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Corporate ownership and concentration

by

Alejandra Medina, Adriana De La Cruz and Yun Tang*

This working paper documents the trends in the ownership structures of listed companies around the world and the rise in ownership concentration. It identifies three major trends in corporate ownership: the dominance of company group structures, in particular in a number of emerging markets; the growth of state ownership through various state-controlled investors; and the re-concentration of ownership in the hands of large institutional investors, in particular investors that follow passive index investment strategies. The paper also discusses the implications for corporate governance of corporate ownership by private companies, states and institutional investors in global public equity markets.

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Introduction

This working paper reviews the main trends and issues in ownership structures and their implications for the design and implementation of corporate governance regulations. The paper also supports the OECD Corporate Governance Committee's ongoing review of the *G20/OECD Principles of Corporate Governance* (G20/OECD Principles), the international standard in the field of corporate governance. The G20/OECD Principles help policy makers to evaluate and improve the legal, regulatory and institutional framework for corporate governance. This paper focuses, therefore, on trends in listed company ownership structures around the world and the rise in ownership concentration. It addresses the importance and implications of corporate ownership by private companies, states and institutional investors in global public equity markets.

The issues discussed in this paper are the result of extensive work undertaken by the OECD in recent years on the ownership structures of listed companies around the world. During the past decade, several markets have seen an increase in ownership concentration in publicly listed companies. While this is a global development, there are important country and regional differences with respect to the different categories of shareholders that make up the largest shareholders at the company level. There are three major trends: first, the dominance of company group structures, in particular in some emerging markets; second, the growth in state ownership through various state-controlled investors; and third, the re-concentration of ownership in the hands of large institutional investors, in particular investors that follow passive index investment strategies.

The paper is organised as follows: Section 1 provides an overview of the ownership structure of listed companies; Section 2 discusses the main issues arising from having a corporation as a controlling shareholder and more importantly when listed companies are part of a company group; Section 3 describes the main issues related to the state as a controlling shareholder of listed companies and discusses the regulatory approaches to corporations under public sector control; and Section 4 discusses the re-concentration of ownership in the hands of institutional investors in some advanced markets and the main issues arising from it.

1 Ownership structure and trends in ownership concentration

Today's equity markets have two important characteristics: the prevalence of concentrated ownership in listed companies, and a wide variety of ownership structures across countries. Historically, however, most of the corporate governance debate has focused on situations with dispersed ownership, where the challenge of aligning the interests of shareholders and managers dominates. As a result, it has long been assumed that in most listed companies individual shareholders might have a too small stake to warrant the cost of taking action or making an investment in monitoring performance.

Instead, recent developments have been shaping the ownership structures of listed companies towards concentrated ownership models. The first factor contributing to this is the change in the composition of listed companies as a result of the increasing importance of Asian companies in stock markets. Between 2009 and 2019, 47% of all public equity in the world was raised by Asian companies. This is a marked increase from 22% during the 1990s. As a result, Asia as a region has become the largest equity market by number of listed companies, hosting 54% of the total number of companies globally as of end 2020. Since Asian companies are characterised by having a controlling shareholder – either a corporation, family or the state – developments on a worldwide scale in terms of new listings towards Asian emerging markets have increased the dominance of controlled companies.

The second factor impacting concentration at the company level has been the rise of institutional investors. The assets under management by pension funds and insurance companies went from representing 65% of GDP in 2000 to 119% in 2019 in the OECD area. While assets under management by institutional investors have increased during the last two decades, many companies in OECD economies have left the public equity markets. In particular, there were almost 8 000 delistings of European companies over the 2005-19 period, over 5 000 delistings of US companies and around 1 300 of Japanese companies. For the OECD area as a whole, these delistings were larger than the number of new listings, resulting in a net decrease in listed companies every single year between 2008 and 2019 (OECD, 2021[1]). The result of these trends is that a growing amount of money from institutional investors has been allocated to a diminishing number of companies.

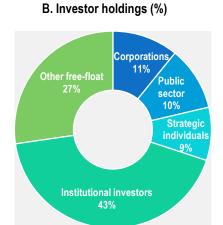
This development has been particularly prominent in the United States, which is by far the largest public equity market in terms of market capitalisation. In the United States, institutional investors held less than 20% of the US equity market in the early 1970s (Fichtner, 2020_[2]). Today, they hold 68%. At the same time, over the last 20 years, the number of companies listed on the US stock market declined by nearly 50% (U.S. Department of the Treasury, 2017_[3]). This shows that overall, the growth in institutional investors' assets under management has also increased ownership concentration at the company level in jurisdictions where atomistic dispersed ownership was considered the norm.

The third factor that has contributed to the increase in ownership concentration is the partial privatisation of many state-owned companies through stock market listings since the 1990s. In many cases, privatisation through stock market listings has not led to any change in control and today states have controlling stakes in a large number of listed companies, in particular in Asian emerging markets. Globally, the public sector held USD 10.7 trillion of listed equity as of end 2020, which was almost 10% of global market capitalisation.

As a result of these developments, the ownership landscape has changed into something that no longer fits the assumption of a dispersedly owned equity. To better understand the ownership structure in listed companies, investors can be classified into five categories: private corporations and holding companies ("corporations"); public sector; strategic individuals and families ("strategic individuals"); institutional investors; and other free-float including retail investors ("other free-float") (De La Cruz, Medina and Tang, 2019_[4]). Institutional investors are the largest investor category, holding 43% of global market capitalisation, equivalent to USD 44 trillion. Corporations, the public sector, and strategic individuals follow, with 11%, 10% and 9% of global listed equity, respectively. The category "other free-float" mainly includes direct retail investments and holdings by institutional investors that are below the disclosure thresholds.

Figure 1.1. Global overview of listed companies and investor holdings, end-2020

A. Universe of listed companies Market capitalisation (USD trillion) 50 United States 40 30 Europe Asia 20 (excl.CN & JP) China 10 Other Others Japan advanced 0 0 3 4 5 6 7 8 Number of listed companies (thousand)

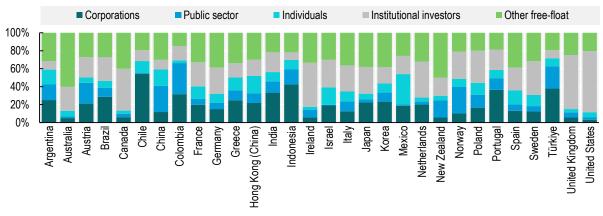


Note: Panel A shows the market capitalisation and number of listed companies for 25 766 listed companies from 92 markets, the bubble size represents their share in global market capitalisation. Panel B shows the overall ownership distribution by owner categories. Source: OECD Capital Market Series dataset, FactSet, Thomson Reuters, Bloomberg.

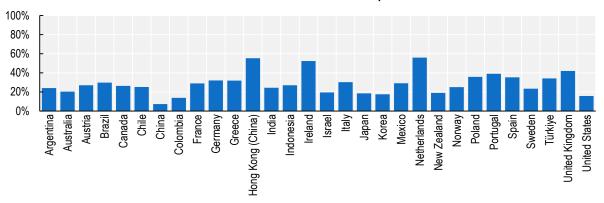
There are significant differences across jurisdictions in the relative importance of each category of investors. Corporations are important investors in Chile, Indonesia, Türkiye and India, where they hold over one-third of listed equity, while in Colombia, Norway and the People's Republic of China (hereafter 'China'), the public sector owns about 30% of listed equity. Institutional investors are the biggest owners in the United States, the United Kingdom, Ireland, Canada and the Netherlands. In recent decades, ownership by non-domestic investors has increased significantly, in particular in some advanced markets. For example, in Ireland, the Netherlands and the United Kingdom, non-domestic ownership of listed equity ranges between 40% and 60% of total market capitalisation.

Figure 1.2. Ownership by investor category as a share of market capitalisation, end-2020

A. Ownership by investor category



B. Non-domestic ownership



Note: Detailed information for all jurisdictions is provided in the Annex. Source: OECD Capital Market Series dataset, FactSet, Thomson Reuters, Bloomberg.

Although the ownership structure in most markets is characterised today by a fairly high degree of concentration at the company level, there are important differences with respect to the categories of owners that make up the largest owners.

Table 1.1 and Table A A.3 show ownership concentration by the top three investors of all investor categories and by category. Even in jurisdictions that show the lowest level of concentration, the top three investors own on average over one-third of the listed companies' shares. Importantly, in 34 jurisdictions the average combined holdings of the top three investors represent over half of the companies' shares.

Considering only private corporate owners of listed companies, in 20 jurisdictions, the top three corporations hold on average over 25% of the shares of the company. The public sector concentrates the ownership of listed companies in fewer markets. However, in jurisdictions such as Slovenia, Lithuania, Romania and China, the top three public sector investors hold on average over 15% of the shares in listed companies. Strategic individuals concentrate on average over 20% of the shares in listed companies in 16 jurisdictions including France, Norway, Italy, Germany and Spain. The largest category of investors, namely institutional investors, concentrate significant stakes in listed companies in some of the largest markets. In the United States, the United Kingdom, Poland, Sweden and Norway, the top three institutional investors concentrate, on average, at least 15% of the shares in listed companies.

Table 1.1. Ownership concentration by the top 3 investors at the company level, end-2020

	Top 3 all investors		Top 3 corporations		Top 3 public sector		Top 3 individuals		Top 3 inst. investors
	(%)		(%)		(%)		(%)		(%)
Russia	79.7	Colombia	52.2	Slovenia	29.4	Hong Kong (China)	34.7	Iceland	30.2
Croatia	75.3	Chile	51.3	Russia	25.9	Mexico	32.3	United States	23.5
Lithuania	73.1	Indonesia	46.5	Lithuania	25.8	Lithuania	28.7	Romania	22.7
Indonesia	71.7	Türkiye	45.2	Romania	17.4	Israel	28.2	United Kingdom	22.6
Chile	69.4	Portugal	43.7	China	16.1	China	27.6	Denmark	21.7
Colombia	69.2	Croatia	41.7	Croatia	13.9	Greece	27.2	Netherlands	20.1
Türkiye	66.7	Bulgaria	39.3	Argentina	11.5	Poland	26.0	Poland	18.0
Argentina	66.7	Estonia	34.0	New Zealand	11.3	Spain	25.0	Sweden	17.3
Romania	65.7	Russia	32.0	South Africa	11.0	Korea	23.4	Ireland	17.3
Portugal	64.5	Argentina	31.7	Austria	11.0	Argentina	22.2	Israel	16.4

Note: The table shows the average combined holdings of the top three investors overall and by category of investors. The table only provides information for the ten jurisdictions showing the highest levels of concentration. Information for all jurisdictions can be found in the Annex. Source: OECD Capital Market Series dataset, FactSet, Thomson Reuters, Bloomberg.

2 Company groups

Company groups can support economic growth and employment through economies of scale and synergies. If adequately managed, they can foster cross-border investments and operations through multinational companies, and are useful for the safeguard of intellectual property rights. Reduced need for external finance, lower informational asymmetries, lower transaction costs and lower dependence on contract enforcement instruments are other benefits of company groups. Likewise, the incorporation of listed subsidiaries or unlisted joint ventures can stimulate entrepreneurship by better incentivising managers to innovate and have their success recognised by shareholders (OECD, 2020_[5]).

In a survey conducted in 2018 by the Ministry of Economy, Trade and Industry of Japan, four rationales were stated by parent companies for having listed subsidiaries. The benefits included improved motivation of the employees of the subsidiary, maintenance of the higher status and brand value of being a listed company, recruitment of high-quality talents in the subsidiary, and enhanced business trust with the subsidiary partners (OECD, 2020_[5]). A survey undertaken by the OECD and the Securities and Exchange Board of India (SEBI) in 2021 shows that more than half of the companies surveyed organised themselves as a group due to economies of scale and efficiencies in resource allocation (OECD, 2022_[6]).

Company groups face the same agency-related issues as stand-alone companies. As controlling shareholders, parent companies may tend to extract private benefits of control, to the detriment of other shareholders. Related party transactions are frequent among group members, and the more complex the group structure is, the higher the risk that these transactions will be executed in an opaque manner. Intra-group activities such as cash-pooling, joint borrowing, cross-guarantees, common branding, use of intellectual property and shared services are also frequent in company groups. Conflicts of interest may also arise when allocating new business opportunities to different group members with overlapping activities.

Non-agency-related issues also exist in company groups. In particular, the functioning of capital markets can be undermined in jurisdictions where dominant company groups have an internal capital market in place. Networks of related companies may also hamper competition when they compete in the same market or take part in the same supply chain. Furthermore, company groups are also associated with adverse effects linked to the concentration of power in fewer hands, such as lobbying and corruption.

2.1. Listed companies as a part of company groups

To illustrate the complexity of company groups across different jurisdictions, Table 2.1 provides a description of their main features. The analysis focuses on the 50 largest listed companies in each jurisdiction and identifies their group structure within the universe of listed and unlisted companies covered by the OECD-ORBIS Corporate Finance dataset. The second column of the table shows the percentage of listed companies that are the ultimate parent of the group. On average, two-thirds of the listed companies are the parent company in the group. The remaining one-third of the listed companies belong to the group as a subsidiary (column 3). When the listed company is a subsidiary of the group, it is usually directly owned by the parent or at most two layers away from the parent. Among the listed companies that are not the parent of the group, on average 31% of them have another listed company as their ultimate parent (column 4), while the rest (69%) have unlisted companies as their ultimate parents (column 5). There are

large differences across jurisdictions. In Chile, over half of the 50 largest listed companies (56%) belong to a group as a subsidiary and the rest are the parent of the group, whereas in Korea 88% are the parent company of the group structure.

