threshold is very large: 80%. This threshold eliminates any incentive for company A to list a subsidiary in the stock market. If it wants to retain the tax exemption, company A has to float less than 20% of the subsidiary, reducing the amount of money it can raise. According to Morck (2005), this is the main reason why pyramidal structures are very rare in the United States.

Introducing a similar rule in Chile would penalize a large concentration of control rights in a few hands. If we think this concentration is good for the economy, such a tax would be detrimental. Yet, our analysis above suggests that it is not the case. The concentration of power is what generates the political influence and the risk of product market collusion. Thus, penalizing this concentration makes sense from an economic point of view.

4.3 More Transparency

The first recommendation of the 2015 IMF conglomerate supervision report reads "Use the recently approved financial stability law to gather more information on the conglomerates' structure, business opportunities, and risks."[23] Nine years went by and not much has been done on this front. The time has come to do something, but what?

The first step is to mandate full transparency of the ultimate ownership of any company operating in the country or owning assets (whether financial or real) in the country. The G20 is already moving in this direction, and thus, Chile will be forced, sooner or later, to follow suit. The sooner this decision is made, the better for Chile's economy.

This information should be freely available to researchers and journalists because this is the only guarantee that it will be analyzed with some degree of regularity and objectivity. Any attempt to centralize this information in some agency will put the independence and objectivity of the analysis at risk. Powerful interests will likely capture the agency itself, and the researchers will find that they can only access the data to study "innocuous" topics (Zingales (2019)).

The same strategy cannot be pursued with data on the cost and availability of credit, since these data are confidential for good competitive reasons. Yet, both the CMF and the Central Bank of Chile should be in charge of reporting on potential anomalies in the granting of credit. These anomalies are likely to disappear if the full separation of control between banking and commerce takes place. Nevertheless, monitoring these anomalies could be a good way to check the progress toward an effective separation between commerce and industry.

The report required from the CMF and the Bank of Chile should regard not only the rates at which loans are granted to affiliated and unaffiliated firms but also the quantity granted and the probability of having an application for credit rejected. Particular attention should be given to startups, especially in the industries where firms affiliated with the bank are present.

Finally, following the Caval scandal Chile has introduced a special procedure for the extension of credit to Politically Exposed Persons (PEP). This procedure requires approval of these loans by top executives and disclosure of the approval process on the bank's website. Unfortunately, this procedure does not address the fundamental problem of these transactions: that they might be

[23] IMF, "Chile Conglomerate Supervision" September 2015.

used to ingratiate politicians and regulators. The best solution for this problem would be that banks disclosed on their website the list of loans (with interest rates and conditions) granted to any PEP, letting journalists, researchers, and ultimately customers decide whether these conditions were fair (i.e., similar to the ones offered to otherwise identical non politically exposed persons). Alternatively, the data on these loans should be communicated to the CMF, which will create a databank of politically exposed persons and their close relatives. In this case, the CMF should produce a report once a year on whether these loans were treated like any other loan. Once again, the focus should not be just on the rates, but also on the quantity granted, the amount of collateral demanded, and the speed of approval.

4.4 Resolving Doors

Business groups' political influence distorts regulation and hampers competition. While more transparency and separation between banking and commerce can alleviate this problem, it does not fix it. The same is true for the Pigouvian tax on pyramid layers. Two steps are necessary to reduce the power of large groups in the legislative process: reducing the influence that money has on elections and imposing some stricter constraints on the revolving door policy.

Chile recently changed its campaign financing law, and thus, it is not wise to propose other changes before having studied the effects of the ones just introduced. Unfortunately, the time passed is so short that there are no good systematic studies on these effects. Thus, it is doubly important to operate on the other margin: reducing the constant revolving of positions between large business groups and government and vice versa.

There is a long-standing debate in economics about the costs and benefits of revolving doors. Revolving doors can provide incentives for public sector workers to perform and bring private sector expertise to the public sector. The possible costs are that a regulator might exercise leniency in exchange for (or in the hope of) a future job from the regulated industry, or that a former regulator might intercede with her former colleagues to buy some slack for her new employer. Growing evidence (summarized in Lancieri et al., 2023) suggests that the costs tend to exceed the benefits.

One simple way to reduce the risk of quid-pro-quo is to create a black-out period (let's say two years) after the end of their public office, where former ministers and top bureaucrats cannot go work in private firms affected by the actions of the agencies or ministry they were heading.

It would also be useful to have some restrictions on the other side of revolving doors. In 2008 U.S. President Obama issued an executive order requiring all appointees entering government not to “participate in any particular matter involving specific parties that is directly and substantially related to my former employer or former clients” for a period of two years from the date of the appointment.[24] At the very minimum, Chile should adopt this rule.

To avoid business groups bypassing this norm, the law should establish that if a firm affiliated with a business group falls in the restricted category, all the business groups should fall into it as well. Thus, a central banker would not be able to join the board of CCU for two years because Banco de Chile is in the restricted category, and CCU belongs to the same group as Banco de Chile.

5. Conclusions

Some of the negative effects that we attributed to conglomerates in this article can also be caused by wealth concentration. For example, wealth concentration favors collusion in the product market and financial restrictions to new entrants who do not belong to the club. Chile is one of the countries with the highest level of wealth concentration in the world. In the 2019 Credit Suisse Report, Chile comes 6th for the share of wealth controlled by the top 1% (38%), twice as much as countries like Japan and Belgium. This confounding effect could justify a more benign approach to conglomerates: why blame them alone when they are not the only cause?

We think the opposite. Conglomerates amplify the negative economic effects of wealth concentration (not to mention the political ones). Since there is precious little evidence in favor of the economic efficiency of the conglomerate form (at least in Chile), and plenty of evidence that it might exacerbate the effects of wealth concentration, the desire to penalize the conglomerate form should be more pronounced in countries with very high level of wealth concentration, like Chile. In fact, the anecdotal evidence goes in the opposite direction. The higher the level of wealth concentration is, the broader the use of conglomerates and the political support to protect them. This political economy of the conglomerate form is an important topic for future research.

[24] https://obamawhitehouse.archives.gov/21stcenturygov/actions/revolving-door.

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