

# **Evolution of Ownership and Control Around the World: The Changing Face of Capitalism<sup>1</sup>**

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## **Abstract**

This chapter documents the evolution of ownership and control of firms around the world over a hundred year period from the beginning of the 20<sup>th</sup> century to today. It records the substantial changes that have taken place in the nature of stock markets and contrasts these with the persistent patterns of ownership that are observed in many countries around the world. In particular, it documents the growth in dispersion in ownership that took place in many countries from the early part of the 20<sup>th</sup> century. It reports that this took place in the absence of formal systems of investor protection but in the presence of institutional developments that facilitated the building of trust between investors and firms. Contrary to the view that concentrations of ownership necessarily undermine the operation of equity markets by exploiting minority interests, the chapter argues that in many countries they played a central role not just in exercising control but also in promoting relations between investors and firms that were central to the development of their stock markets. In particular, concentrations of ownership in the hands of families may have been a source of public as well as private benefits. The chapter concludes by looking at recent changes and argues that these reinforce the long-run patterns of the relative decline of the UK and US stock markets, the continued decline of family firms in the UK, the growth of private equity and the emergence of new forms of concentrated shareholdings.

**Key words: Ownership, control, trust, stock markets**

**JEL classification: G32, G34, N20**

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## **1. Introduction**

Raghu Rajan and Luigi Zingales document the “Great Reversal” that has taken place in stock exchanges around the world. What were the dominant stock markets at the beginning of the 20<sup>th</sup> century were minnows by the end, and the new giants of the 21<sup>st</sup> century were pinpricks a century earlier. The rise and fall of stock markets is a fascinating phenomenon and contradicts the common perception that stock markets are a persistent distinguishing feature of countries’ financial systems.

Stock markets come and stock markets go but ownership goes on forever. In contrast to their owners, corporations have the potential to achieve immortality through their separate legal form, perpetual existence and permanent capital. They can retain their identity while their ownership transfers from one generation to the next. That makes the study of the evolution of ownership of the corporation a particularly interesting and important subject. It lies at the heart of understanding the emergence and development of our capitalist systems and it is critical to an appreciation of our corporate origins and destination.

This chapter is a study of the evolution of ownership and control around the world during the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> century. There are numerous histories of corporations over much longer periods but there are few that combine international comparisons with individual firm analyses. The reasons are few published data sets, inaccessible archives and incomplete records. And even where data are identifiable, their interpretation needs a sound appreciation of their relevant institutional and cultural context.

We have been involved in such analyses with many co-authors over several years and this paper draws together the evidence that has emerged from these studies and the many that other authors have written on similar and related topics. The chapter is focused on the interface between corporations and stock markets and the way in which this influences the governance and control of firms. It is not therefore concerned with financial markets per se or with corporations in their own right but with the intersection of the two.

We would suggest that it is this point of intersection that is particularly significant in understanding both the variety and nature of capitalism. Who owns and who controls corporations determine their values, purposes, operations and performance, and the benefits that different parties derive from them.

Section 1 of the paper summarizes what we know about the nature of stock markets at the beginning and end of the 20<sup>th</sup> century and the alternative theories that underpin these observations based on formal systems of regulation and law, and informal institutional arrangements to monitor and control agency problems of management and establish relations of trust between investors and the constituent parties to the firm. Section 2 examines the theoretical underpinnings of different stock markets. Sections 3, 4, 5 and 6 examine in detail the evolution of ownership and control in four countries – the UK, Germany, Japan and the US – during the 20<sup>th</sup> century. These four countries contrast what are conventionally classified as stock market and bank-oriented systems and countries with dispersed and concentrated ownership. Section 7 provides a perspective on ownership in the twentieth century for these four countries, and section 8 examines recent developments in these countries since the turn of the millennium. Section 9 summarizes the conclusions of the paper and draws out their policy implications.

What emerges is much more commonality in historical trends in ownership across countries than the marked variations in the development of stock markets would lead one to expect. There have been similar changes in ownership that persist over several decades. However, ownership is different from control. While there are similarities in ownership, there are marked differences in control. The controlling party varies significantly across countries and these differences are persistent across time.

To illustrate the distinction, the emergence of dispersed ownership in the UK was associated with a decline in family ownership and, over time, their elimination as controlling shareholders. In other countries, such as Germany and Japan, there has been a similar and in some cases more pronounced increase in the dispersal of ownership but with large shareholders, sometimes but not always families, retaining control.

Some countries' financial systems have been remarkably resilient to external shocks. Others have changed appreciably. In particular, attempts to reform the Japanese corporate sector in the post WW2 period demonstrate the complexity of imposing alien forms of corporate ownership. The resilience of ownership and control in the face of changing external circumstances reflects their deep rooted and intrinsic institutional and cultural origins.

There are many criteria by which the success and failure of alternative systems of ownership and control might be judged. One is the extent to which they promote the interests of shareholders and the willingness of shareholders to invest in companies. The evidence on this runs quite contrary to conventional wisdom. The UK and US are regarded as two of the world's most stock market oriented economies, which have adopted the most extensive protections of shareholder interests of late. However, from a corporate perspective, stock markets enjoyed greater success in terms of shareholder participation in the earlier rather than the latter parts of the 20<sup>th</sup> century and in non-Anglo American countries rather than in the UK and the US.

Indeed, while we were revelling in the success of stock markets in promoting the engagement of dispersed small investors, we were failing to observe what Michael Jensen 30 years ago called "the eclipse of the public corporation".<sup>2</sup> We have seen Jensen's prognostications come to pass with the substitution of publicly listed companies by private equity. The question is whether stock markets can re-energize themselves through strengthening their governance arrangements by, for example, promoting the emergence of institutional investors with substantial large block of shares that are managed actively in contrast to the largely passive disengaged conduct of index funds.

While there have been repeated attempts to identify dominant forms of corporate governance, they invariably have proven incorrect. In the 1980's the Japanese keiretsu were regarded as the most successful corporate system in the world as their values increased to a point where they could steadily acquire large chunks of the rest of the world's corporate sector.

Then with the bursting of the Japanese stock market bubble in the 1990s and the banking crisis leading to the lost decade, attention focused on the US and its success in promoting the emergence of internet-based companies. However, with the bursting of the dotcom bubble in the early 2000s, US corporate governance looked less impressive and for a brief period the

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<sup>2</sup> Jensen, Michael (1989), "Eclipse of the Public Corporation", *Harvard Business Review*, September-October.

UK held the dominant position, at least until the financial crisis of 2008 and its subsequent corporate scandals.

It is unclear which country is now regarded as having the model corporate governance system, with some of the Scandinavian countries being viewed as combining the right balance of commercial and social interests. However, past experience suggests that this is unlikely to persist and it is more probable that there is no such thing as a model form of ownership and control of companies or, if there is, then it is likely to prove transient and suited to the needs of an economy at a particular point in time. Instead, existing evidence points towards the benefits of diversity rather than uniformity of corporate form.

This suggests that the focus of policy towards the design of corporate governance should be on promoting diversity, not harmonization on a particular type of corporate system. To date regulation has been highly prescriptive in, for example, strengthening shareholder rights. This may have advantages for investors but comes at the expense of the interests of the corporate sector. For example, the types of restrictions that exist in some countries on the use of multiple classes of shares may have discouraged active engagement by controlling shareholders in corporate governance and given rise to the phenomenon which Mark Roe describes as “strong managers, weak owners”.<sup>3</sup>

More generally, care needs to be taken that policy does not have unintended consequences in impeding the financing or governance of companies. For example, regulation of pension funds and insurance companies has had the effect of discouraging institutions from investing in certain classes of financial assets, most notably equities. A principle of policy neutrality, in the sense of avoiding distorting the ownership and control structure of firms, may be a useful basis for evaluating and judging regulation.