Company groups also have intricate structures that involve several layers and subsidiaries incorporated across different jurisdictions. The number of layers in a group represents the longest chain between the ultimate parent firm and its subsidiaries. Thus, a higher number of layers (column 7) in a group reflects a more complicated structure. In some jurisdictions, such as India and Viet Nam, the group structure is less complex with the median number of corporate layers ranging from three to five, while in France, the median number of layers in a company group is nine. The number and composition of subsidiaries also vary across jurisdictions. In France, the median number of group subsidiaries is 340, incorporated across 40 different jurisdictions. In Germany, this number is 162 and the subsidiaries are incorporated in 31 different jurisdictions. Conversely, in Indonesia a corporate group has typically much fewer subsidiaries (nine), incorporated in only three jurisdictions.

Table 2.1. Listed companies as part of a company group structure by jurisdiction, end-2019

	(2)	(3)	As perce	entage of colu	mn (3)	(7)	(9)	(10)	(11)	
	Share of listed companies that are the ultimate parent of the group	Share of listed companies that are a subsidiary in the group	(4) Share of listed companies having a listed parent	(5) Share of listed companies having an unlisted parent	(6) Share of listed companies with a non- domestic parent	-4	in the group (median)	No. of financial subsidiaries in the group (median)	No. of jurisdictions where at least one group company was incorporated (median)	
Belgium	70%	30%	27%	73%	27%	6	52	5	14	
Brazil	60%	40%	40%	60%	45%	6	28	4	4	
Chile	44%	56%	57%	43%	43%	7	24	8	7	
France	76%	24%	8%	92%	17%	9	340	49	40	
Germany	82%	18%	33%	67%	22%	8	162	33	31	
India	68%	32%	25%	75%	25%	5	36	6	6	
Indonesia	42%	58%	28%	72%	62%	5	9	5	3	
Italy	58%	42%	19%	81%	24%	6	60	7	11	
Japan	94%	6%	67%	33%	33%	6	92	7	22	
Portugal	52%	48%	0%	100%	14%	5	25	6	4	
Russia	58%	42%	33%	67%	38%	5	87	11	4	
Singapore	58%	42%	19%	81%	43%	8	108	58	8	
Korea	88%	12%	67%	33%	17%	4	22	3	6	
Spain	66%	34%	24%	76%	47%	6	90	14	16	
Viet Nam	74%	26%	23%	77%	15%	3	12	2	1	

Note: The table shows characteristics of the group structure for the largest 50 listed companies in each jurisdiction, except for Portugal where the largest 30 listed companies were used. Values reported from column 7 to column 11 are the median of the sample used in the corresponding jurisdiction. All related companies where the parent company holds directly or indirectly over 25% of the equity that reported positive assets are included in the analysis.

Source: OECD-ORBIS Corporate Finance dataset.

This characterisation of company group structures reflects the use of pyramidal ownership. However, the information provided is based on equity shareholdings and the minimum cut-off used to be considered part of the group structure is 25% of the equity in the subsidiary. Therefore, the table does not take into account the effects of dual class shares, which could present an even more complex picture.

Listed corporations are also commonly owned by other listed companies. Table 2.2 shows the share of the total market capitalisation in each jurisdiction of holdings in listed companies by other listed companies

and by unlisted companies. Jurisdictions with high overall corporate ownership have high ownership by other listed companies. However, in many of these cases, non-domestic listed corporations are the owners of these companies. This is particularly the case in Croatia and Chile where many listed corporations are subsidiaries of non-domestic listed companies.

Table 2.2. Corporations as owners of listed companies as a share of market capitalisation, end-2020

	Market capitalisation owned by listed companies	Market capitalisation owned by unlisted companies		Market capitalisation owned by listed companies	Market capitalisation owned by unlisted companies
Croatia	47%	10%	Japan	18%	4%
Chile	38%	16%	South Africa	17%	3%
Portugal	28%	9%	Netherlands	17%	3%
Türkiye	25%	13%	Mexico	17%	2%
Colombia	25%	7%	Hong Kong (China)	16%	6%
Indonesia	24%	19%	India	16%	18%
Lithuania	23%	5%	Argentina	15%	10%
Romania	22%	8%	Greece	15%	10%
Korea	21%	2%	Belgium	14%	12%
Brazil	19%	10%	Poland	14%	3%

Note: The table shows information for the top 20 jurisdictions by listed company ownership. Detailed information for more jurisdictions can be found in the Annex.

Source: OECD Capital Market Series dataset, FactSet, Thomson Reuters, Bloomberg.

Another relevant but less common situation is the cross-shareholdings among listed companies. In some markets, they are used to create pooling of voting rights to help exercise control over strategic decision-making while reducing the influence of minority shareholders and to protect group affiliates from hostile takeovers. As shown in Table 2.3, cross-shareholdings among listed companies are common in Japan, accounting for 6.3% of the country's total market capitalisation. In Hungary and Colombia, the figure is 5.1% and 3.5%, respectively. Cross-shareholdings are less common in other markets, with 1% or less of the market capitalisation of domestic listed companies.

Table 2.3. Cross-shareholdings within domestic listed companies, end-2020

	Share of cross-shareholdings (as share of market capitalisation)		Share of cross-shareholdings (as share of market capitalisation)
Japan	6.3%	Chile	0.7%
Hungary	5.1%	India	0.6%
Colombia	3.5%	Russia	0.4%
Austria	1.1%	Korea	0.4%
Italy	0.9%	Israel	0.2%

Note: The table shows information for the top 10 jurisdictions with cross-shareholdings within domestic listed companies. Source: OECD Capital Market Series dataset, FactSet, Thomson Reuters, Bloomberg.

2.2. Definition, disclosure and transparency

The definition of company groups differs across jurisdictions. It can either be explicitly expressed in law or regulation, or implicitly through references to the main components of a company group such as a parent company or a set of subsidiaries. The sources of definition of company groups can include company law

or regulation, securities law or regulation, listing rules, and national corporate governance codes, among others (OECD, 2020_[5]).

Company groups are mostly defined in company law (30 out of 45 jurisdictions surveyed in 2020), followed by securities law (21 jurisdictions), listing rules (9), and in the national corporate governance code (3). Overall, company groups are defined in multiple sources in 23 jurisdictions. In Finland, for example, company groups are defined in all four sources. Tax law, bankruptcy law and banking regulation were also cited by 13 jurisdictions. Importantly, although some form of definition is provided in the legal or regulatory regimes, five jurisdictions have no explicit definition of company groups (Canada, China, Italy and Switzerland). Although Italian company law does not provide a definition of company group, the Italian Civil Code sets out rules for subsidiaries that are "directed and co-ordinated" by their parent company (OECD, 2020_[5]). Moreover, in 2022 the Italian Crisis and Insolvency Code introduced a formal definition of "Group of enterprises". The definition makes direct reference to the aforementioned rules in the Italian Civil Code, thus including enterprises that exercise or are subject to such direction and co-ordination activity (Gazzetta Ufficiale, 2019_[7]).

The main transparency requirements around company group structures and intra-group activities for listed companies across the different jurisdictions are based on the consolidated financial statements based on IFRS and the disclosure of major shareholdings in annual reports. Despite this commonality, there is no clear consensus on the level of specificity needed in, among others, the disclosure of ownership, relationships among key shareholders, group structures and governance policies. For example, disclosure of corporate group structures is mandatory in over three-quarters of the jurisdictions covered in the 2020 OECD review of company groups, while there is no provision in seven of them (Costa Rica, Ireland, Latvia, Singapore, South Africa, Sweden and Türkiye). In Colombia, disclosure to the regulator of group structures at the second and third level of shareholdings is mandatory, and Japan has voluntary disclosure. In half of the jurisdictions, there is no disclosure requirement for cross-shareholdings (Table 2.4).

Table 2.4. Mandatory and/or voluntary disclosure provisions for all listed companies

(Number of jurisdictions)	Major share ownership	(uitilliate)	Corporate group structures	voting	Shareholder agreements		Share- holdings of directors
Mandatory to the regulator/authorities only	1	7			2	1	3
Mandatory to the regulator/authorities and voluntary to public	1	3	1	1			2
Mandatory to public	43	32	36	37	33	22	36
Voluntary to public		2	1		2	1	3
None		1	7	7	8	21	1
Total number of jurisdictions	45	45	45	45	45	45	45

Source: OECD (2020_[5]), Duties and Responsibilities of Boards in Company Groups, https://doi.org/10.1787/859ec8fe-en.

Disclosure provisions for listed parent companies regarding their group governance structures and policies, as well as the transparency of their subsidiaries, are common across jurisdictions. Still, they seem to be restricted to general requirements for listed companies, such as disclosing their own governance and consolidated financial reporting. Nevertheless, more detailed provisions exist in some countries. In Switzerland, for example, issuers have to disclose the operational group structure, including the listed and unlisted subsidiaries.

Several jurisdictions have disclosure requirements for subsidiaries. These requirements can take the form of a special report that includes the main aspects of the given group member's relationship with other group companies (Colombia, the Czech Republic, Latvia, Slovenia and Türkiye), or an explanation in the annual report on the substantial characteristics of the group relations based on the national code of corporate

governance (Italy, Spain). However, no jurisdiction surveyed had any legal or regulatory requirements to provide detailed information on the governance structure of subsidiaries of listed companies.

2.3. Duties and responsibilities of boards in company groups

The duties and responsibilities of boards are key for regulating company groups. In many jurisdictions, directors' duties of care and loyalty are exclusively towards the company on whose board the directors sit. Common law jurisdictions such as Hong Kong (China), Ireland, Israel, New Zealand, the United Kingdom and the United States follow this approach (OECD, $2020_{[5]}$). For instance, in Ireland legislation specifies that the directors of a subsidiary have to operate the subsidiary as an autonomous entity, and even though they may take into account the interests of the parent company, if any conflict of interest arises, they must act in the interests of the subsidiary of which they are board members (ISB, $2014_{[7]}$).

Special legal and regulatory frameworks for company groups exist in some jurisdictions. Most of these special frameworks are based on the German *Konzernrecht*, or law on company groups. This model defines two types of company groups, namely de facto and contractual groups. The first type exists when a company has an effective control of another company. In this case, any negative impact or influence of the parent company must be disclosed, audited and compensated. Contractual groups have to conclude a Control Agreement that must be approved by the shareholders of both the parent and subsidiary companies. This agreement requires the parent company to compensate the subsidiary for losses on an annual basis as well as a transfer of profits to the parent, fixed dividends and exit rights for shareholders of the subsidiary (German Federal Law, 1965[8]). Jurisdictions that have incorporated at least certain elements of the German model include Austria, Brazil, the Czech Republic, Latvia, Poland, Portugal and Slovenia.

Other balancing approaches include the French *Rozenblum* doctrine that softens the classic fiduciary approach. Under this doctrine, directors have reduced liability for violation of the duty of loyalty in certain circumstances when they may temporarily sacrifice the interest of the subsidiary for the benefit of the group. This occurs, for example, when the businesses of the companies are executed within a coherent group policy and provided that the actions will not cause the effective insolvency of the subsidiary (Cour de Cassation, 1985_[9]). Belgium, Estonia, the Netherlands and Spain have integrated features of this doctrine into their legal frameworks. In Italy, the Civil Code provides for some elements of necessary compensation of benefit in the group whenever subsidiaries are "directed and co-ordinated" by their parent company.

Self-regulatory protocols have also been established in a number of jurisdictions. Colombia, Finland and Saudi Arabia include a definition of a company group in their national code of corporate governance. Colombia also includes a set of special recommendations for group companies concerning their structure, audit and controls, as well as disclosure (Superintendencia Financiera, 2014[10]). Japan's and India's self-regulatory approaches to group governance have similar characteristics. In 2018, the Securities and Exchange Board of India established that listed parent companies owning a large number of unlisted subsidiaries should monitor the group's governance through a dedicated group governance unit of the parent's board (SEBI, 2018[11]). In a recent survey undertaken by the OECD and SEBI, 17% of the Indian companies surveyed responded that they have a group governance policy (OECD, 2022[6]). In 2019, Japan's Ministry of Economy, Trade and Industry published Group Guidelines encouraging company groups to optimise the business portfolio with the aim of improving the entire corporate group's value. Notably, it excluded from the definition of independent director any person related to the parent company in the previous ten years (OECD, 2020[5]).

2.4. Creditor protection in company groups

Although regulation involving creditor protection in company groups may be less pertinent for large creditors that can obtain secured credit, it may be relevant for creditors that have to estimate the risk engaged through a subsidiary rather than with the parent company. France with the *lettre de patronage* or Germany's *Patronatserklärungen* have settled corporate guarantees in which parent companies define their obligations to support their subsidiaries in the event of default, which can be given to a particular creditor or, for instance, included in an annual report. Yet, in France for example, there is a distinction between the *obligation de moyens* (equivalent to "best efforts") and *obligation de résultat* (a full commitment), as only the latter assures the creditor a full repayment (Code civil, 2006[12]).

If insolvency is foreseeable, legal frameworks to protect creditors are generally well established. In Belgium, the *action en comblement du passif* stipulates that in the case of bankruptcy and if assets are insufficient to honour the debt commitments, directors or managers may have to repay the creditors in the event of serious misconduct from their side (Code de droit économique, 2017_[13]). This legal structure is integrated into company groups through the concept of a shadow or de facto director, when the parent company is directly involved in the management decisions of the given subsidiary. Accordingly, parent directors are held liable to the creditors of their subsidiaries. The shadow director approach exists in European jurisdictions such as Belgium, France, Germany, Italy, the Netherlands, Spain, Switzerland and the United Kingdom, but also in the United States (Hopt, 2015_[14]).

Other creditor protection mechanisms include indemnification, veil-piercing, subordination and substantive consolidation. In Germany, the *Konzernrecht* includes indemnification, which stipulates that subsidiaries belonging to de facto groups must be fully compensated at the end of the year for all transactions caused by the parent that are divergent from the subsidiary's own interest. In specific cases, veil-piercing, referring to lifting the limit liability principle that shareholders should not be held liable for the debts of their corporation beyond the value of their investment, can be available for creditors. In the United States, this mechanism is more broadly used when, for example, the subsidiary is undercapitalised (Anderson, 2009_[15]).

Moreover, jurisdictions such as Germany, Italy, New Zealand, Spain and the United States, establish subordination in their insolvency law regime, meaning parent companies' debt claims are subordinated to the claims of all other creditors. In addition, insolvency regimes in some jurisdictions such as France, New Zealand and the United States have also integrated the concept of substantive consolidation, in which there is a combination of the assets and liabilities of two or more linked companies in a way they are treated as a single entity. In France, the *action de confusion de patrimoine* allows courts and legal representatives to extend the proceedings opened against some of the subsidiaries to the entire group (Grelon and Dessus-Larrivée, 2006_[16]).

2.5. Related party transactions

As shown in Table 2.1, most listed companies in many jurisdictions are part of a company group. Since company groups are set up to overcome market frictions and exploit synergies, engaging in multiple related party transactions (RPTs) is a normal part of business. However, this may increase the scope for abusing the rights of other shareholders and, if not properly regulated, may jeopardise market confidence. In company groups, as for a controlling shareholder in stand-alone companies, the parent company may intend to extract private benefits of control at the expense of subsidiaries and minority shareholders.

The commonly accepted definition of an RPT is provided by the International Accounting Standards (IAS24), where "a related party transaction is a transfer of resources, services, or obligations between related parties, regardless of whether a price is charged." The definition includes key management personnel and therefore their remuneration is also recognised as an RPT. However, when referring to

RPTs, this paper does not include executive remuneration as this is normally treated as a separate topic in corporate governance.

The legal and regulatory approach taken to address related party transactions uses a combination of measures such as disclosure requirements and the procedures for approval by board and/or shareholders. RPTs are defined and regulated in domestic regulation and depending on jurisdictions, related parties are defined in, for example, company law, civil codes, securities law, accounting standards, stock exchange listing rules and corporate governance codes. Of the 50 jurisdictions covered by the *OECD Corporate Governance Factbook 2021* (hereafter 'OECD Factbook') (OECD, 2021[17]), 49 define related parties through law and regulations, the exception being Portugal which defines related parties through its Corporate Governance Code. Only two other jurisdictions apart from Portugal define related parties through their corporate governance codes in addition to law and regulations, namely China and Finland. Stock exchange rules define related parties in six jurisdictions, namely Australia, China, Latvia, Malaysia, New Zealand and Singapore. Additionally, related parties are defined through accounting standards in nine jurisdictions.²

Most jurisdictions require ex-post disclosure of RPTs in the annual financial statements following IAS24 or a local standard similar to IAS24. For instance, of the 50 jurisdictions covered by the OECD Factbook, 82% (41 jurisdictions) follow the IAS24 standard. In five other jurisdictions – China, India, Japan, Indonesia and the United States – a local standard is used instead. In four jurisdictions (Hong Kong (China), Singapore and Switzerland), either IAS24 or a local standard is required for disclosure (OECD, 2021[17]). In addition to disclosure in the financial statements, 82% of the jurisdictions require periodic annual disclosure of RPTs and 80% require immediate disclosure for some specific transactions. This is a significant development, given that only 53% of jurisdictions had an immediate disclosure requirement in 2019.

When it comes to the approval of RPTs, the board of directors plays a major role, although in some cases shareholder approval is also required for larger transactions. Board approval of certain types of related party transactions is required in 37 jurisdictions covered by the OECD Factbook. In 36 jurisdictions, board members that are considered as related are required to abstain from voting. Overall, independent directors (often as members of the audit committee) play a key role in the approval of RPTs: in 21 jurisdictions their approval is required and in 8 jurisdictions it is recommended. 15 jurisdictions also require an independent external opinion in the approval process of RPTs.

Shareholder approval is less frequent and mostly required for very large transactions and those completed on non-market terms. In some jurisdictions, shareholders' approval is required whenever the transactions surpass a pre-established threshold, is not approved by the board, and/or is recommended by the audit committee or an external independent specialist. Seventeen jurisdictions require approval from minority shareholders and another six a simple majority. In a few (4) jurisdictions the transaction has to be approved by the majority of the minority, where minority means all disinterested shareholders. In Chile for example, a qualified majority (2/3) is necessary for shareholders' approval (OECD, 2021[17]).

In many jurisdictions where there is a requirement for board or shareholder approval, there is also a definition related to the materiality of the transaction. The materiality aspect of a related party transaction has been approached differently by jurisdictions that seek better transparency while avoiding cumbersome thresholds that would affect the board of directors' duties. Most jurisdictions use quantitative thresholds to define what should be a material transaction. However, no criteria have been adopted as a common practice worldwide. Market capitalisation, annual turnover, share capital, total assets are among the criteria used with thresholds ranging from 5 to 50% of the total amount. For example, Italy has established a

¹ Including all OECD, G20 and Financial Stability Board members as well as Malaysia and Peru.

² Including China, Finland, Greece, Hungary, India, Latvia, Poland, Portugal and the United States.

materiality threshold depending on the size of the transaction relative to that of the company. All transactions for which at least one of the three indices established – listed company's market capitalisation, assets or liabilities – exceeds 5% (or 2.5% for pyramids) are considered material (CONSOB, 2010_[18]). In Brazil, this threshold is set at BRL 50 million (USD 9 million) or 1% of the company's total assets (CVM, 2014_[19]).

2.6. Key issues

Company groups are a prevalent way of organising corporations around the world, in particular in a number of emerging market economies. As for other ownership structures, they come with governance challenges that need to be dealt with through an adequate corporate governance framework. Concerning company groups, some of the most pressing issues relate to discrepancies regarding disclosure of the group structure, beneficial owners and material issues and the responsibilities of boards of directors.

2.6.1. Disclosure of key items related to company groups

Company groups are not consistently defined across jurisdictions. Although there is to some extent some common ground on the main transparency requirements to which company groups are subject (essentially due to the use of IFRS), important governance issues are either not mandatory or lack precision in current legal and regulatory frameworks.

The G20/OECD Principles state that public disclosures by listed companies should include material information on major share ownership, including beneficial owners, and voting rights. As seen before in Table 2.4, there is strong consensus on the importance of mandatory disclosure of major share ownership, special voting rights and directors' shareholdings. However, in two jurisdictions listed companies are not required to publicly disclose the identity of major share owners and special voting rights need not be disclosed in eight jurisdictions. In addition, transparency around shareholder agreements is not mandatory in 12 jurisdictions. Shareholder agreements bind a group of shareholders to act in concert with a view to constitute an effective majority or the largest single block of shareholders. These agreements typically include issues related to the selection of board members and the chair.

Importantly, in 13 jurisdictions public disclosure of beneficial ownership of listed companies is not mandatory. Not being able to identify the beneficial owner may make it difficult to fully understand what motivates a company's direction and control, as well as potentially reduce the accountability of controlling shareholders. None of the jurisdictions surveyed had any legal or regulatory requirement to provide detailed information on the governance structure of subsidiaries of listed companies (OECD, 2020[5]).

The lack of disclosure of the ultimate beneficiaries and group structures may also be detrimental to creditors of the subsidiaries which may be vulnerable to opportunism by shareholders of these subsidiaries and the parent. The lack of transparency in subsidiaries therefore increases creditor risk in company groups compared to stand-alone companies (Hopt, 2015_[14]). This can have broader economic implications through increased cost of credit.

2.6.2. Duties and responsibilities of board members in company groups

There is a fundamental difference across jurisdictions in the fiduciary responsibilities of board members in company groups. The primary concern is to whom does a board director owes his/her duty of care. The G20/OECD Principles state that a key principle for board members working within the structure of a group of companies is that "[...] even though a company might be controlled by another enterprise, the duty of loyalty for a board member relates to the company and all its shareholders and not to the controlling company of the group" (annotation to Principle VI.A). However, legislations in some jurisdictions apply a whole-of-group approach instead.

In most jurisdictions, the general duties of directors to oversee risk management encompass at least some measure of oversight of risks to which material subsidiaries and other group companies may be exposed. However, in over 40% of the jurisdictions covered by the OECD's review of company groups in 2020, there is no explicit requirement for the board of a parent company to oversee or monitor risk management policies and systems within the group distinct from the general requirements of oversight for the company itself (OECD, 2020_[5]).

Another issue relates to the responsibilities of directors during financial distress, in particular the extent to which shadow directors are considered responsible for misconduct in a group company. Differences between countries in this regard have implications for the predictability of outcomes during insolvency proceedings and, by extension, possibly also for the availability of credit and terms of access.

These issues and complexities are exacerbated in the case of cross-border company groups and when there is no clarity about how the duties and responsibilities of directors of companies differ between the jurisdictions in which the group operates.

2.6.3. Related party transactions: Definitions, approval and enforcement

Some of the most relevant issues related to managing RPTs in company groups include definition and disclosure, the role of independent directors in approving RPTs and enforcement tools available to minority shareholders. In dealing with each of these elements, countries have adopted varying approaches depending on circumstances, political considerations and in some cases history.

Despite the convergence across jurisdictions with respect to the definition and disclosure of RPTs in financial statements, important differences remain in terms of ex-ante and ongoing disclosure. Importantly, several jurisdictions do not require immediate disclosure of material related party transactions in addition to their inclusion in annual financial statements or periodic additional disclosures. This could be particularly important when financial statements do not include information on material transactions with consolidated subsidiaries.

Defining materiality for the purpose of screening transactions for approval remains a challenge, with indications that there is scope to improve both quantitative and qualitative criteria. This is a key issue on which there is no consensus across jurisdictions. Furthermore, as discussed in Section 2.5, it is not only numerical thresholds that can differ in identifying material transactions but also the party against which it is measured, whether the parent company, the group or the related party and the company balance sheet items. In addition, jurisdictions also use complementary criteria to screen transactions such as the terms of the transactions (e.g. at market terms) and/or whether the transaction is recurrent.

In a large majority of jurisdictions, the board is charged with making decisions about related party transactions. However, a controlling shareholder can exert significant influence on the board of directors, therefore limiting the role of the board and particularly that of independent directors in the RPT approval process. In many jurisdictions, independent directors play a key role in approving RPTs and a key issue arises whenever the definition of independent director is weak. In practice, it is frequent that independent directors owe their position to the controlling shareholder, generating, in some cases, conflicts of interest whenever the independent director is confronted with situations where they have to protect minority shareholders' interests.

One approach taken to address this issue is to strengthen the definition of independent directors. Some jurisdictions require a higher share of independent directors whenever the chair of the board is a representative of the controlling shareholder or an executive director. A different approach has been to ensure independence through the nomination process. In Italy and Israel, for example, some of the independent directors are also elected with the votes of minority shareholders. However, this could possibly give disproportionate power to minority shareholders, particularly in markets where there are low levels of free-float (OECD, 2018_[20]).

Shareholder approval of related party transactions is generally regarded as a complement to board approval, but it is often limited to large transactions and to those transactions recognised by the board as out of market terms. At the same time, ex-ante approval, despite appearing more effective in screening RPTs and protecting uninterested shareholders (if interested shareholders cannot vote), is not required in most cases and could delay the decision-making process. Ex-ante shareholder approval, however, may be especially attractive when the cost of private litigation to compensate the damage caused by the transaction is prohibitive (OECD, 2012_[21]).

Minority shareholders seeking challenge or redress, within reasonable limits, should be given the opportunity to do so, according to the G20/OECD Principles. Shareholder approval of some material transactions has been one approach to prevent the occurrence of abusive RPTs. However, having all RPTs approved by shareholders is cumbersome and sometimes impractical. Moreover, in some jurisdictions enforcement tools available to minority shareholders to overturn a related party transaction remain weak. Minority shareholders are generally given a special role in the approval of transactions that can clearly damage them. However, for the remaining transactions, minority shareholders will have to use class actions, derivate suits or just rely on the judicial system for redress in cases when they consider that the related party transaction was abusive (OECD, 2012_[21]).

The G20/OECD Principles state that all shareholders should have the opportunity to obtain effective redress for violation of their rights. They also suggest that in jurisdictions where enforcement of the law is weak, it is desirable to strengthen ex-ante rights of shareholders to avoid ex-post redress. Ex-ante actions to deter abusive related party transactions include board oversight and shareholders' approval. Ensuring effective ways for shareholders to obtain legal redress (ex-post) would also have significant influence on deterring abusive related party transactions.

Class action suits and derivative suits are the two main legal means for shareholder redress. In several jurisdictions derivative suits are permitted but class action suits are not. Moreover, while a derivative suit indirectly provides redress for shareholders, compensation stemming from a successful outcome would belong to the company and not shareholders directly, making derivative suits unattractive if shareholders must cover litigation costs during the process. Moreover, in the case of a successful outcome, the shareholders will benefit only in proportion to their holdings in the company (OECD, 2009_[23]).

3 The public sector as controlling shareholder

The importance of listed companies under public sector ownership has increased worldwide during the past two decades, mostly reflecting the listing of minority stakes of state-owned enterprises (SOEs) as a first step toward or as an alternative to complete privatisation. A recent study shows that emerging and developing markets have listed around 1 300 SOEs over the past two decades (World Bank, 2021_[23]). The increase in state ownership of listed companies has also been driven by the growth in sovereign wealth funds (SWFs), public pension funds and other state-controlled investment vehicles.

Table 3.1 provides an overview of the magnitude of listed companies controlled by the public sector. Any company in which at least one ultimate parent is a government which owns 25% of the shares is classified as controlled by the state.³ By the end of 2020, 1 677 listed companies had the state as a controlling shareholder, representing a total value of USD 11.6 trillion or the equivalent of 11% of global market capitalisation. These listed firms under state control are often among the largest listed firms in their jurisdictions, for example representing 93% of market capitalisation in Saudi Arabia, 44% in China, and 41% in Norway. Importantly, these companies make up 13% of the MSCI Emerging Market Index, which is tracked by an important number of global institutional investors.