Policy can, however, go further in promoting diversity of corporate form through facilitating the adoption of different types of corporate structure. For example, the introduction of the public benefit corporation in the US has introduced the possibility of companies establishing corporate forms that emphasize social and public purposes of companies. A policy of harmonizing on a particular system of shareholder primacy should give way to one that encourages the adoption of multiple and competing forms of corporate ownership. The history of the evolution of ownership and control over the last hundred years suggests that many flowers should be encouraged to bloom and fade over the next hundred years. The winners may be the countries that choose not to choose winners.

## **2. Stock Markets Around the World in the 20<sup>th</sup> Century and Their Alternative Theoretical Underpinnings**

Let us start with a simple fact. Figure 1 records that the average number of listed companies in the world per million of the world’s population is around 10. It has been at that level fairly consistently over the last 25 years since 1990. Germany has had slightly fewer listed companies than the world average over that period. In contrast, the UK and US have had substantially more, approximately 30 per million of population in 1990. However, over the last 25 years, they have experienced a marked decline to close at the world average by the beginning of this decade. Looking at the last 25 years through the lens of the UK and the US,

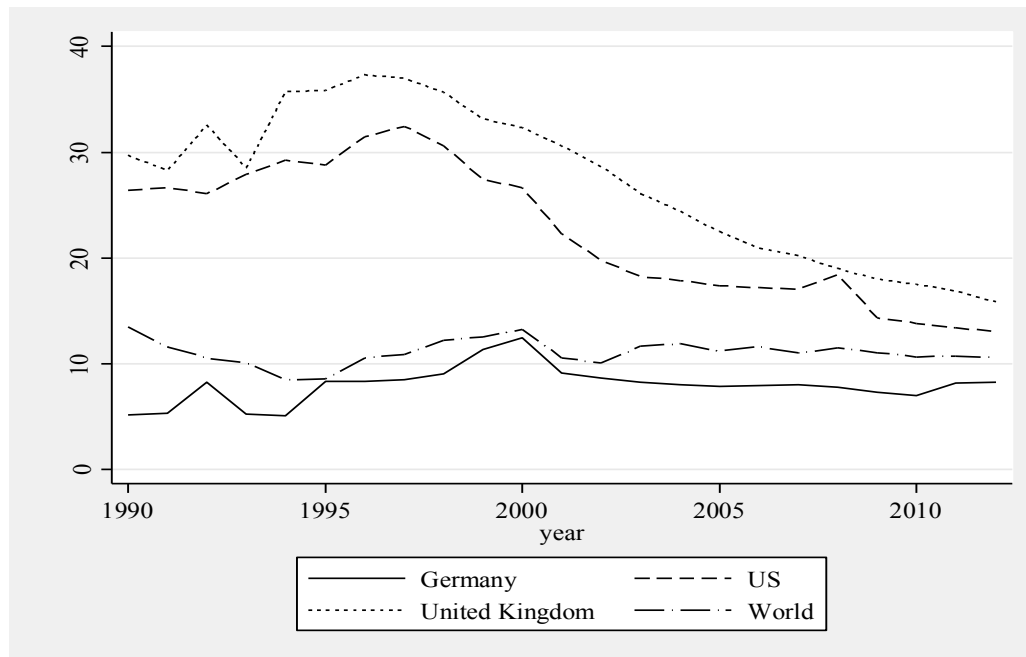
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<sup>3</sup> Roe, Mark (1996), *Strong Managers, Weak Owners: The Political Roots of American Corporate Finance*, Princeton: Princeton University Press.

Michael Jensen's observation on the eclipse of the public corporation appears to have come to pass.

**Figure 1. The number of listed firms for Germany, the U.K., the U.S. and world stock markets: 1990-2012.**

The figure shows the number of domestically incorporated companies listed on a country's stock exchange divided by the country's population in millions. Data for the U.K. are for the main (or premium) stock market. Investment companies, mutual funds and other investment vehicles are excluded.



Source: Data taken from the London Stock Exchange and the World Bank.

But now put these statistics in the context of a much larger and longer set of countries and years, in fact 24 countries over 87 years from near the beginning of the 20<sup>th</sup> century to the end, as shown in Table 1. One striking fact is that 17 of the 24 countries had at least as many listed companies per million of population before WW1 in 1913 as the world average 100 years later. The second striking fact is that the countries with the largest number of listed companies were Australia, Belgium, the Netherlands, Switzerland and the UK. By the end of the century, Belgium and the Netherlands had withered to close to today's world average, whereas Australia, Switzerland and the UK remained well above the global average. So the decline in the public corporation set in much earlier than the 1980s in some countries but not everywhere. In fact, in some countries the reverse was true and stock markets expanded appreciably, in particular in two areas – North America (Canada and the US) and Japan.

**Table 1. Size of Stock Markets During the 20<sup>th</sup> Century**

This table records the number of domestic listed companies per million of population for a selection of countries for the period 1913 to 1999.

Country	1913	1929	1938	1950	1960	1970	1980	1990	1999
Argentina	15.29				26.78	15.58	9.85	5.54	3.63
Australia	61.74	76.92	84.88	122.05	93.72		68.53	63.89	64.91
Austria	38.72	42.62	30.06	16.29	13.34	12.05	8.74	12.57	12.02
Belgium	108.7			55.09	42.60	38.39	22.85	18.50	14.33
Brazil	12.43	9.85	5.17	41.02		4.32	4.06	3.86	3.18
Canada	14.65			66.61	62.43	55.20	50.52	42.99	130.13
Chile	20.62				44.52	38.72	23.78	16.32	19.03
Cuba	12.69								
Denmark	38.22	54.86	85.25	81.28	75.75	52.14	42.54	50.18	44.80
Egypt	16.58	13.44			10.58	1.76		11.01	13.71
France	13.29		24.64	26.20	18.34	15.98	13.99	15.05	
Germany	27.96	19.73	10.91	13.22	11.33	9.07	7.46	6.53	12.74
India	0.82	1.81	2.59	3.13	0.00	0.00	3.11	7.31	6.48
Italy	6.32	6.40	3.11	2.70	2.79	2.46	2.36	3.82	4.54
Japan	7.53	16.65	19.48	9.15	8.35	15.19	14.80	16.76	20.00
Netherlands	65.87	95.48			21.42	15.95	15.12	17.39	15.14
Norway	33.51	41.50	45.98	37.98	37.10	37.90	44.53	44.80	49.62
Russia	2.02								0.81
South Africa				69.05	60.93	51.39	42.48	20.75	15.86
Spain							25.20	10.96	22.25
Sweden	20.64	16.36	14.93	12.83	14.04	13.18	12.39	14.14	31.46
Switzerland	61.53	67.80	55.46	52.47	51.74	58.72	78.03	49.61	34.01
UK	47.06						47.22	29.63	31.11
US	4.75	9.72	9.16	8.94	9.33	11.48	23.11	26.41	28.88

Source: Rajan, Raghu and Luigi Zingales (2003) "The Great Reversals: The Politics of Financial Development in the 20th Century", *Journal of Financial Economics* 69, 5-50.

In terms of market capitalization (Table 2), at the beginning of the century Cuba had the most valuable stock market relative to its GDP and the US the smallest. The picture by the end of the century looked very different with the Netherlands, Switzerland and the UK all having stock market values that were more than twice their GDP.

**Table 2. Time series of size of stock markets in various countries during the 20<sup>th</sup> Century**

This table records the aggregate market capitalization of domestic companies on stock markets divided by the GDP of their respective countries.

Country	1913	1929	1938	1950	1960	1970	1980	1990	1999
Argentina	0.17				0.05	0.03	0.11		0.15
Australia	0.39	0.50	0.91	0.75	0.94	0.76	0.38	0.37	1.13
Austria	0.76					0.09	0.03	0.17	0.17
Belgium	0.99	1.31			0.32	0.23	0.09	0.31	0.82
Brazil	0.25						0.05	0.08	0.45
Canada	0.74		1.00	0.57	1.59	1.75	0.46	1.22	1.22
Chile	0.17				0.12	0.00	0.34	0.50	1.05
Cuba	2.19								
Denmark	0.36	0.17	0.25	0.10	0.14	0.17	0.09	0.67	0.67
Egypt	1.09				0.16		0.01	0.06	0.29
France	0.78		0.19	0.08	0.28	0.16	0.09	0.24	1.17
Germany	0.44	0.35	0.18	0.15	0.35	0.16	0.09	0.20	0.67
India	0.02	0.07	0.07	0.07	0.07	0.06	0.05	0.16	0.46
Italy	0.17	0.23	0.26	0.07	0.42	0.14	0.07	0.13	0.68
Japan	0.49	1.20	1.81	0.05	0.36	0.23	0.33	1.64	0.95
Netherlands	0.56		0.74	0.25	0.67	0.42	0.19	0.50	2.03
Norway	0.16	0.22	0.18	0.21	0.26	0.23	0.54	0.23	0.70
Russia	0.18								0.11
South Africa				0.68	0.91	1.97	1.23	1.33	1.20
Spain							0.17	0.41	0.69
Sweden	0.47	0.41	0.30	0.18	0.24	0.14	0.11	0.39	1.77
Switzerland	0.58					0.50	0.44	1.93	3.23
UK	1.09	1.38	1.14	0.77	1.06	1.63	0.38	0.81	2.25
US	0.39	0.75	0.56	0.33	0.61	0.66	0.46	0.54	1.52

Source: Rajan, Raghuram and Luigi Zingales (2003), *op. cit.*

What we have therefore observed are long waves of stock market development: long-run decline in some markets but appreciable growth elsewhere followed by reversal over the last few years, in particular in the UK and the US. The first hypothesis that might therefore be put forward is that stock markets are characterized by mean reversion – they revert over time towards the global average. But if that is the case then it is in general very slow and in some countries, such as Australia and Canada, barely perceptible.

The second possibility is that there are some underlying determinants of the evolutionary process. One that has received a great deal of attention is that the legal origins of countries are a fundamental influence on the development of financial markets in general. In an influential set of articles, La Porta, Lopez-de-Silanes, Shleifer, and Vishny ((1997), (1998), (1999), (2000)) argue that the successful development of financial systems in different countries depends on legal origins and regulation for the protection of investors.<sup>4</sup> Where the

<sup>4</sup> La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 1997. Legal determinants of external finance. *Journal of Finance* 52, 1131-1150; La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 1998. Law and finance. *Journal of Political Economy* 101, 678-709; La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer, 1999. Corporate ownership around the

law provides strong protection then minorities can invest with confidence; where the law offers little protection then investors do not invest or seek protection through other means, for example by taking large stakes in companies. The structure of financial systems is therefore a product of the legal systems within which they operate, for example explaining the comparatively large or growing size of stock markets in countries such as Australia, Canada, the UK and US with their strong common law investor protection systems and the relatively small or declining stock markets in Belgium, Germany and the Netherlands with their comparatively weak civil law investor protection.

An alternative set of hypotheses is based on institutional explanations. These are most closely associated with the work of Douglass North who argues that the self-interested conduct of individuals is conditioned by institutions, with both formal rules and informal norms, whose evolution over time is constrained by the complementarities and externalities that exist between them.<sup>5</sup> Law and regulation are part of the institutional framework but it also encompasses social norms and conventions.

There are many explanations for the emergence of financial intermediaries of which transaction costs, information, expertise and taxation are the most obvious. According to these explanations, institutions economize on the costs that individual investors incur in monitoring and controlling the companies in which they invest.<sup>6</sup> Different institutional arrangements across countries therefore represent alternative ways of controlling the agency problems of delegated management ranging from the exercise of control by dominant family members in some countries to governance by mutual funds, pension funds and life insurance companies, or most recently, hedge funds and private equity firms, elsewhere.<sup>7</sup>

An alternative theory to the monitoring and control story is that institutions provide the commitment that is required to establish relations between individual investors on the one hand and companies and their constituent parties, such as customers, employees, suppliers

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world. *Journal of Finance* 54, 471-517; . La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, Investor protection and corporate governance (2000), *Journal of Financial Economics*, 58, 3-27.

<sup>5</sup> North, Douglass C. "Economic performance through time." *The American Economic Review* 84.3 (1994): 359-368, In an earlier paper with Weingast, North examines how in seventeenth century England, following the Glorious Revolution, Parliament sought to pre-commit itself and the Crown not to exercise arbitrary confiscatory powers and 'make credible the government's ability to honour its commitments'. They document the financial consequences of these constitutional reforms that took the form of a far larger and less costly market for government borrowing. Their work provides an early attempt to relate the evolution of institutions and investor protection to the development of financial markets: See North, Douglass C. and Weingast, Barry R. *The Journal of Economic History* 4, December (1989): 803-832.

<sup>6</sup> Two sets of theories that are particularly relevant to this are the agency theories of aligning interests of management and shareholders through contracts and incentives (for example Alchian, Armen, and Harold Demsetz (1972), "Production, Information Costs, and Economic Organization." *The American Economic Review*, 62, 777-795., and Jensen, Michael and William Meckling (1976) "Theory of the firm: Managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, 3, 305-360 and theories of the relation of ownership to the exercise of control in the allocation of corporate assets and investments (for example, Grossman, Sanford, and Oliver Hart (1986), "The costs and benefits of ownership: A theory of vertical and lateral integration." *Journal of Political Economy*, 94, 691-719. and Hart, Oliver, and John Moore (1990), "Property Rights and the Nature of the Firm." *Journal of Political Economy*, 98, 1119-1158.,

<sup>7</sup> See a working paper by Taro Niggemann and Jörg Rocholl, Pension Funding and Capital Market Development (2010), House of Finance, Goethe University Frankfurt; available at SSRN. They discuss the important role played by pension funds in the development of stock markets and bond markets in 57 countries.



and local communities, on the other. Trust and the trustworthiness of participants in market and economic transactions play an important role in this.<sup>8</sup>

Historically families established long-run relations with their companies, frequently over several generations of family members, but as they sold their shares to smaller individual investors to fund their growth and cash out, the relationships became severed. A hundred years ago, individual shareholders held a majority of shares in companies investing directly themselves, but by the end of the century financial institutions, such as mutual funds, pension funds and life insurance companies, had emerged as intermediaries between the individual investors and the companies in which they invested. A variety of institutions therefore developed to preserve relations of trust that a large number of individual investors on their own were unable to provide. In the following sections, we will refer to banks, business coordinators, families and local stock exchanges as acting as “institutions of trust” in different parts of the world.