For the state, listing an SOE can offer many benefits. Being subject to monitoring by outside investors as well as the stricter governance and transparency requirements applied to listed corporations may improve SOEs' performance. In addition, the funds obtained from partial listings may alleviate pressures on public finances while keeping control of the listed SOEs. For example, the proceeds Brazil collected from divesting more than 160 SOEs during the 1990s and early 2000s helped the government to reduce its public debt by 8% of GDP. In Singapore and Türkiye, the proceeds have been reinvested into the economy, including large infrastructure projects (World Bank, 2021[23]).

Some corporate governance challenges may arise. First, listed SOEs normally take the form of joint stock corporations and are thus subject to the classic agency issues present in privately owned listed companies. Second, the state as a controlling shareholder may hold particular ownership objectives linked to public policy, which can give rise to new forms of "private benefits" of control.

³ The definition of control is based on equity shareholdings and the minimum cut-off to be considered a controlled company is if any single public sector owner holds at least 25% of the equity. The selection of 25% of the equity as a cut-off is based on the fact that most jurisdictions require at least 75% of the votes cast by shareholders to pass a special resolution. Thus a shareholder with more than 25% of the votes can block special resolutions, and is considered as a majority shareholder. This definition may differ from the one provided by the OECD SOE Guidelines where an SOE is "any corporate entity recognised by national law as an enterprise, and in which the state exercises ownership, should be considered as an SOE". Importantly, the OECD SOE Guidelines state: "The Guidelines apply to enterprises that are under the control of the state, either by the state being the ultimate beneficiary owner of the majority of voting shares or otherwise exercising an equivalent degree of control."

Table 3.1. Listed companies under state control, end-2020

	Market cap. of state controlled companies (USD billion)	No. of listed companies under state control	Average state holdings ⁴	State controlled listed companies (share of total market capitalisation)	State controlled listed companies (share of total number of companies)
China	5 435	773	50%	44%	26%
Saudi Arabia	2 161	22	51%	93%	17%
Hong Kong (China)	686	194	53%	15%	12%
Russia	329	50	64%	52%	37%
India	286	101	68%	11%	9%
Japan	245	16	46%	4%	0%
Brazil	139	27	63%	15%	11%
Norway	133	6	54%	41%	4%
Germany	133	15	67%	6%	3%
Indonesia	126	46	65%	26%	9%
France	124	11	47%	4%	3%
Denmark	93	2	45%	15%	2%
Finland	81	5	38%	25%	5%
Switzerland	76	18	57%	4%	9%
Italy	72	11	53%	10%	6%
Rest of the world	1 463	472			
Total	11 581	1 769		11%	7%

Note: The table shows information for the top 15 jurisdictions by market capitalisation under state control. It is worth mentioning that control is not restricted to the state where the company is listed. It can be any state, e.g. a company listed in Germany can be controlled by a state different from the German state. Please note that the definition of state used here may differ from that used in individual jurisdictions, see the Annex for details. Detailed information for more jurisdictions can be found in the Annex.

Source: OECD Capital Market Series dataset, FactSet, Thomson Reuters, Bloomberg.

3.1. Challenges related to the state as a controlling shareholder

The state as a controlling shareholder could have direct and indirect political influence on publicly traded companies that may not be aligned with minority shareholders' interests. Although the state's influence can be somewhat alleviated by being listed and subject to general regulations applicable to any other listed company, the risk of being exposed to political influence remains. From the economic point of view, this can translate into operational inefficiencies and weaker profitability (e.g. political influence can result in excess employment or excess capacity in a certain firm), to the detriment of other shareholders. Therefore, minority shareholder interests risk being superseded by political motives if the ownership and regulatory frameworks do not have sufficient safeguards.

State influence in listed companies will also depend on whether the state is a direct shareholder or indirect shareholder via entities such as public pension funds, SWFs and financial government institutions. When the state is an indirect owner, its influence may be limited as the presence of intermediary owners may create a buffer (Okhmatovskiy, 2010[24]). Conversely, when the state owns listed firms directly, it is more likely to intervene with their operational management (Deng et al., 2020_[25]). In some cases, states as owners can still exercise significant operating control in a firm under some situations without holding a significant portion of its shares (e.g. through special voting rights or provisions in the corporate bylaws). In France, the action spécifique gives considerable power to the government, such as making the relevant minister's approval compulsory for investors to surpass a certain threshold of shareholding.

⁴ The state holdings correspond to the average within the companies identified as being under state control.

According to the *OECD Guidelines on Corporate Governance of State-Owned Enterprises* (hereafter 'SOE Guidelines'), the state should exercise its ownership function in an informed and active way, and avoid both passive ownership and excessive control (OECD, 2015_[26]).

The state as owner can in practice often influence both internal and external governance mechanisms. Evidence shows that state ownership reduces the number of board committees and increases the power of CEOs, consolidating power within the firm and therefore leading to a weaker internal governance system (Borisova et al., 2012[27]). The fact that board members representing the state can be politically affiliated persons, with fewer incentives to safeguard the autonomy of the company, can further weaken the internal governance systems. Furthermore, CEOs in some cases may also be political appointees with direct access to the political level, undermining the authority of the board to oversee company performance. In addition, executive compensation structures in these companies show a lower correlation between firm performance and compensation level compared with private companies, which can harm the interests of shareholders (Borisova, Salas and Zagorchev, 2019[28]).

External governance mechanisms also function less effectively when the state is a controlling shareholder. Generally, hostile takeovers can expose managers to the threat of external control. However, for listed companies under state control, takeovers are less likely to occur and their managers are shielded from such risk (OECD, 2010_[29]). The implicit guarantees that come with state ownership can also lead to a reduced risk of bankruptcy. Moreover, product market competition normally functions as a disciplinary external mechanism for managers whereby increasing the threat of liquidation reduces managerial slack and ensures the quality of management. However, a large percentage of SOEs controlled by the state operate without competition or in oligopolistic industries such as transportation, telecommunications and other utilities and therefore face less competition (OECD, 2017_[30]).

Agency issues in state-controlled listed companies also vary depending on whether the state is an active or passive shareholder. When the state is a passive controlling shareholder, the managerial agency problems remain, harming shareholders' interests. Conversely, like other majority investors the state can take an active role in designing incentives to address the principal-agent issues (e.g. linking executive compensation to the company's performance). It can also monitor and evaluate boards' behaviour ensuring they act in the best interest of shareholders and prevent managerial misbehaviour (e.g. theft of corporate assets).

When the state is an active and informed owner, managerial issues can be alleviated, but it increases the risk of abuse of minority shareholders rights. Generally, a controlling shareholder can either take a disproportionate share of profits, or pursue non-commercial goals that diverge from the interest of minority shareholders. While non-state shareholders mainly focus on commercial activities, the state as owner, may pursue non-commercial objectives. For instance, in addition to profitability targets, the government may seek to maintain social stability and improve employment even at the cost of reducing profits.

A further challenge may arise from the internationalisation of SOEs. An increasing number of state-controlled listed companies have become multinationals partly driven by international political objectives. These companies can be requested to provide subsidised infrastructure, preferential finance or other services to maintain political influence and facilitate political relationships between countries, which may be detrimental to their profitability (Cuervo-Cazurra et al., 2014[31]). As a result, these companies may become less market-oriented, negatively affecting firm performance and by consequence other shareholders' interest.

States as owners can impose their own objectives on companies more easily compared to private controlling shareholders, for example by unduly influencing the selection process of senior executives (Milhaupt and Pargendler, 2017_[32]). In general, governments "wield bigger sticks and carrots" than other private shareholders, raising their influence in the selection process of senior executives (Borisova et al., 2012_[27]) and promoting government officials as executives, which will tend to follow government guidance and prioritise political goals out of concern for their political career (Li and Xia, 2008_[33]).

3.2. Regulatory approaches to listed SOEs

Listed SOEs are typically subject to general regulations applicable to any other listed company, but may be subject to specific provisions. For example, state-owned enterprises created by specific laws or decrees may have additional conditions and requirements assigned (e.g. transparency), or they can be subject to special legal requirements (e.g. public procurement rules) or to the oversight of other state actors, such as the parliament or the comptroller's office.

Table 3.2 provides a comparison of governance regimes for a group of countries. In all jurisdictions, listed SOEs are subject to general corporate and securities law governing other listed firms. Some jurisdictions also have corporate governance principles specifically for SOEs. Regarding stock exchange regulations, listed SOEs are normally treated in the same way as any other listed companies, except in Brazil, which has a programme tailored to listed SOEs. It is important to mention that the cross-listing of SOEs on non-domestic stock exchanges is a widespread phenomenon.

Table 3.2 Governance regime for listed SOEs

	Subject to general Corporate and Securities Laws	binding Principles of Corp.	regime for SOEs	Special governance rights for state shareholder	voting rights for	Publicly disclosed policy on state ownership	Restrictions on board membership by politicians/Gov. officials	rules on	Centralised state ownership of SOE shares	holding	
Argentina	•	•	0	•	0	0	O (1)	•	0	0	•
Austria	•	•	0	•	0	0	0	•	•	•	0
Brazil	•	0	•	•	•	•	•	0	0	0	•
China	•	0	0	•	0	•	0	•	•	O (2)	•
Colombia	•	•	0	0	0	•	•	0	•	0	•
France	•	0	0	•	•	•	0	•	●(3)	0	0
Germany	•	•	0	•	0	•	0	•	0	0	0
India	•	0	0	0	0	•	0	0	0	0	•
Indonesia	•	0	0	0	0	0	0	0	•	0	•
Italy	•	•	0	•	•	0	0	0	•	0	0
Japan	•	0	0	•	0	0	0	0	•	0	•
Korea	•	0	0	0	0	•	0	•	•	0	•
Norway	•	•	0	0	0	•	•	●(6)	•	0	•
Poland	•	•	0	•	0	•	0	0	0	0	0
Russia	•	0	0	0	0	•	0	0	● (4)	0	•
Saudi Arabia	•	0	0	•	0	•	0	0	(5)	•	0
Singapore	•	0	0	0	0	•	0	0	•	•	•
Türkiye	•	0	0	0	0	0	0	0	0	0	0
United States	•	0	0	0	0	0	0	0	0	0	0

Notes: (1) In 2018, the Argentinian Government published "State-owned companies for growth", but it has not been continued in subsequent years; (2) Despite SASAC being classified as a holding company by (Milhaupt and Pargendler, 2017_[32]), SASAC mainly plays a supervisory role and does not collect profits from SOEs, thus here it is not classified as a holding company; (3) and (4) with minor exceptions; (5) Saudi Arabia has centralised only part of its SOE portfolio; (6) the Norwegian state as a shareholder has several expectations (but not requirements) on compensation for SOE managers.

Source: OECD Capital Market Series dataset, FactSet, Thomson Reuters; Milhaupt and Pargendler (2017_[32]), Governance Challenges of Listed State-Owned Enterprises around the World, https://ssrn.com/abstract_id=2942193; OECD (2018_[34]) Ownership and Governance of State-Owned Enterprises: A Compendium of National Practices, https://www.oecd.org/corporate/organising-state-ownership-function.pdf; OECD (2020_[35]) Organising the State Ownership Function, https://www.oecd.org/corporate/organising-state-ownership-function.pdf; OECD (2020_[36]) Implementing the OECD Guidelines on Corporate Governance of State-Owned Enterprises: Review of Recent Developments; https://doi.org/10.1787/4caa0c3b-en; OECD (2022_[37]), Ownership and Governance of State-owned Enterprises: A Compendium of National Practices 2021, https://www.oecd.org/corporate/ownership-and-governance-of-state-owned-enterprises-a-compendium-of-national-practices.htm; National sources.

Many countries included in the table have centralised the state's ownership functions of listed SOEs. The ownership function is defined as an entity that exercises the power, responsibility, or steering ability to (1) appoint boards of directors; (2) set and monitor objectives; and (3) vote company shares on behalf of the government (OECD, 2018_[34]). Austria, Saudi Arabia and Singapore have created holding companies to exercise the ownership rights of all or a significant portion of their SOEs and separate the ownership function from other state roles.

In line with the SOE Guidelines, most OECD jurisdictions publicly disclose their policies on state ownership. In this context, a number of governments have self-imposed restrictions on board membership to professionalise the boards of listed SOEs and allow them "to exercise objective and independent judgement". For example, Brazil, Colombia and Norway have set explicit restrictions on having politicians or government officials as board members.

Some jurisdictions confer special governance rights, such as golden shares, to long-term shareholders (e.g. loyalty shares in Italy and France). The state as long-term owner may therefore be granted special voting rights for shares of listed SOEs. For example, in France all listed companies are allowed to grant double voting rights to shares held for at least two years. In 2014, the *Loi Florange* automatically assigned these rights, which allowed the state to keep its influence on listed SOEs while divesting some shares from its portfolio.

3.3. Key issues

The increasing importance of state ownership in listed companies presents several challenges for their corporate governance framework. States are a particular type of owner with different objectives than those of others shareholders, and these objectives can greatly influence corporate governance practices in companies. The state's role as regulator may bring a competitive advantage to companies under its control. At the same time, these companies may pursue non-commercial objectives at the expense of other private shareholders. As boards play a fundamental role in the governance of these companies, the mechanism for board nomination and appointment process is of significant importance. Concerning state ownership, some of the most pressing issues discussed by the OECD Working Party on State Ownership and Privatisation Practices (WPSOPP) and addressed in the SOE Guidelines relate to ensuring a level playing field, the misalignment of commercial and non-commercial objectives, ensuring equal treatment of shareholders, and board nomination and appointment.

3.3.1. A level playing field

With the growing importance of SOEs in the economy, increasing emphasis has been placed on how to ensure competitive neutrality – a level playing field – between SOEs and non-SOEs. Competitive neutrality emphasises that "all enterprises are provided a level playing field with respect to a state's ownership, regulation or activity in the market" (OECD, 2021[38]). Achieving competitive neutrality is both of political and economic importance. The economic rationale lies in the fact that ensuring a level playing field can enhance efficiency in resource allocation in the economy and hence contribute to productivity and economic growth. The political rationale lies in the role of the government in ensuring that economic actors are "playing fair" while also safeguarding that public services are being provided. As SOEs move closer towards full commercialisation and becoming listed, they are made subject to similar regulatory treatment as other private enterprises. However, SOEs are often competing with private enterprises on an unequal footing, as they may benefit from privileges unavailable to their private competitors, including better access to financing, regulatory or tax preferentialism, and selective subsidies. They may also face greater constraints on efficiency due to characteristics related to their governance described above, including uncompensated directives to pursue non-commercial objectives not imposed on their private sector

competitors. Such unequal treatment distorts competition and thwarts entrepreneurship (Capobianco and Christiansen, 2011_[39]).

SOEs often benefit from preferential access to different kinds of financing sources. Regarding debt financing, SOEs in most countries access market-based financing.⁵ However, state ownership carries a perceived state guarantee, which normally leads to improved access to and conditions in credit markets (Geng and Pan, 2021_[40]). Moreover, state ownership in banks is significant around the world (La Porta, Lopez-de-Silanes and Shleifer, 2002_[41]). In jurisdictions where state-owned banks play a dominant role in the financial market, SOEs are often prioritised in the allocation of credit (Brødsgaard and Li, 2013_[42]). Very few countries currently have mechanisms in place to ensure there is no preferential financing for SOEs. For equity financing, SOEs also have access to the state budget as a form of recapitalisation. During crises, when equity injection is much needed, these public companies are often prioritised over private ones (OECD, 2020_[43]).

In addition to superior access to financing sources, SOEs may also have access to government subsidies not available to their private competitors. Even though several economies do not allow outright state aid for the commercial activities of SOEs (e.g. within the EU Single Market), in reality exceptions may occur, and state aid is sometimes granted to sustain the operations of SOEs, particularly when they are in distress (OECD, 2012_[44]). Further, SOEs often have access to nationally owned land and other natural resources free of charge or at very low costs. In addition, the favourable tax regimes as well as certain tax exemptions granted to SOEs are also equivalent to selective government subsidies (Capobianco and Christiansen, 2011_[39]).

Through various policy means and as regulators, the state holds significant power regarding who can enter into certain industries. For example, SOEs in some countries are subject to a lighter regulatory approach than private enterprises in certain activities such as the financial industry (OECD, 2012_[44]). Meanwhile, in many industries that have undergone privatisation processes such as telecommunications and airlines, SOEs still have significant relationships with politicians in their role as regulators, which also distorts competition (Wisuttisak and Rahman, 2020_[45]).

To tackle the above issues, the SOE Guidelines make recommendations to ensure a level playing field in markets. It is recommended to have a clear separation between the state's ownership function and other state functions. Moreover, SOEs undertaking economic activities should be subject to the general laws, tax codes and regulations that are imposed on private enterprises. There should be no discrimination between SOEs and their competitors when establishing laws and regulations.

Regulatory and competition authorities have an important role to play in ensuring a level playing field. A number of jurisdictions have pursued competitive neutrality through various policies such as establishing mechanisms to identify and eliminate unfair advantages, including with respect to public procurement, financing, taxation and regulatory neutrality. Regarding the latter, these jurisdictions assess competition and regulatory approaches, and SOEs may be subjected to compensatory payments where regulatory advantages apply. Australia, Slovenia and Switzerland report having established requirements for such compensatory payments (OECD, 2018[34]).

To ensure market consistency of financing, governments have taken several measures to ensure neutral terms of debt access. For instance, in New Zealand the loan documentation for SOEs is required to disclaim explicitly that the Crown does not guarantee the debt repayment. The European Commission also verifies whether certain public bodies are subject to any advantages in access to debt financing.

⁵ In a number of countries, SOEs are able to access debt financing from the state treasury. However, this access is normally limited to individual SOEs or a subset of SOEs. Very few countries, such as the United Kingdom, provide most SOEs loans directly from the state source.

3.3.2. Commercial versus non-commercial objectives

The objectives of the state as owner can differ from those of other shareholders when listed SOEs pursue any non-commercial objective. The rationale for the state to engage in commercial activities can include: "(i) monopolies in sectors where competition and market regulation is not deemed feasible or efficient; (ii) market incumbency, for instance in sectors where competition has been introduced but a state-owned operator remains responsible for public service obligations; (iii) imperfect contracts, where those public service obligations that SOEs are charged with are too complex or malleable to be laid down in service contracts; (iv) industrial policy or development strategies, where SOEs are being used to overcome obstacles to growth or correct market imperfections" (Christiansen, 2013_[46]).

State-owned enterprises are therefore expected to pursue both commercial and non-commercial objectives in many cases. Listed SOEs are assumed to pursue non-commercial objectives to a more limited degree due to the need to respect the interests of all shareholders. According to a survey of 32 countries, the most common objective of SOEs is to support national economic and strategic interests, as well as to supply specific public goods and services. Indeed, besides profitability targets, SOEs may prioritise other goals such as maintaining social stability or improving employment (OECD, 2018_[34]). For instance, in 2020, China's State-owned Assets Supervision and Administration Commission of the State Council (SASAC) specifically required that SOEs hire at least the same number of employees as in 2019 to preserve the employment rate (SASAC, 2020_[47]). Moreover, out of political concerns, listed SOEs can be required to provide subsidised infrastructure or other services to other countries, which may be harmful to their profitability. An important driver of the recent increase in the number of multinational SOEs are political incentives to establish subsidiaries abroad (Cuervo-Cazurra et al., 2014_[31]).

A main concern is the lack of sufficient separation between commercial and non-commercial objectives. The incentives under which some SOEs operate in key sectors lead to excess capacity that becomes difficult to eliminate, with potentially heavy costs for the home country in terms of efficiency and excessive debts. For companies, this translates into lower profitability, innovation and competitiveness.

If this pursuit of non-commercial objectives was carefully balanced to match any subsidies and other advantages granted to SOEs, there might be no concerns about a level playing field. However, in practice it more often than not leads to distortions. Although exits/bankruptcies of inefficient firms are the expected result of competition, this is not often the case for SOEs. Driven by motivations such as sustaining employment or retaining political patronage and sinecures, a large number of SOEs are kept alive instead of being winded down. This leads to inefficient allocation of resources and prevents more productive firms from entering the market (OECD, 2017_[48]).

Between 2012 and 2016, the net return on capital for listed SOEs was lower than for private listed companies in both advanced and emerging economies. And, since 2002, profit margins for listed SOEs in emerging markets are lower than for private listed companies, consistent with excess capacity issues. Debt levels are also higher in listed SOEs than in private listed companies in advanced economies (OECD, 2017_[48]).

In addition, because the state can be the controlling shareholder in a number of companies, there is a risk that the government could interfere with the operations of certain companies to improve the overall performance of the state's portfolio. A government could encourage listed SOEs to provide services that are detrimental to their profitability but benefit other companies in the state portfolio, for example through related party transactions and procurement decisions that favour SOEs over other service providers.

The SOE Guidelines recommend that governments develop and communicate the rationale for owning an individual SOE, an ownership policy that defines the overall objective and the government's role in corporate governance, as well as the implementation strategy. Consistent with this recommendation, many jurisdictions have explicit ownership rationales through legislation or government policies/decisions. These rationales are reviewed on a regular basis (OECD, 2018_[34]). For instance, in Germany the Ministry of

Finance publishes an annual report on the state's enterprise ownership. In addition, it compiles every two years the "Report of the Federal Ministry of Finance on the evaluation of the important federal interest". In Finland, the government issues a resolution on state ownership policy following each parliamentary election.

Another remedy to this problem has been to rely on the separation of commercial and non-commercial activities of SOEs. It is important for the government to compensate SOEs for non-commercial objectives. For example, the EU's Transparency Directive requires that SOEs separate costs and assets between commercial and non-commercial activities. Over 60% of countries surveyed by the OECD requested that SOEs separate the accounts of commercial and non-commercial activities, and that countries compensate the companies that deliver public services (OECD, 2018_[34]).

3.3.3. Equal treatment of shareholders

The protection of shareholder rights is one of the key elements of corporate governance. The SOE Guidelines say that the state should ensure that all shareholders are treated equally and that they have equal access to corporate information. There are various rights that should be guaranteed equally to shareholders, including voting rights, the right to receive dividend payments, to access information on the company's activity, and to participate in shareholder meetings, among others. Ensuring this equal treatment is crucial considering that state owners and other shareholders might have different objectives. As discussed in Section 3.1, listed SOEs are often entrusted with social and political objectives in addition to profitability targets. States, as controlling shareholders, may often pursue non-commercial goals that diverge from the interest of minority shareholders.

State ownership is also more complex considering that the state is not only a shareholder, but also a regulator and legislator. Unless these roles are carefully separated within the public administration they can increase the state's power as shareholder, giving the state an unfair advantage over other shareholders. As states "wield bigger sticks and carrots" than other private shareholders, the state has more leverage to impose its objectives on companies. At the same time, there is the constant challenge of managing conflicts between the state's role as owner of companies and its other roles. Driven by its interest as a shareholder, the state could develop legislation and regulations for the benefit of its ownership in these companies.

The state also has superior access to information compared to other shareholders. The SOE Guidelines recommend that SOEs should develop an active policy of communication and consultation with all shareholders. However, the state – whether through ownership rights conferred by law or its role as a regulator – can generally access a wider source of data records compared to private shareholders.

The listing of SOEs is largely the result of states' privatisation efforts and, in many cases, the state may want to preserve its influence over the company despite its divestment decision. To achieve this, several governments have put in place shares that grant special prerogatives (golden shares). For instance, in Brazil, a few listed SOEs allow the state to hold veto powers over certain issues (OECD, 2021[49]).

Another difficulty is the fact that the legislation in most jurisdictions is not well designed to address misconduct, such as self-dealing action, when committed by the state as a controlling shareholder. When a private controlling shareholder engages in self-dealing, it normally involves economic benefits that can be measured and there is legislation that can be used in the ruling. Government ownership raises issues such as sovereign immunity as governments are partly immune from legal suits (Kahan and Rock, 2011_[50]). The fact that such misconduct mostly involves the pursuit of political or policy goals, instead of measurable economic ones, can further complicate the process.

To support the equal treatment between state shareholders and private shareholders, the SOE Guidelines recommend that where SOEs are required to pursue non-commercial objectives, adequate information about these objectives should be available to non-state shareholders at all times. Regulators and related

organisations have taken several initiatives in this direction. For instance, in Estonia, since 2018, listed SOEs are exempted from requirements in the State Assets Law to report back to the government certain information that is not required in stock market regulations, such as minutes of supervisory board meetings. In Indonesia, the OJK Corporate Governance Roadmap regulates the formation of a corporate governance task force. One of the six working groups of the task force is responsible for discussing the gaps on equal treatment of shareholders, and prepare a comprehensive analysis and recommendations for the Roadmap. All recommendations are later presented to the Board of Commissioners of OJK (OJK, 2014_[51]).

3.3.4. Board nomination and appointment in listed SOEs

The responsibility for board nomination and appointment in SOEs generally belongs to the government. Depending on the ownership model (centralised, decentralised or dual models involving two ministries), this responsibility can fall either on an ownership agency, one ministry or several ministries (OECD, 2018_[34]). According to the SOE Guidelines, in exercising ownership rights, it is important to ensure a well-structured and transparent nomination framework to facilitate a rule-based process. This can be achieved by putting in place a formal nomination process which is subject to public scrutiny. In the most "advanced" jurisdictions the procedures rely on private sector best practices including external consultants and draw on databases of directors (OECD, 2013_[52]). Such mechanisms can reduce the risk of political intervention in the nomination process and enhance the government's capacity to identify nominees based on skills and qualifications. As they are mostly operated on a commercial basis, listed SOEs should have best practices similar to those of private companies.

Achieving transparency and efficiency in board nomination and appointment in listed SOEs has long been one of the most contentious policy challenges in the reform of SOEs. Undue political intervention in the selection process remains a problem, undermining effective competition and leading to inefficient outcomes. In many cases, directors are appointed and retained based on their political allegiances instead of technical competences (World Bank, 2014_[53]). Such politically motivated appointments are often associated with poor corporate governance, as well as inefficiencies and reduced performance. In many jurisdictions, it is still common for government officials to sit on the SOE board, which can harm its performance. In particular, the compensation of these officials is not normally tied to company performance, meaning officials may lack incentive to contribute to value creation by the firm. In pursuit of their political career, they may prioritise non-commercial goals such as retaining employment instead of pursuing profitability.

Importantly, having politicians and government officials who exercise significant political powers over SOEs on the company boards can lead to conflicts of interest. When politicians serve on the board, there may be doubts as to their ability to perform their role as regulator and at the same time serve the company. To mitigate such conflicts of interest, countries have implemented measures such as preventing politicians from taking roles on SOE boards. Indeed, there is a growing consensus that ministers, state secretaries, or other political officials should not serve on SOE boards (OECD, 2018[34]). For instance, in Norway, serving politicians are restricted from serving on SOE boards. In China, both incumbent and newly retired officials are banned from serving as independent directors of listed SOEs.

In like manner, other jurisdictions have taken measures to professionalise SOE boards, ensuring board members have the right mix of skills and experience to exercise their responsibility in a professional and efficient way. A number of practices have been adopted, such as seeking expertise from recruitment agencies and establishing a candidate pool based on rigorous qualification criteria. For instance, in Sweden the board nomination process involves a working group that analyses the expertise needed based on the company's operations, current situation and future challenges, as well as the current board composition. Two recruitment agencies are then hired to undertake the recruitment process. There has also been an increased emphasis on the technical qualifications of the board. According to OECD

research, almost all countries surveyed have established minimum qualification criteria for board members (OECD, 2018_[54]).