This chapter examines these alternative institutional arrangements as explanations of the evolution of financial markets over the 20<sup>th</sup> century and in the first two decades of the 21<sup>st</sup> century. It contrasts formal legal and regulatory rules with institutions that promote the exercise of control by investors to address agency problems in management and those that seek to establish relations of trust between the different parties to the firm. It examines the emergence of these formal and informal institutional arrangements and their consequence for the development of equity markets in four countries – the UK, Germany, Japan and the US. These four countries have been chosen, firstly because they span the different types of legal systems mentioned above, namely common law in the case of the UK and US and civil law in Germany and Japan and, secondly, because they have very different institutional arrangements that are conventionally described as bank oriented in Germany and Japan and market oriented in the UK and US. In fact we will discover by looking at these four countries in a long-run evolutionary context that their institutional form is very much richer than this conventional description would suggest.

### 3. The UK<sup>9</sup>

By some criteria the UK had even more flourishing stock markets at the start of the century than at the end. It certainly had more of them. In the first half of the century from 1900 to 1950, not only was there a flourishing London Stock Exchange but there were also more than 19 provincial exchanges, which specialized in particular industries. For example the Birmingham exchange was important for cycle and rubber tube stocks, Sheffield for iron, coal and steel and Bradford for wool. Thomas (1973) describes how “the number of commercial and industrial companies quoted in the Manchester stock exchange list increased from 70 in 1885 to nearly 220 in 1906. Most of these were small companies with capital ranging from £50,000 to £200,000” and “by the mid 1880s Sheffield, along with Oldham, were one of the two most important centres of joint stock in the country, with 44 companies, with a paid up capital of £12 million.”<sup>10</sup>

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8 North, Douglass and Barry Weingast (1989) "Constitutions and commitment: the evolution of institutions governing public choice in seventeenth-century England." *Journal of Economic History* 49, 803-832 and Colin Mayer (2013), *Firm Commitment: Why the Corporation is Failing Us and How to Restore Trust in It*, Oxford: Oxford University Press.

<sup>9</sup> Sections 3, 4 and 5 of this article on the UK, Germany and Japan draw on Mayer, Colin (2015), “Economic Development, Financial Systems and the Law” in Niahm Moloney, Eilis Ferran and Jennifer Payne (eds), *The Oxford Handbook of Financial Regulation*, Oxford: Oxford University Press.

<sup>10</sup> See Thomas, William A., 1973. *The provincial stock exchanges*. Frank Cass, London, see pages 133 and 124.

One of the features of stock markets around the world today is the modest amount of finance that in aggregate they raise for their corporate sectors, even in countries with large stock markets such as the UK and US.<sup>11</sup> However, stock markets are important sources of finance for two purposes: firstly for financing small rapidly expanding firms and, secondly, for funding acquisitions by large firms. Equity issues for internal investment are commonplace in recently listed companies and by larger firms acquiring others. To establish the financing patterns of companies early in the 20<sup>th</sup> century Franks, Mayer and Rossi (2009) collected data on companies that were incorporated in Britain at the start of the 20<sup>th</sup> century and are still in existence today.<sup>12</sup> They looked at how much equity they issued and in what form. The answer was that large issues were made in the form of ordinary equity and some as preference shares that receive dividends ahead of ordinary shareholders. Even at the beginning of the 20<sup>th</sup> century there was little evidence of the feature of many countries today, namely the issue of more than one class of ordinary shares (dual class shares); however, firms did issue a great deal of ordinary shares.

Strikingly, the main purpose to which equity issues were put at the beginning of the 20<sup>th</sup> century is the same as it is today – acquisitions. Firms grew rapidly through acquiring other companies and issued equity to finance the transactions. So acquisitions have been an important component of the growth of UK firms for more than a century and the existence of a large and vibrant stock market has contributed to this. It is an interesting question why this dilution of family ownership did not occur in countries, such as France and Germany. One reason is that takeover markets were much less well developed.<sup>13</sup>

What about ownership? When did this become dispersed? Franks, Mayer and Rossi (2009) examined a sample of companies incorporated at the start of the 20<sup>th</sup> century and examined the rate of increase at which their ownership became dispersed, defined as the minimum number of shareholders required to exercise control, set as a certain percentage (for example, 25%) of their equity. What they found was striking. Table 3 shows that the rate at which ownership of firms at the beginning of the 20<sup>th</sup> century became dispersed was rapid and very similar to that in the second half of the century. The main reason for the rapid dispersion was not so much that directors and founding families sold their initial shareholdings but that their shares were diluted through takeovers. What happened and continued to happen throughout the 20<sup>th</sup> century was that firms issued shares to acquire others and in the process they diluted the shareholding of their directors and founders. For example, if a family initially owned all one million shares in a company and issued another one million to purchase another firm then the family's shareholding declined from 100% to 50%. So the dispersed ownership of the UK is not a recent phenomenon. It set in early in the 20<sup>th</sup> century and persisted throughout

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<sup>11</sup> The Kay Review (Kay, 2012) refers to the changing nature of British Industry and its financing needs. He states: *"Equity markets have not been an important source of capital for new investment in British business for many years. Large UK companies are self-financing – the cash flow they obtain from operations through profits and depreciation is more than sufficient for their investment needs. This is true of the quoted company sector as a whole and of a large majority of companies within it"*.

<sup>12</sup> Julian Franks, Colin Mayer and Stefano Rossi (2009), Ownership: Evolution and Regulation, *The Review of Financial Studies*, 22 (10): 4009-4056.

<sup>13</sup> Even so, UK families could have preserved their control by constructing pyramids as they did on the Continent, but they did not. However, pyramids were in evidence in the colonies, e.g. Canada. It is possible that the lack of development of institutions of trust, as in the UK, created the incentives for these control mechanisms.

and it has consistently been associated with rapid growth through acquisitions. There is no evidence of the UK stock market having undergone a fundamental shift during the 20<sup>th</sup> century.

The stability of the UK financial system during the 20<sup>th</sup> century stands in marked contrast to its regulation. At the beginning of the century investor protection in the U.K. was very weak and UK stock markets were largely unregulated. According to an index of anti-director rights, compiled by La Porta et al (1998) the UK scored very low, 1 out of a possible 6, about the same score as Germany in 1990. In contrast to the view that common law is associated with strong investor protection, the common law in England contributed directly to the lack of protection of minorities. In a famous case in 1843, *Foss v. Harbottle*, a shareholder sued directors of a company for misuse of company funds.<sup>14</sup>

**Table 3 Time series of dispersion of ownership for the UK**

This table reports the change in ownership in 40 companies in the UK that were in continual existence over the whole of the 20<sup>th</sup> century in Panel A and a second sample of 20 companies that were established in 1960 and were in continual existence until 2000.