Another mechanism that could benefit the nomination process is setting up a board nomination committee. As recommended by the SOE Guidelines, board nomination committees can help identify potential suitable candidates and structure the nomination process. Indeed, as the board is best placed to decide what type of profile it needs to complete the team, such arrangements can help identify potential suitable candidates and improve efficiency.

The SOE Guidelines also focus on the involvement of non-state shareholders in the board election process. As the government is often the only controlling shareholder in listed SOEs, it is critical to ensure that the rights of minority shareholders are respected. The participation of these minority shareholders not only ensures that their benefits are protected through the process, it can also bring additional expertise to the board, which contributes to the board's efficiency. Thus it is important to establish mechanisms to facilitate the participation of non-state shareholders in the board nomination and election process.

Re-concentration of ownership in the hands of institutional investors

In recent decades, most advanced markets have seen significant shifts in the relative importance of the different categories of investors. The most prominent feature is the increased importance of various forms of institutional ownership at the expense of direct ownership by individual households. This shift is most pronounced in the United Kingdom, where direct ownership by households in 2018 fell to 13.5% with different categories of institutional investors, notably insurance companies and pension funds, being the dominant category of owners. Japan has also seen a marked decrease in equity directly held by households, from around 30% in 1980 to 18% in 2021. The same is true in the United States, where households, which were relatively significant owners of public equity until the 1980s, have progressively been replaced by institutional investors as the dominant owners of publicly listed companies.

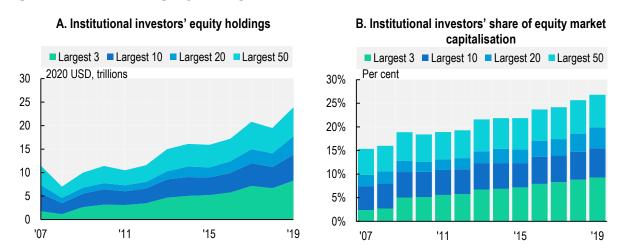
This trend has been coupled with a large number of delistings from the stock markets in OECD economies. There were almost 8 000 delistings by European companies during the 2005-19 period, over 5 000 delistings by US companies, and around 1 300 by Japanese companies. These delistings have not been matched by new listings in most markets, resulting in a net loss of listed companies in every single year between 2008 and 2019 (OECD, 2021[1]).

These trends, together with the fact that many institutional investors allocate their assets following investable indices, have resulted in an increasing amount of resources being allocated to fewer companies. The impact has been stronger in developed markets where the decline in the number of listed companies has been significant and the domestic market's share in global indices is higher. For example, the MSCI World Index, a global investable equity index, weights the US market 67%, which has contributed to a notable concentration of ownership in the hands of institutional investors at the company level in the US market.

4.1. Trends in institutional investors ownership

One important driver behind the increased importance of institutional investors as corporate owners (such as pension funds and to some extent investment funds), has been political decisions to promote and transform pension systems towards funded plans and the establishment of mandatory and voluntary private pillars in many countries. As a result, the assets under management (AUM) by pension funds and insurance companies went from representing 65% of GDP in 2000 to 119% in 2019 in the OECD area. At the same time, their allocation to listed equity has grown at a similar pace over the past decade. The total holdings of the largest 50 institutional investors in the stock market doubled in absolute terms between 2007 and 2019, from USD 12 trillion to USD 24 trillion. The three largest institutional investors have increased their holdings of publicly listed equity from around USD 1.8 trillion in 2007 to USD 8.3 trillion in 2019, equivalent to 9.3% of global market capitalisation.

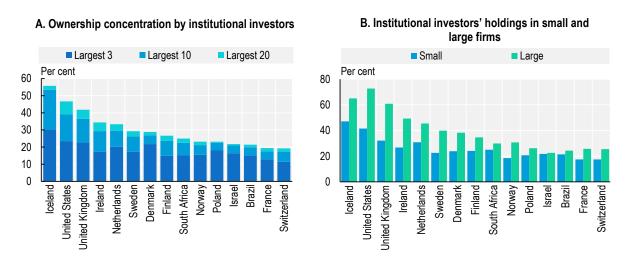
Figure 4.1. Global holdings by the largest 50 institutional investors



Source: OECD-ORBIS Corporate Finance dataset, Thomson Reuters Datastream.

The significant increase in institutional investors' AUM and the fact that a large portion of their assets tracks or replicates stock markets indices have led to institutional ownership concentration, particularly in large firms. As most indices are weighted by market capitalisation, they tend to favour large companies over small ones. Therefore, the holdings of investors that follow these indices are concentrated in fewer and larger companies. Panel A of Figure 4.2 shows the average combined holdings of the largest 3, 10 and 20 institutional investors at the company level in each market. In Iceland, the United States, the United Kingdom, Ireland, the Netherlands and Sweden, the combined ownership of the top 20 institutional investors represents at least 30% of the listed equity in each company.

Figure 4.2. Ownership concentration and holdings in small and large firms, end-2020



Note: Small companies correspond to companies with a market capitalisation below the median of the jurisdictions. Large companies correspond to companies with a market capitalisation above the median of the jurisdictions.

Source: OECD Capital Market Series dataset, FactSet, Thomson Reuters, Bloomberg.

A closer look at institutional investor ownership at the company level reveals that there are large differences between their holdings in large versus small companies. Large companies are defined as those with market capitalisation above the median level in each jurisdiction, and small companies correspond to those with

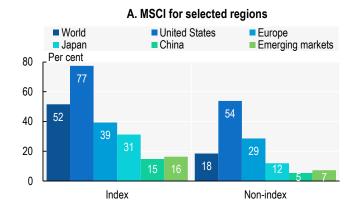
a market capitalisation below the median level in each jurisdiction. In each jurisdiction, the institutional investors' holdings are on average higher in large companies compared to small companies. Differences are wide in two of the largest equity markets, the United States and the United Kingdom, where institutional investors hold on average 30 percentage points more in large firms compared to small firms.

4.2. The use of investable indices

The growing use of indices by institutional investors, along with the growing share of corporate equity they own, has led to important differences with respect to institutional ownership between companies included in a major index and those not included. In addition, because most indices weight companies according to their market capitalisation and free-float levels, being a large firm with higher free-float, all else equal, will result in a higher weighting in the index. As shown in Figure 4.3, companies included in the MSCI indices show a higher average institutional ownership than non-index companies. The average difference in institutional holdings between MSCI World Index companies and non-index companies is 33 percentage points. Similarly, the average differences in institutional holdings between companies included in regional MSCI indices and non-index companies go from 9 percentage points in China to 24 percentage points in the United States. For emerging markets companies, those included in the MSCI Emerging Markets Index have on average 16% institutional holdings compared to 7% for companies not included.

The fact that institutional investors follow index investment strategies and that indices favour large firms results in an increasing volume of funds being allocated to the same companies. As shown in Figure 4.2 Panel B, their preference for large companies is strong. Indices built on other criteria, such as environmental, social and governance (ESG), select an even smaller number of companies from the same pool of companies that are already included in major indices. The investment bias resulting from index investing leaves smaller and growth firms off the radar of institutional investors.

Figure 4.3. Institutional investor holdings in indexed versus non-indexed companies, end-2020





Note: No regional index was available for other advanced markets.

Source: OECD Capital Market Series dataset, FactSet, Thomson Reuters, Bloomberg, MSCI Constituents Information (as of December 2020).

The total number of investable indices climbed to 3.05 million in 2020, with equity indices representing 76.6% of the total. This means that the number of equity indices is almost 60 times the number of listed companies available for investment (IIA, 2021_[55]). The set of products offered by index providers is vast and covers different market segments and regions. However, given that their methodology for company inclusion considers free-float and market capitalisation as part of the main criteria, these indices tend to select the largest companies with the higher free-float within segments and regions.

4.3. Institutional investors' engagement

The fact that institutional investors' holdings have risen dramatically in the last decades has shifted attention to their responsibility to act as stewards of the companies they hold shares in. Given that they have a fiduciary duty to their clients and ultimate beneficiaries, it is expected that they focus on maximising long-term value and that they engage with companies to achieve this objective. Therefore, these investors have an important role to play as responsible owners and their influence as shareholders should ultimately benefit society as a whole.

Whether and how institutional investors engage with companies has come under increasing attention due to the high levels of ownership concentrated in the hands of a small number of institutional investors. Today, the top three institutional investors globally own significant stakes at the company level in many developed markets, allowing them to directly influence companies' decisions presented to shareholders.

Large asset managers tend to divide their various portfolio teams responsible for management and stewardship. BlackRock's stewardship team votes at 16 000 meetings annually. The voting is split across regions with, for example, the London office voting the shares held in companies listed in Europe, the Middle East and Africa. However, portfolio managers can be located elsewhere (BlackRock, 2020_[56]). Having a dedicated team for stewardship is widespread, and teams of some of the largest asset managers have been growing lately. BlackRock's and Vanguard's stewardship teams almost doubled between 2017 and 2020 and, importantly, staff in ESG roles almost quadrupled at BlackRock and Goldman Sachs between 2017 and 2020. Despite this increase, only 47 people were in charge of stewardship at BlackRock, the largest asset manager firm, covering over 10 000 investee companies in 2020 (Financial Times, 2020_[57]).

Table 4.1. Asset managers' stewardship teams

Asset managers	Stewardship team 2020	Additional staff in ESG roles in 2020	Stewardship team 2017	Additional staff in ESG roles in 2017
BlackRock	47	86	26	22
Vanguard Group	35	0	20	0
UBS Asset Management	8	14	0	0
State Street Global Advisors	12	6	9	3
Allianz Global Investors	9	38	6	28
JPMorgan Asset Management	11	0	8	0
Capital Group	18	18	19	0
Goldman Sachs AM International	5	50	2	14
Amundi	5	25	0	0
T Rowe Price	4	7	4	4

Source: Financial Times, companies' websites.

The rise of institutional investors has been accompanied by the increasing use of passive investment strategies. Rather than actively selecting individual stocks to maximise the absolute risk-adjusted return, passive investment strategies typically seek to benchmark their returns against a pre-defined market index. In turn, the index provider defines the investment criteria and sets the inclusion and exclusion methodology.

Engagement issues become more critical in the case of passive index investors. These investors may lack the incentives to engage in stewardship activities to improve companies' governance and increase value. Even though improvements in the value of index companies will have a positive impact on beneficial owners and on the economy as a whole, managers of passive index funds may have no incentive to engage (Bebchuck, Cohen and Hirst, 2017_[58]). Managers of passive index funds offer to match the

investable index performance by closely replicating the index composition at a low cost. Regardless of the performance of stocks included in the index, passive investors will hold them in their portfolios.

In recent years, the competition between index fund managers has prompted some providers to cut fees to zero or even below to attract volume to their funds. Asset managers gave up USD 6 billion in revenues by cutting fees between 2014 and mid-2018 (Flowspring, 2018_[59]). Other institutional investors, such as activist hedge funds, have more incentives to engage with companies as the agency issues are somewhat alleviated due to the compensation structure. Hedge fund managers are compensated via management fees and an incentive payment related to the return of the portfolio.

From a market-wide perspective, informed investors, such as institutional investors, also play a role in producing new and unique information for the market. However, since many investors follow passive investment strategies, their ability to perform their monitoring function and thus produce information to the market may be reduced. In 2020, the increasing amount of funds managed via passive index funds and ETFs reached a record USD 8.2 trillion, or 48% of total equity investment via funds (Investment Company Institute, 2021[60]). Less information will affect the market price dynamics and ultimately impact the allocation of resources in the economy. More importantly, the mechanical investment rules of passive investing have raised concerns that at the aggregate level, these strategies might contribute to destabilising price dynamics by amplifying investors' trading patterns. In addition, the increasing correlation in the returns of index companies could also become a source of instability (Sushko and Turner, 2018[61]).

4.4. Key issues

Ownership concentration in the hands of institutional investors, in particular asset managers, gives these investors important power in corporate decisions. Whether they exercise their rights and duties with investee companies or not, the issue has become a matter of public policy since it affects the functioning of capital markets and the allocation of resources in the economy at large. This power, if not used to engage with companies and to monitor management, will shift to management. Since ownership concentration in the hands of institutional investors is mostly observed in markets where there is no other large controlling shareholder, investors' lack of engagement will affect the internal corporate governance of the company. Also important, their use of index-based strategies may impact the price formation process at the market level. Overall, three issues concerning the re-concentration of ownership in the hands of institutional investors have been identified: the level of engagement with investee companies, the investment bias towards large companies, and reduced information to the market.

4.4.1. Level of engagement with investee companies

Ownership concentration was conceived as a governance tool whereby investors will monitor management and exercise their vote instead of just exiting the investment. However, when ownership concentration rests in the hands of institutional investors, it may not result in more monitoring and more voice. The fact that institutional investors are managing other people's money and receive compensation for their services that may not be related to the performance of the AUM may reduce their incentives to engage with investee companies. The fact that they can only capture a small fraction of their engagement activities while having to bear the full cost is at the core of their reduced incentives to engage and monitor investee companies.

The revenue model of institutional investors is usually a percentage of assets under management. The clear incentive here is to compete to increase the inflow of funds to raise revenues. However, this does not necessarily imply that the right incentives are in place to engage with companies and increase value since it can be done instead through marketing. Ideally these investors will choose to raise the value of the companies in the portfolio to increase their size of AUM. However, they cannot reap the full benefits of engagement whereas the benefits from marketing strategies can be fully appropriated (Rock, 2018_[62]).

In addition, the broad classification "institutional investors" includes different categories of investors and, more importantly, these investors differ in their business models and investment strategies, leading to different motives. Traditional institutional investors such as pension funds, investment funds and insurance companies are influenced by a different set of factors than alternative institutional investors and asset managers. Therefore, if engagement is not part of their business model and investment strategy, asking them to engage may not be an effective approach (Çelik and Isaksson, 2013_[63]).

What may be less evident is that reduced engagement can have significant effects on their voting behaviour at shareholder meetings. Evidence shows that institutional investors may tend to support management proposals. Such behaviour may shift power to management, possibly destabilising the checks and balances within the internal corporate governance structure. In fact, the three largest US passive fund families are increasingly likely to vote in favour of management proposals, while mutual funds tend to vote according to proxy advisors (Boone, Gillan and Towner, 2020_[64]).

Equally important, since institutional investors offer exposure to diversified portfolios at low cost, there is a risk that the number of companies they invest in may surpass their ability to engage in a cost-efficient way. Large asset managers like BlackRock and Vanguard invest in over 10 000 companies each (BlackRock, 2020_[56]; Vanguard, 2020_[65]), and pension funds like CalPers and Norges Bank Investment Management invest in 10 551 and 9 123 companies, respectively (CalPers, 2020_[66]; Norges Bank, 2020_[67]). Voting shares in so many companies becomes a major task and the legal pressure to vote may turn engagement into a compliance function.

Furthermore, in an attempt to benefit from the scale of their business, large asset managers tend to divide the teams responsible for portfolio management from stewardship. Stewardship teams relative to the number of companies invested in are small, and although they rely on the support of proxy advisers, engagement may remain insufficient (Table 4.1). A concern is that the compensation structure of governance professionals is not typically related to companies' performance, creating misaligned incentives (Rock, 2018_[62]).

Equally important, the use of indices has an impact on the amount and quality of institutional investors' engagement with investee companies. These investors follow either an active strategy or a passive strategy. The ones who follow an active strategy typically have a universe from which they may pick stocks and a benchmark index against which their performance is tracked. The fact that their performance is benchmarked against an index will make them select a similar portfolio composition than that of the index. If the fund manager decides to sell or increase the holdings in one particular stock that is part of the benchmark index, it will increase the tracking error⁶ of the fund. However, fund managers do have some incentives to engage with individual companies when the fee structure compensates them for outperforming the index.

The index funds⁷ that follow a passive strategy mimic the index composition rather than try to beat the benchmark. Because they do not promise to beat the index, research in individual companies may be necessary only in companies representing a higher weight in their portfolio. Further, in general transactions only occur when the index rebalances its composition and weights. These reduce the management cost compared to an actively managed fund. Indeed, the current cost of an actively managed fund is around 100 bps compared to only 4 bps for an S&P 500 Index fund. Therefore, engagement incentives will be reduced when managers follow a passive strategy. On the one hand, they have no motivation to exercise their voice because it is costly and, on the other, they will not be able to sell a stock for as long as it is contained within the benchmark.

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⁶ Tracking error is the difference in actual performance between a position (usually an entire portfolio) and its corresponding benchmark.

⁷ Including ETFs.

Several regulators have implemented stewardship codes in response to institutional investors' reduced engagement as evidenced by the global financial crisis. Likewise, industry-based guidelines and other regulations have proliferated as a means to incentivise institutional investors to increase engagement. For instance, among the 50 jurisdictions covered by the *OECD Corporate Governance Factbook 2021*, 19 jurisdictions have put in place either regulations or laws to enforce the disclosure of voting policies for institutional investors, 17 have developed stewardship codes/principles that recommend the disclosure of voting policies, and 5 have regulations or laws as well as principles/codes to promote disclosure (OECD, 2021[17]).

Institutional investors' engagement can be improved, and solutions are emerging. One approach has been the one taken by the UK Financial Reporting Council (FRC), which pioneered the introduction of stewardship codes in 2010. To improve the use of the code, since 2016, the FRC undertakes an evaluation of all signatory statements to identify best practice reporting against the stewardship code. The exercise distinguishes between signatories that report satisfactorily and those that need further improvement. The evaluations have led to a substantial improvement in the quality of the statements (Financial Reporting Council, 2016_[68]).

Another emerging approach comes from asset managers themselves. In October 2021, BlackRock announced that it will give ultimate owners, such as big pension funds and other sophisticated institutional clients, the right to vote their (indirectly owned) shares at annual meetings starting in 2022. Approximately 40% of the USD 4.8 trillion index-tracking equity assets will be eligible to cast proxy votes. Currently, BlackRock stewardship teams are responsible for this task, and they will continue to vote proxies on behalf of the clients that prefer to continue delegating it to them (Barrons, 2020_[69]). Further, BlackRock has stated that it is "committed to exploring all options to expand proxy voting choice to even more investors" such as individual investors (The Wall Street Journal, 2021_[70]). It remains to be seen whether the initiative to allow institutional clients to vote their shares will be effective in encouraging engagement with companies, and help address concerns expressed by some about asset managers' voting power.

More regulatory efforts may be on the way. In September 2021, the US Securities and Exchange Commission (SEC) proposed a rule that would enhance the information mutual funds, exchange-traded funds and certain other funds report about their proxy votes. The proposal would also require institutional investment managers to disclose how they voted on executive compensation or so-called "say-on-pay" matters (SEC, 2021_[71]).

Considering that an index investment product replicates the market index and offers to provide exposure to market risk (or systematic risk), therefore it is assumed that individual companies' idiosyncratic risks should be diversified away. Engagement activities with individual companies pursuing idiosyncratic gains are precisely the kind of risks that diversification should eliminate. In this sense, maximising the adjusted return of the entire index portfolio by reducing the systematic risk may also be an option. Therefore, efforts to reduce the systematic risk of the entire index portfolio instead of reducing the total risk of individual stocks may be desirable. For many managers, such an approach may be consistent with their diversification and cost-minimisation strategy (Gordon, 2021_[72]). The question therefore arises of whether index managers should be expected to engage with individual companies on idiosyncratic issues or if they should support and sometimes advance shareholder initiatives that will reduce systematic risk of the entire index portfolio (e.g. climate-related initiatives).

4.4.2. Investment bias towards large companies

Institutional investors generally use indices in their asset allocation process. On the one hand, index investing has brought large benefits in terms of diversification for households' investments and a reduction in management fees. On the other hand, the shift from direct retail investment to institutional investors has created a bias that favours large companies in public equity markets.

New indices normally re-classify the same universe of listed companies according to different characteristics or criteria. As mentioned in Section 4.2, the total number of investable indices is almost 60 times the number of investable listed companies. This could be a problem when considering that the number of companies that list their shares on public markets has decreased in recent years and that an increasing amount of resources is allocated to the same groups of companies.

Index providers normally select as constituent firms those with a high market capitalisation and higher levels of free-float. The preference for larger and liquid firms also extends to larger and liquid markets since index providers also apply filter criteria for the countries to be included in a particular index. For example, for its Developed and Emerging Market indices, STOXX selects countries that have a market capitalisation that is equal to or greater than the 20th percentile of the market capitalisation of the countries covered by STOXX. Further, STOXX screens countries by market liquidity. To be eligible, countries must have a total value of shares traded equal or greater than the 40th percentile in the case of Develop market indices, and equal or greater than the 30th percentile in the case of Emerging Market indices (STOXX, 2021_[73]). The investment bias resulting from index investing may not only leave small and illiquid markets off the radar of institutional investors, but more importantly it may also turn smaller and growth firms practically invisible to them.

4.4.3. Reduced information to the market

The G20/OECD Principles recommend that "stock markets should provide fair and efficient price discovery as a means to help promote effective corporate governance". From a market-wide perspective, informed investors, such as institutional investors, also play a role in producing new and unique information to the market. However, the fact that some investors follow passive investment strategies may reduce their ability to perform their monitoring function and thus the production of information to the market.

In 2020, the amount of funds managed via passive index funds and ETFs reached a record USD 8.2 trillion, accounting for 48% of total equity investment via funds (Investment Company Institute, 2021_[60]). The reduced amount of information contained in prices can affect the price formation process and ultimately impact the allocation of resources in the economy. Concerns have also been raised that the mechanical investment rules of index investors (e.g. rebalancing their portfolio on a quarterly basis when the index provider rebalances the index) also can amplify trading patterns, destabilise prices and increase the co-movement in the return of index companies (Sushko and Turner, 2018_[61]).

The increase in ETF and passive funds ownership has also led to a decrease in pricing efficiency, and the extent to which stock prices reflect firm specific information has decreased (Israeli, Lee and Sridharan, 2017_[74]). Moreover, the increase in ETF ownership has led to a decline in the number of analysts covering a particular firm. Meanwhile, more indexing has reduced trading of individual stocks, resulting in higher trading costs and lower liquidity. ETF holdings are also said to have introduced persistent distortions from fundamentals at the individual asset level (Bhattacharya and O'Hara, 2018_[75]).

4.5. Regulatory approach

The G20/OECD Principles, while recognising the existence of a large investment chain, highlight the risk that incentives in the investment chain may not be aligned with those of beneficial owners. The G20/OECD Principles recognise that "if shareholder engagement is not part of the institution's business model and investment strategy, mandatory requirements to engage, for example through voting, may be ineffective and lead to a box-ticking approach" (OECD, 2015_[76]). The G20/OECD Principles recommend that institutional investors should disclose their voting policies with respect to corporate governance and with respect to their investment. They also recommend that they disclose the procedures for how they exercise their voting rights and how they manage conflicts of interest (OECD, 2015_[76]).

Stewardship codes, industry-based guidelines or other regulations aiming to improve institutional investors' engagement have been developed in some jurisdictions. The global financial crisis was a key driver in pushing jurisdictions to implement codes or regulations for institutional investors as a response to the perceived lack of monitoring in the period preceding the crisis. The first national stewardship code was adopted by the FRC in the United Kingdom in 2010 and since then they have grown in importance as a corporate governance framework. Today, 22 countries have adopted stewardship codes or similar regulations that follow a "comply or explain" approach. The codes emphasise enhancing the quality of engagement by requiring that institutional investors disclose policies and activities mainly regarding voting and management of conflicts of interest. They also include principles that guide how institutional investors should act in stewardship activities, including collaborating with other investors, enhancing engagement with companies to increase the investment return, and establishing a policy for the escalation of stewardship activities. Adherence to these codes is typically on a voluntary basis. For instance, in the United Kingdom, asset managers and owners, as well as other service providers, can apply to adhere to the code.

Recently, with the increasing importance of ESG issues, stewardship codes have started to also include ESG requirements. The UK FRC published a revised Stewardship Code in October 2019 that includes an expectation that signatories should integrate ESG factors into their investment decisions (Financial Reporting Council, 2020_[77]). In Japan, a revised Stewardship Code released in 2020 explicitly requires that institutional investors consider sustainability issues in their investment management strategies (JFSA, 2020_[78]). Incorporating ESG issues into stewardship codes presents new challenges for institutional investors, as there is no systematic framework and metrics to measure ESG issues. This may explain why the revised UK Stewardship Code has fewer signatories (125) so far than the previous version (around 300).

In the United States, an investor-led initiative, the Investors Stewardship Group (ISG), launched a Framework for US Stewardship and Governance in 2017. Over 70 US and other institutional investors managing USD 32 trillion in US equities have signed or adhered to the framework.⁸ The stewardship framework is based on the following six principles: (i) Institutional investors are accountable to those whose money they invest; (ii) Institutional investors should demonstrate how they evaluate corporate governance factors with respect to the companies in which they invest; (iii) Institutional investors should disclose, in general terms, how they manage potential conflicts of interest that may arise in their proxy voting and engagement activities; (iv) Institutional investors are responsible for proxy voting decisions and should monitor the relevant activities and policies of third parties that advise them on those decisions; (v) Institutional investors should address and attempt to resolve differences with companies in a constructive and pragmatic manner; and (vi) Institutional investors should work together, where appropriate, to encourage the adoption and implementation of the Corporate Governance and Stewardship principles (Investor Stewardship Group, 2017_[79]).

Whether adherence to these initiatives translates into meaningful shareholder engagement remains to be seen. In the United Kingdom, quality and quantity of stewardship has improved since the introduction of the Stewardship Code (Financial Reporting Council, 2016_[68]). For instance, it has led to increasing voting activities of certain financial institutions and institutional investors (Tsukioka, 2020_[80]). However, one study shows that compliance with the UK Stewardship Code has no significant impact on earnings reporting quality (Lu et al., 2018_[81]). The FRC, in its efforts to continue improving the impact of the code on UK listed companies, revised it in 2020 and imposed additional requirements, including the provision of evidence on stewardship activities.

Private pension fund plans in the United States are also subject to some engagement rules established in the Employee Retirement Income Security Act of 1974. In 1994, the Department of Labor in its Interpretive

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⁸ The largest US asset managers namely BlackRock, State Street and Vanguard have signed to the Principles.

Bulletin 94-2 (IB 94-2) recognised that fiduciaries may engage in monitoring or influencing corporate management whenever the increase in value of the investment plan surpasses the cost involved. Further, in 2008, the Interpretative Bulletin 2008-02 updated the IB-94-2 by stating that "fiduciaries' responsibility for managing proxies includes both deciding to vote or not to vote". It also stated that fiduciaries in voting proxies shall "only consider factors relating to the economic value of the plan's investment and shall not subordinate the interests of the participants and beneficiaries in their retirement income to unrelated objectives". In 2016, the Interpretive Bulletin 2016-01 further emphasised that fiduciaries in voting proxies must consider only the factors that affect the value of the plan's investment (Federal Register, 2020_[82]). In 2020, the Department of Labor proposed amendments to the "Investment Duties" regulation requiring for fiduciaries "the use of written proxy voting policies and guidelines, and the selection and monitoring of proxy advisory firms".