	All Shareholders		Directors		Outsiders		No. of Observations
	Mean	Median	Mean	Frequency	Mean	Frequency	
Panel A: Evolution of Ownership, 1900 Sample							
1900	2.35	1	1.77	39	15.4	10	40
1910	6.93	1.5	2.8	30	19.15	26	40
1920	9.92	2	1.96	26	23.93	27	37
1930	14.78	3.5	2.24	21	28.93	28	36
1940	14.84	5	2	13	22	23	32
1950	21.13	7	3.17	12	27.25	24	30
1960	24.83	10	4	8	31.65	20	24
1970	51.95	11	3	8	57.57	21	23
1980	57.86	8	1.8	5	61.24	21	22
1990	45.76	4	2	2	48.33	21	21
2000	48.45	3	1.67	3	53.58	19	20
Mean	22.49	2.33	35.12				
Panel B: Evolution of Ownership, 1960 Sample							
1960	1.1	1	1.1	20	0	0	20
1970	23.55	2	1.23	13	23.25	16	20
1980	15.05	1	2.08	13	20.12	17	20
1990	10.1	4.5	1.5	8	10.9	20	20
2000	3.85	3	1.4	5	5.25	20	20
Mean	9.09	1.42	14.4				

Source: Julian Franks, Colin Mayer and Stefano Rossi (2009), Ownership: Evolution and Regulation, *The Review of Financial Studies*, 22 (10): 4009-4056.

The court found in favour of the directors because their actions had been approved by a majority of shareholders. As Lord Justice Hoffman said: "The emancipation of minority shareholders is a recent event. For most of the first century of company law they were

<sup>14</sup> 67 ER 189, (1843) 2 Hare 46

virtually defenceless, kept in cowed submission by a fire-breathing and possibly multiple-headed dragon called Foss vs. Harbottle. Only in exceptional cases could they claim protection of the court".<sup>15</sup> Furthermore, in the absence of specific investor protection, common law did not always provide efficient investor protection. For example, in a legal case, *Re Brazilian Rubber Plantations [1911]* and *City Equitable Fire Insurance Company*, the court upheld clauses in the company's charter that limited directors' liability even when there was wilful neglect or dereliction of duties.<sup>16</sup> In this respect, the differences between common law and civil law may not always have matched our preconceptions.<sup>17</sup>

The dominance of the strict majority was enshrined in English law and remained so for 100 years until landmark legislation was passed in 1948 requiring substantially increased disclosure from listed companies and empowering 10% or more of shareholders to call extra ordinary meetings if dissatisfied with directors' actions. These provisions marked a step change in La Porta et al's measure of shareholder rights raising it from 1 at the beginning of the century to 3 in 1948. With the passage of legislation in 1980-1985 it rose further to a score of 5, where it remains today.

Thus during the 20<sup>th</sup> century there was a substantial increase in investor protection from a virtual absence in the first half to a high degree of protection by the 1980s. But despite this pronounced shift there was no change in the importance of stock markets in terms of their size or usage by the corporate sector. This runs quite counter to the law and finance theories that associate strong investor protection with financial market activity. The UK operated a large and vibrant stock market for the first half of the 20<sup>th</sup> century without investor protection. For those who regard regulation as a pre-requisite for market development, this is surprising. How could stock markets have flourished in the UK in the absence of investor protection? This should not be taken to mean that investor protection cannot contribute to stock market development. It maybe that stock market development might have developed faster with improved investor protection. Moreover, even if it were the case that markets developed adequately on the back of informal contracting based upon trust, it might be that regulation becomes necessary in larger more established, global markets.<sup>18</sup>

One piece of evidence in this puzzle is the orderly way in which some aspects of stock markets operated. The takeover market in the UK is now conducted according to a set of self-regulatory rules known as the Takeover Code overseen by the Takeover Panel.<sup>19</sup> These stipulate how takeovers should be conducted and in particular lay down the basis on which the shareholders of the target firm should be treated. One of these rules states that all shareholders in the target firm should be offered the same price for each of their shares, referred to as 'the equal price rule'. This is designed to avoid a practice that is common in

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<sup>15</sup> Foreword to Hollington, Robin, 1999, *Minority Shareholders' Rights*. Sweet and Maxwell.

<sup>16</sup> Cited in Julian Franks, Colin Mayer and Stefano Rossi (2009) *op. cit.*

<sup>17</sup> For historical evidence on investor protection and financial development over the long run that challenges the law and finance hypothesis, see Aldo Mussacchio & John D. Turner (2013), *Does the law and finance hypothesis pass the test of history?*, *Business History*, 55 4: 524-542.

<sup>18</sup> See Franklin Allen, Jun "QJ" Qian, and Chenying Zhang, *An Alternative View on Law, Institutions, Finance and Growth*, working paper June 2011, Boston College, Chestnut Hill, MA 02467.

<sup>19</sup> The Takeover Panel is designated as the supervisory authority responsible for performing certain regulatory functions in relation to takeovers pursuant to the Directive on Takeover Bids (2004/25/EC). Its statutory functions are set out in Chapter 1 of Part 28 of the Companies Act 2006.

many countries by which some, namely large shareholders that own controlling blocks, are offered one price and small minority shareholders are offered another, lower one.<sup>20</sup>

These rules were introduced at the end of the 1960s. Before that, the takeover market was essentially unregulated. Directors of acquiring firms therefore could in principle have followed the practice of gaining control of firms by purchasing blocks of shares at one price and offering other shareholders a lower price. This is clearly cheaper than paying everyone the same price. They could have done this but they did not. Repeatedly they offered all shareholders the same price and also sold their own shares at the same price as was offered to other shareholders. Franks, Mayer and Rossi (2005) report that out of 33 acquisitions that occurred between 1919 and 1939 there was not a single case of price discrimination and in virtually every case almost all of the shares in the acquired company were purchased.<sup>21</sup> In other words a law of one price prevailed without a law of one price being enacted. It occurred by convention rather than regulation.

Why? One clue comes from the observation above on the importance of local stock markets. At the beginning of the century companies were very dependent on local shareholders to raise finance, in particular for acquisitions. Their reputation amongst local investors was critically important to allow access to external sources of finance. Directors were keen to uphold the interests of their shareholders to allow them to access finance for future expansion. In other words their dependence on local investors for future expansion acted as a commitment device and local stock markets as institutions of trust.

Provincial stock markets played an important role in promoting new issues. Writing in 1921, one author noted that “local knowledge on the part of the investor both of the business reputation of the vendor and the prospects of his undertaking would do a good deal to eliminate dishonest promotion and ensure that securities were sold at fair prices fairly near their investment values.”<sup>22</sup> Concentrating ownership among local investors was recognized as a method of reducing information problems as well as fraud. As one stockbroker put it, “the securities are rarely sold by means of a prospectus and are not underwritten, they are placed by private negotiation among local people who understand the [cotton] trade”.<sup>23</sup> As a result, securities were traded in the city in which most investors resided. For example, shareholders in Manchester were anxious that the shares of Arthur Keen’s Patent Nut and Bolt Co. of Birmingham should be listed in Manchester where most of the shareholders lived. The reason was that proximity between brokers and directors was thought to create better-informed markets. In 1920, shares in Guest, Keen and Nettlefolds were quoted in Birmingham, Bristol, Cardiff, Edinburgh, Glasgow, Liverpool, Manchester and Sheffield.

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<sup>20</sup> An example of how regulation currently affects the acquisition process was Glencore’s bid for Xstrata. Glencore could not vote its stake of 34% in the acquisition for Xstrata and, because independent directors required the bid to be structured as a “scheme of arrangement”, it needed 75% of the votes cast, excluding their own stake. A second rule is that a majority by number of shareholders must vote for the merger. Likewise in a bid for Sky by Fox, a company controlled by Murdoch and which had a 39% stake in Sky before the bid, the independent directors who represent the non-blockholders have insisted that this bid also be structured as a scheme of arrangement requiring that 75% of the independent votes be cast in favour of the acquisition.

<sup>21</sup> Franks, Julian, Colin Mayer, and Stefano Rossi. "Spending less time with the family: The decline of family ownership in the United Kingdom." *A history of corporate governance around the world: Family business groups to professional managers*. University of Chicago Press, 2005. Editor Randall K. Morck: 581-612.

<sup>22</sup> Frederick Lavington (1921), *The English Capital Market*, Methuen: London.

<sup>23</sup> Cited in Lavington, *op. cit.*

GKN formally listed on the London Stock Exchange in June 1946. By then the directors owned a negligible stake and the largest shareholder of the period was the Royal Bank of Scotland with 2.4% of issued ordinary shares. In the second half of the century, asset managers including the Prudential Assurance, Norwich Union Life Insurance, Schroder Investment Management, and Scottish Widows Investment Management among others alternated as the largest shareholders with stakes varying from 3% to 5% of issued equity capital.

The picture that emerges from GKN is of a corporation whose shares were traded on local provincial exchanges, expanded rapidly through acquisitions, broadened its shareholder base both numerically and geographically in the process, and, by the beginning of the second half of the twentieth century, was widely held primarily by institutional shareholders. Its experience was replicated in another company that will shortly feature prominently in this chapter. As firms expanded through acquisition their activities developed beyond their hometowns. Their shareholder base also expanded and was no longer geographically concentrated. The need for more formal systems of information disclosure through company accounts and listing rules became more acute. The result was the 1948 Companies Act and the London Stock Exchange Listing rules that together substantially strengthened information disclosure.

Regulation not only responded to changing patterns of ownership and financing of firms but in turn influenced subsequent developments. In the first half of the 19<sup>th</sup> century there were a large number of small local banks in Britain that were closely involved in the financing of firms. However, the existence of small banks empowered to engage in note issuance caused serious stability problems. Between 1809 and 1830 there were 311 bankruptcies of local banks. Large banks are less exposed to local market conditions and have more resources available to them than small banks. Encouraged by the Bank of England, banks withdrew from the illiquid investments in which they were engaged and began to spread their activities geographically frequently through mergers. A convenient relation emerged by which the clearing banks faced little competition and the Bank of England little financial failure. As a consequence, today there is a high level of concentration of corporate lending in Britain and a noticeable absence of local banking.

Similarly, changes in corporate law in Britain in the middle of the 20<sup>th</sup> century prompted a wave of hostile takeovers during the 1950s and 1960s, particularly in response to the greater disclosure of accounting information on the book value of companies. For a brief period of time during the 1950's and 1960's, the unregulated takeover market encouraged Continental European style ownership patterns with dual classes of shares as companies sought protection from the emerging hostile takeover market. But these takeover defences met with stiff opposition from an influential quarter – the institutional investors and the London Stock Exchange. They were concerned about the interference with the takeover process, the ability of management to entrench itself behind takeover defences and the withdrawal of their voting rights. Under pressure from the institutions, the Stock Exchange made it known that it disapproved of the use of dual class shares and would not permit their use for companies that wished to raise new equity issues. The intervention of the institutions and the Stock Exchange proved decisive and during the 1970's and 1980's companies steadily withdrew dual class shares.<sup>24</sup> These prompted calls for the hostile takeover market to be regulated and in response

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<sup>24</sup> In 1965 about 15 percent of listed companies on the London Stock Exchange had dual class shares, voting and non voting shares. By the 1990s virtually all of these companies had enfranchised the non-voting shares thereby creating a single class of voting shares.

the Takeover Panel was established and the Takeover Code introduced at the end of the 1960s. Much of this code has focused on regulating takeover procedures and protecting investors, particularly small investors.

It is therefore important to view regulatory changes as at least in part as a response to emerging crises and in turn a determinant of the subsequent patterns of ownership and financing of corporations.

#### 4. Germany

Ownership of German listed companies is stratified into two parts: a substantial proportion is highly concentrated in the hands of families and other companies, while the other part has largely dispersed ownership just like the US and the UK. Franks, Mayer and Wagner (2006) provide the first long-run study of ownership and control of German corporations by assembling data on the ownership and financing of firms spanning almost a century from 1860 to 1950.<sup>25</sup> At first sight, German financial markets at the beginning of the 20<sup>th</sup> century looked remarkably similar to their UK counterparts. There were a large number of firms listed on German stock markets (Table 4) and firms raised large amounts of equity finance (Figure 2 and Panel A of Table 5)). This runs counter to the conventional view of Germany as a bank oriented financial system. Firms raised little finance from banks and surprisingly large amounts from the stock market.

**Table 4. Number of listed companies on the Berlin stock market for the period 1870-2000**

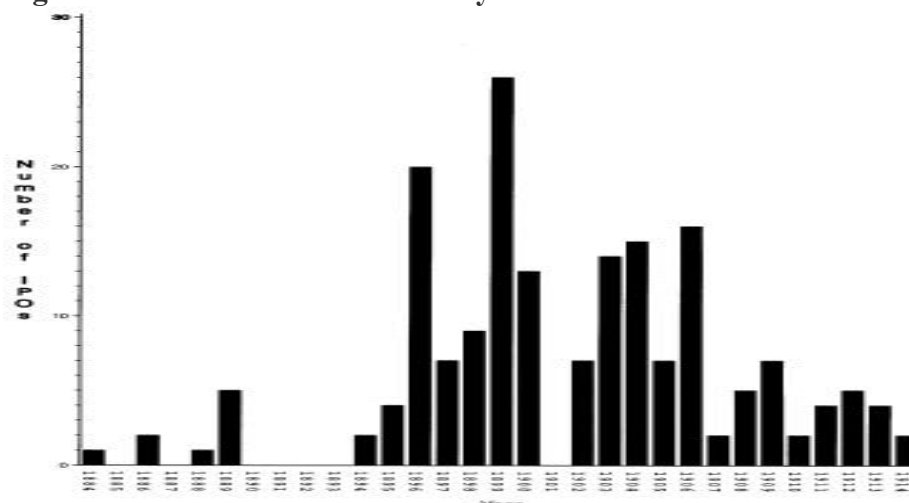
1870	325
1875	554
1880	612
1890	1,005
1906	1,113
1910	2,400
2000	700 (All exchanges)

Source (except figure for 2000): Fohlin, Caroline (2005), "The History of Corporate Ownership and Control in Germany" in Randall Morck (ed), *A History of Corporate Governance Around the World: Family Business Groups to Professional Managers*, Chicago: University of Chicago Press.

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<sup>25</sup> Franks, Julian, Colin Mayer, and Hannes F. Wagner. "The origins of the German corporation—finance, ownership and control." *Review of Finance* 10.4 (2006): 537-585.

**Figure 2 IPO Activities in Germany 1894 to 1914**



Source: Schlag Christian and Anja Wodrich (2000), “Has There Always Been Underpricing and Long-Run Underperformance? - IPOs in Germany Before World War I” Center for Financial Studies, Working Paper 2000/12.