Other jurisdictions have also introduced regulatory requirements with respect to pension funds, especially for the exercise of voting rights and the management of conflicts of interest. In Sweden, the National Pension Insurance Funds Act was amended stating that funds "shall manage the pension fund assets in an exemplary manner through responsible investments and responsible ownership." The amendment also emphasises that "particular weight shall be placed on promoting sustainable growth" without jeopardising the primary objective of the funds to achieve the greatest possible benefit for beneficiaries (Swedish Ministry of Finance, 2000_[83]). All funds conduct active corporate governance by voting their shares, except the largest fund, AP7, which is restricted by law from voting its shares in Swedish companies (OECD, 2021_[17]). In Chile, the law establishes that pension funds' opinions and interests must be stated during shareholder meetings. Their influence over corporate management is strictly defined as indirect through the election of independent directors in the investee companies. Moreover, the law explicitly encourages pension funds to act with other minority shareholders when electing independent board members (Decree Law 3500, 1980_[84]).

The EU published in 2017 the Shareholder Rights Directive II which aims to boost long-term engagement of institutional investors and asset managers. The amended rules require that investors operating in the EU "publicly disclose their engagement policy that describes how they integrate shareholder engagement in their investment strategy" and "how their engagement policy has been implemented, including a general description of voting behaviour, and explanation of the most significant votes and the use of proxy advisers". The rules adopt a "comply or explain" approach, hoping to shift the focus of institutional investors to a more long-term investment horizon and encourage them and asset managers to include social and environmental issues in their investment decisions. Moreover, asset managers have to report to their institutional clients how they performed against their mandate (EU, 2017_[85]).

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Annex A. Ownership information by jurisdiction

Table A A.1. Ownership by investor category as share of market capitalisation, end-2020

	Corporations		Public sector		Individuals			Institutional investors				
	Non- domestic	Domestic	Total	Non- domestic	Domestic	Total	Non- domestic	Domestic	Total	Non- domestic	Domestic	Total
Argentina	14%	11%	25%	0%	17%	17%	0%	17%	17%	10%	0%	10%
Australia	2%	3%	5%	2%	0%	2%	0%	6%	6%	16%	11%	27%
Austria	7%	14%	21%	4%	19%	23%	1%	5%	6%	15%	8%	23%
Belgium	12%	14%	26%	2%	2%	3%	0%	7%	7%	33%	2%	35%
Brazil	10%	19%	29%	3%	7%	10%	0%	8%	8%	17%	9%	27%
Bulgaria	68%	7%	75%	2%	0%	2%	0%	9%	9%	0%	1%	1%
Canada	2%	4%	6%	1%	2%	4%	0%	3%	4%	23%	24%	46%
Chile	18%	36%	54%	1%	0%	1%	0%	13%	13%	6%	6%	12%
China	2%	9%	12%	0%	29%	29%	1%	17%	18%	3%	8%	11%
Colombia	7%	25%	32%	1%	34%	35%	0%	3%	3%	6%	10%	16%
Croatia	48%	9%	57%	0%	17%	17%	0%	5%	5%	1%	9%	10%
Denmark	0%	9%	10%	2%	8%	10%	0%	2%	2%	27%	9%	36%
Estonia	4%	31%	35%	1%	16%	17%	0%	14%	14%	7%	4%	11%
Finland	1%	3%	5%	2%	15%	17%	0%	9%	9%	21%	10%	31%
France	5%	15%	20%	3%	4%	6%	1%	13%	14%	21%	6%	27%
Germany	4%	11%	15%	4%	3%	7%	1%	8%	10%	23%	7%	30%
Greece	16%	8%	25%	2%	9%	11%	0%	14%	14%	14%	2%	16%
Hong Kong (China)	19%	3%	22%	10%	1%	11%	11%	8%	19%	15%	3%	18%
Hungary	7%	14%	21%	2%	2%	5%	0%	5%	6%	26%	6%	32%
Iceland	0%	8%	9%	0%	1%	1%	1%	5%	7%	16%	51%	66%
India	9%	24%	33%	1%	11%	12%	0%	11%	11%	13%	9%	22%
Indonesia	17%	25%	43%	1%	15%	17%	1%	10%	10%	8%	1%	8%
Ireland	1%	5%	6%	3%	5%	8%	0%	4%	4%	48%	1%	49%
Israel	4%	15%	19%	1%	0%	1%	0%	19%	19%	14%	17%	31%
Italy	3%	10%	13%	3%	8%	11%	0%	11%	11%	25%	4%	29%
Japan	2%	20%	22%	2%	2%	3%	0%	6%	6%	15%	15%	30%
Korea	1%	22%	23%	2%	8%	10%	0%	10%	10%	15%	3%	18%
Lithuania	24%	3%	27%	4%	39%	43%	1%	9%	10%	2%	0%	2%
Mexico	14%	5%	19%	2%	0%	2%	0%	34%	34%	13%	7%	20%
Netherlands	14%	6%	20%	3%	0%	3%	1%	3%	4%	37%	3%	40%
New Zealand	1%	4%	6%	2%	17%	19%	0%	5%	5%	16%	5%	20%
Norway	4%	6%	10%	1%	28%	29%	2%	7%	9%	18%	12%	30%
Poland	14%	3%	17%	1%	13%	14%	2%	12%	14%	19%	16%	35%
Portugal	6%	30%	37%	12%	1%	13%	0%	9%	10%	21%	2%	22%
Romania	25%	5%	30%	2%	27%	28%	0%	2%	2%	7%	9%	16%
Russia	9%	9%	18%	3%	28%	31%	0%	17%	17%	10%	1%	11%
Saudi Arabia	1%	1%	2%	0%	87%	87%	0%	2%	2%	1%	0%	1%
Slovenia	5%	8%	14%	3%	31%	34%	0%	0%	0%	7%	1%	8%
South Africa	12%	8%	20%	3%	13%	15%	0%	3%	3%	19%	11%	31%
Spain	7%	6%	13%	4%	3%	7%	1%	15%	16%	24%	2%	25%
Sweden	2%	11%	12%	2%	4%	6%	1%	12%	12%	19%	19%	38%
Switzerland	1%	5%	6%	3%	3%	6%	1%	5%	6%	26%	6%	33%
Türkiye	13%	25%	38%	16%	9%	25%	0%	9%	9%	5%	4%	9%
United Kingdom	4%	2%	6%	5%	1%	6%	1%	2%	4%	32%	29%	60%
United States	2%	1%	3%	2%	1%	3%	1%	4%	6%	11%	57%	68%
United Otales	∠ /0	1 /0	J/0	∠ /0	1 /0	J/0	1 /0	1 /0	070	11/0	JI /0	0070

Table A A.2. Corporate ownership by listed companies as share of market capitalisation, end-2020

	By listed companies	By unlisted companies		
Argentina	15%	10%		
Australia	3%	2%		
Austria	13%	8%		
Belgium	14%	12%		
Brazil Brazil	19%	10%		
Bulgaria	2%	72%		
Canada	2%	4%		
Chile	38%	16%		
China	4%	8%		
Colombia	25%	7%		
Croatia	47%	10%		
enmark	2%	7%		
Estonia	4%	32%		
inland	1%	3%		
France	12%	8%		
Germany	11%	4%		
Greece	15%	10%		
Hong Kong (China)	16%	6%		
Hungary	13%	9%		
celand	3%	6%		
ndia	16%	18%		
ndonesia	24%	19%		
reland	0%	6%		
srael	11%	8%		
aly	5%	8%		
apan	18%	4%		
Korea	21%	2%		
ithuania	23%	5%		
1exico	17%	2%		
letherlands	17%	3%		
New Zealand	2%	3%		
Vorway	7%	3%		
Poland	14%	3%		
Portugal	28%	9%		
Romania	22%	8%		
Russia	12%	6%		
Saudi Arabia	1%	1%		
Slovenia	6%	7%		
South Africa	17%	3%		
pain	8%	5%		
Sweden	3%	10%		
Switzerland	3%	3%		
Fürkiye	25%	13%		
United Kingdom	2%	4%		
United States	2%	1%		

Table A A.3. Ownership concentration by the top 3 investors at the company level, end-2020

	Top 3 investors	Top 3 corporations	Top 3 public sector	Top 3 individuals	Top 3 institutional investors
Argentina	66.7%	31.7%	11.5%	22.2%	2.8%
Australia	34.2%	12.8%	0.9%	15.1%	14.0%
Austria	59.7%	25.0%	11.0%	16.5%	12.7%
Belgium	50.9%	21.3%	4.1%	17.2%	13.6%
Brazil	57.9%	23.8%	8.8%	16.9%	15.2%
Bulgaria	64.1%	39.3%	4.4%	18.6%	3.4%
Canada	36.1%	10.1%	1.4%	15.5%	12.6%
Chile	69.4%	51.3%	1.6%	15.7%	6.8%
China	52.7%	10.8%	16.1%	27.6%	4.4%
Colombia	69.2%	52.2%	10.3%	4.8%	9.3%
Croatia	75.3%	41.7%	13.9%	10.2%	15.4%
Denmark	45.4%	14.2%	3.3%	11.1%	21.7%
Estonia	56.8%	34.0%	11.0%	11.0%	6.3%
Finland	36.4%	11.6%	4.1%	16.8%	14.9%
France	57.2%	25.7%	4.4%	20.3%	12.9%
Germany	56.1%	23.3%	3.5%	22.1%	12.0%
Greece	61.2%	20.7%	8.7%	27.2%	7.2%
Hong Kong (China)	61.7%	18.1%	7.5%	34.7%	4.4%
Hungary	56.5%	26.3%	5.3%	19.5%	11.8%
Iceland	36.2%	11.9%	1.8%	6.9%	30.2%
India	55.0%	30.5%	7.5%	17.9%	7.9%
Indonesia	71.7%	46.5%	6.7%	18.4%	2.2%
Ireland	40.2%	13.9%	9.5%	6.8%	17.3%
Israel	60.4%	22.6%	0.4%	28.2%	16.4%
Italy	57.8%	25.9%	5.8%	22.0%	10.1%
Japan	41.2%	22.5%	0.9%	18.0%	8.2%
Lithuania	73.1%	20.7%	25.8%	28.7%	4.0%
Mexico	57.9%	15.3%	1.8%	32.3%	12.4%
Netherlands	42.4%	12.1%	1.5%	15.8%	20.1%
New Zealand	41.7%	14.0%	11.3%	12.8%	10.8%
Norway	47.2%	16.2%	5.1%	20.3%	15.4%
Poland	61.7%	19.1%	5.6%	26.0%	18.0%
Portugal	64.5%	43.7%	4.2%	16.3%	7.0%
Romania	65.7%	21.2%	17.4%	8.1%	22.7%
Russia	79.7%	32.0%	25.9%	18.3%	5.8%
Saudi Arabia	48.5%	20.0%	11.0%	17.2%	2.6%
Slovenia	52.8%	20.2%	29.4%	2.0%	4.8%
South Africa	45.2%	22.0%	11.0%	5.9%	15.3%
Korea	47.7%	21.7%	2.4%	23.4%	4.8%
Spain	51.1%	19.9%	3.2%	25.0%	11.1%
Sweden	38.9%	10.2%	4.5%	18.6%	17.3%
Switzerland	43.8%	12.1%	7.8%	19.9%	11.4%
Türkiye	66.7%	45.2%	4.5%	15.2%	3.7%
United Kingdom	37.4%	8.1%	1.3%	14.6%	22.6%
United States	34.2%	5.7%	1.2%	10.1%	23.5%

Table A A.4. Listed companies under state control, end-2020

	Market cap. of state controlled companies (USD million)	No. of listed companies under state control	Average state holdings	State controlled listed companies (share of total market capitalisation)	State controlled listed companies (share of total number of companies
Argentina	6 019	7	44%	27%	19%
Australia	7 636	3	48%	0%	0%
Austria	40 102	7	53%	32%	14%
Belgium	11 275	4	46%	3%	5%
Brazil	139 028	27	63%	15%	11%
Bulgaria	352	2	67%	2%	6%
Canada	31 951	7	34%	2%	1%
Chile	588	2	81%	0%	2%
China	5 434 950	773	50%	44%	26%
Colombia	42 660	4	75%	42%	12%
Croatia	6 931	9	55%	33%	22%
Denmark	93 078	2	45%	15%	2%
Estonia	904	2	51%	28%	20%
Finland	80 650	5	38%	25%	5%
France	124 056	11	47%	4%	3%
Germany	132 608	15	67%	6%	3%
Greece	9 228	9	45%	20%	16%
Hong Kong (China)	686 252	194	53%	15%	12%
	68	194	75%	0%	5%
Hungary Iceland	-	ı	0%	0%	0%
India	285 769	101	68%	11%	9%
				26%	
Indonesia	125 977	46	65%		9%
Ireland	6 051	2	73%	6%	9%
Israel	-	-	0%	0%	0%
Italy	72 313	11	53%	10%	6%
Japan	245 175	16	46%	4%	0%
Korea	54 178	16	54%	3%	1%
Lithuania	2 996	5	73%	57%	33%
Mexico	-	-	0%	0%	0%
Netherlands	-	-	0%	0%	0%
New Zealand	29 553	9	53%	24%	11%
Norway	133 434	6	54%	41%	4%
Poland	53 024	19	47%	31%	9%
Portugal	1 940	1	25%	2%	3%
Romania	7 224	8	59%	33%	27%
Russia	328 729	50	64%	52%	37%
Saudi Arabia	2 160 701	22	51%	93%	17%
Slovak Republic	-	-	0%	0%	0%
South Africa	10 495	6	34%	3%	4%
Spain	31 657	2	57%	5%	2%
Sweden	16 950	1	41%	2%	0%
Switzerland	75 616	18	57%	4%	9%
Türkiye	63 810	13	65%	29%	6%
United Kingdom	39 637	6	35%	1%	1%
United States	8 507	5	44%	0%	0%
Rest of the world	978 957	322			
Total	11 581 030	1769		11%	7%