As in the UK, issuance of equity caused the ownership of founding families and insider directors to be rapidly diluted. Even by the start of the 20<sup>th</sup> century, founding family ownership was modest and ownership by members of firms’ supervisory boards, which was large at the beginning of the century, declined rapidly thereafter.<sup>26</sup> But there was one important difference between Germany and the UK. In the UK, much of the new equity issuance went to funding acquisitions and mergers. In Germany it did not (Panel B of Table 5). To the extent that companies invested in other firms it was in the form of partial share stakes rather than full acquisitions. As a consequence, new equity was frequently purchased by other companies in the form of blocks rather than by dispersed shareholders. This may have been the lowest cost of acquiring control given the absence of regulation

**Table 5: Financing of German companies and takeover activity, 1890 to 1950**

Panel A of the table reports the sources of finance taken from company balance sheets, classified as bank, bond, other debt, issued equity and reserves as a percentage of assets for firm observations in the decades 1890 to 1950. Observations over the hyperinflation period 1919 to 1925 and companies with only one observation have been excluded.

Panel B reports the percentage of equity issued used for takeovers and other purposes.

**Panel A: Financing as a Percentage of Assets**

Decade	Bank	Bond	Other Debt	Issued Equity	Reserves	No. of Obs.
1890	14.0	5.0	6.3	58.5	16.2	6
1900	12.7	11.3	11.2	50.4	14.4	13
1910	7.0	17.4	15.3	41.6	18.6	25
1920	0.2	5.9	52.6	25.7	15.6	3
1930	7.5	7.6	16.3	54.2	14.4	20
1940	4.5	8.4	20.3	47.6	19.3	12
1950	4.8	0	35.8	38.1	21.3	5

<sup>26</sup> Since the 19<sup>th</sup> century, German companies have had two tier boards with the members of the ‘supervisory board’ being non-executive directors, and members of the management board being executive managers. The former are responsible for the strategic direction of the company and for appointing the management board members; the management board is responsible for the day-to-day management of the company. At a time of crisis, the supervisory board could intervene and dismiss members of the supervisory board.



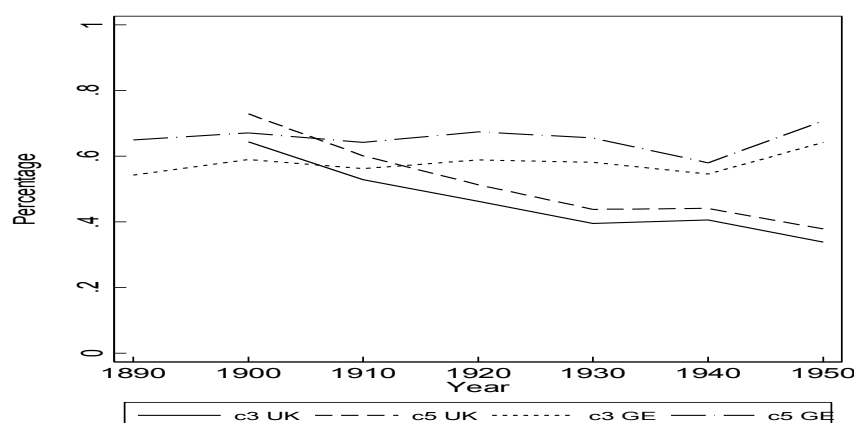
Average	7.8	10.5	17.5	47.3	16.9	84
<b>Panel B: Stated Purpose of Issued Equity (%)</b>						
Decade	Takeovers		Not Takeovers		No. Obs.	
1890	0.0		100		7	
1900	11.8		88.2		17	
1910	17.9		82.1		28	
1920	5.9		94.1		34	
1930	30.4		69.6		23	
1940	0.0		100		10	
1950	0.0		100		4	
Average	13.0		87.0		123	

Source: Julian Franks, Colin Mayer and Hannes Wagner (2006), The Origins of the German Corporation – Finance, Ownership and Control, *Review of Finance*, 10 (4): 537-585.

Furthermore, where equity was widely held by individual investors it was generally held on their behalf by custodian banks. Banks were able to cast a large number of votes at shareholder meetings, not only in respect of their own shareholdings which were in general modest, but as proxies for other shareholders, who had entrusted their votes to the banks to address the free rider problem of monitoring and control that otherwise pervades dispersed share ownership. As a result, concentration of ownership did not decline at anything like the rate observed in the UK over the same period. As shown in Figure 3, this is the case, even if one assumes that all bank proxies were voted on behalf of dispersed shareholders. Thus, a central conclusion of Franks, Mayer and Wagner (2006) is that concentration of ownership declined much less than in the UK.

### Figure 3. Time Series of C3 and C5 for Germany and the UK Adjusted for Proxy Votes Cast by Banks

The figure plots C3 and C5 for Germany for our sample and the UK. C3 and C5 for Germany are adjusted as follows: the number of votes exercised by banks is reduced to 10 percent of their reported number to reflect the fact that in a sample of bank votes approximately 90 percent of them were proxies, while the total number of shares in the denominator of C3 and C5 remains unchanged.



Source: Franks, Mayer and Wagner (2006), Table 4 *op.cit.*

Regulation, or rather existing measures of investor protection, do not explain these differences. As Table 6 reports, indices of both shareholder anti-director rights and levels of private enforcement are identical and equally low in Germany and the UK in the first three decades of the twentieth century. In this regard, the high level of stock market activity at the beginning of the 20<sup>th</sup> century is surprising in both countries. Small investors would not have

been expected to subscribe to new equity issues in the absence of either strong anti-director or private enforcement provisions. Other factors must have encouraged them to participate.

**Table 6. Minority investor protection indices of investor protection in Japan, the United**

	Japan			United Kingdom		Germany	
	1900	1990	Year law/rules changed	1900	1990	1900	1990
<b>Anti-director rights</b>	1	4	1950, 1974	1	5	1	1
<b>Liabilities standard</b>	0	0.667	1948	0	0.667	0	0
<b>Disclosure</b>	0	0.917	1948	0	0.833	0	0.417
<b>Public enforcement</b>	0	0.658	1948	0	0.75	<0.25	0.25
<b>Creditor rights</b>	3	1	1952	n/a	4	n/a	3

Source: Franks, Mayer and Miyajima (2014). This table is based upon La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998 and 2006). The scores for the United Kingdom and Germany are based on Franks, Mayer, and Rossi (2006) and Franks, Mayer, and Wagner (2006).

Trust mechanisms were different in Germany from those in the UK. Franks, Mayer and Wagner (2006) argue that they were associated with the role of banks as promoters of new equity issues, custodians of individual shareholdings and voters of proxies on behalf of individual investors. The English economic historian Lavington (1921) argued that banks provided a more secure basis for the issuance of IPOs in Germany than promoters in the UK whose interests were primarily confined to selling issues rather than ongoing relationships with companies. Regulation at the end of the 19<sup>th</sup> century contributed to this by conferring rights not on minority investors but on the banks, which as the promoters of corporate equity were able to control firms' access to the German stock markets. In the same way as firms in Britain upheld their reputation amongst local investors to gain access to equity markets, so German firms depended on banks as the gatekeepers to securities markets. How the two arrangements compared in protecting the interests of investors is an unresolved issue.

The overall picture that emerges in Germany is of firms issuing equity to fund their growth to other companies and individual investors. They were not growing through full acquisitions but through companies taking partial stakes in each other and individuals holding shares via banks. Equity finance was therefore intermediated by companies and banks. In contrast, in Britain, there was little intermediation by financial institutions until the second half of the twentieth century and then it came from pension funds and life assurance companies rather than credit institutions. There has never been significant intermediation by inter-corporate pyramids in Britain. It did not have pyramids or dual class shares, and bidders abided by an equal price rule so that all shareholders received the same price irrespective of the size of their block. There was also an absence of hostile changes of control, at least until the 1950s. It may be that geographic proximity of shareholders to boards of directors, i.e. local management and local shareholders, created conditions of trust providing an environment that did not pose a threat to family control. Thus, families were content to dilute their ownership because they were not afraid it would dilute their control.

In essence, Franks, Mayer and Wagner (2006) document the creation of the “insider system” of ownership that Franks and Mayer (1995) and (2001) describe in modern-day corporate Germany. This is characterized by inter-corporate holdings in the form of pyramids and complex webs of shareholdings, extensive bank proxy voting and family ownership. What distinguished its emergence from the dispersed ownership of the UK were two factors: firstly, the partial rather than full acquisition of shares by one company in another thereby creating

corporate pyramids and inter-corporate holdings and, secondly, the intermediation of equity shareholdings by banks. It is therefore insider control, not in the sense of ownership by owner-directors, but rather voting control remaining within the corporate and banking sector and not in the hands of outside individual shareholders as in the UK and US.

Can regulation explain these developments? At one level, the clear answer to emerge from this chapter is no. Investor protection was equally weak in Germany and the UK in the first three decades of the century when most of the developments documented in this chapter occurred. But that response is probably more a reflection of the inadequacies of existing measures of investor protection than of the irrelevance of law and regulation. By the beginning of the twentieth century Germany had enacted a corporate code that provided more extensive corporate governance than existed in virtually any other country at the time. This may have been critical to the rapid development of the German stock market at the end of the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> century. Furthermore, the Exchange Act of 1896 reinforced the control of the banks over German securities markets. In this respect, legislation favored banks in Germany, with no equivalent legislation in the UK or US. Companies became dependent on banks for access to securities markets in the way in which firms in Britain were dependent on local investors for sources of equity. And since banks acted as custodians of minority investor shares, they could also in principle encourage firms to uphold minority shareholder as well as their own interests. Whether they did or whether their dual role as investors and custodians was a source of conflict is a critical issue.<sup>27</sup>

## **5. Japan**

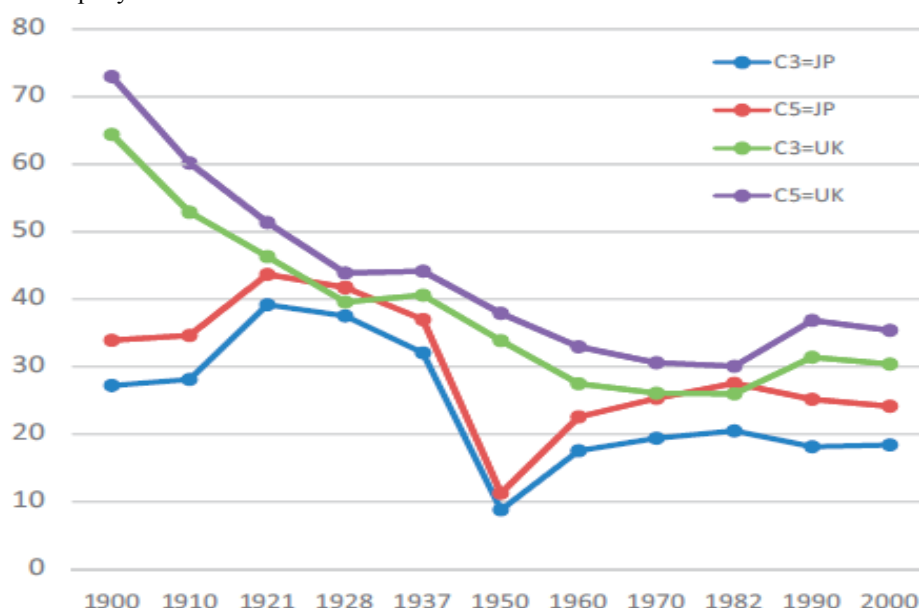
In many respects the most striking country of those considered to date is Japan. As Franks, Mayer and Miyajima (2014) describe, it is striking because today we regard Japan as the archetypal banking system with companies closely interwoven and largely owned by banks and stock markets playing little role in the financing and ownership of firms. Whether or not that is true today, it certainly was not earlier in the 20<sup>th</sup> century. On the contrary, as Figure 4 shows, in many respects Japan displays the highest dispersion of ownership of the three countries at the beginning of the 20<sup>th</sup> century. There were not many firms listed on the Japanese stock markets but ownership of the newly industrialized companies, such as the cotton spinning firms, which were listed at the beginning of the century became dispersed at a remarkably rapid pace. This was so pronounced that measures of concentration are in general lower for Japan than they are even in the stock market economy of the UK at the same time.

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<sup>27</sup> Why did we not see these pro-bank developments in the US and UK? One reason might be that in the US, at least, there was great distrust of banks. They were heavily regulated with restrictions on inter-state banking and controls on interest rates.

#### Figure 4. Japan- UK 100 year time series of dispersion of ownership in the UK and Japan

A comparison of the time series of ownership in UK and Japan for average of top 3 and top 5 shareholders in each company



Source: Julian Franks, Colin Mayer and Hideaki Miyajima (2014), *The Ownership of Japanese Corporations in the 20<sup>th</sup> Century*, *Review of Financial Studies*, 27 (9): 2580-2625.

A second feature of Japan that is particularly interesting is the rapid change in investor protection that occurred just after the Second World War (Table 6). The American occupation dismantled the zaibatsu family firms that dominated pre-war Japan and introduced legislation that transformed weak investor protection in the first half of the century into some of the strongest in the world in the second half of the century. Dispersion of ownership therefore occurred in Japan in the first half of the century in the absence of strong investor protection and the emergence of the insider system of ownership in the second half of the century by which banks and companies had cross-shareholdings in each other occurred against the backdrop of strong investor protection.<sup>28</sup> The move from outsider, dispersed ownership to insider cross-shareholdings therefore coincided with a marked strengthening of investor protection, quite contrary to what was expected at the time and which would have been predicted by the law and finance literature.

As in Germany and the UK, Japan raises the question of how ownership dispersion occurred in the absence of strong investor protection. Franks, Mayer and Miyajima (2014) point again to informal arrangements of trust as being critical to the dispersion of ownership. But unlike in the UK these were not attributable to the prevalence of local stock exchanges. Most companies were listed on one of two stock exchanges – Osaka and Tokyo. Nor, unlike in Germany, did banks play an important role in the relations between investors and firms in the first half of the century. Instead, in the first two decades of the 20<sup>th</sup> century particular individuals rather than institutions were critical to the ability of companies to be able to

<sup>28</sup> A more nuanced view would be that in the 1930s companies with dispersed ownership coexisted with the zaibatsu (family controlled companies). Outside shareholders seemed content to invest in listed subsidiaries of the zaibatsu, notwithstanding the risk of private benefits of control in the form of tunnelling. There is anecdotal evidence that there were relationships of trust between insiders and outside shareholders (see Franks, Hideaki and Mayer, 2014 op. cit).

access stock markets. These individuals were known as business coordinators and had some of the characteristics of today's private equity investors, particularly business angels. They were prominent members of the business community, sometimes senior figures in the local chambers of commerce, who sat on the boards of several firms. Their reputation acted as a validation of the soundness of the companies with which they were associated.

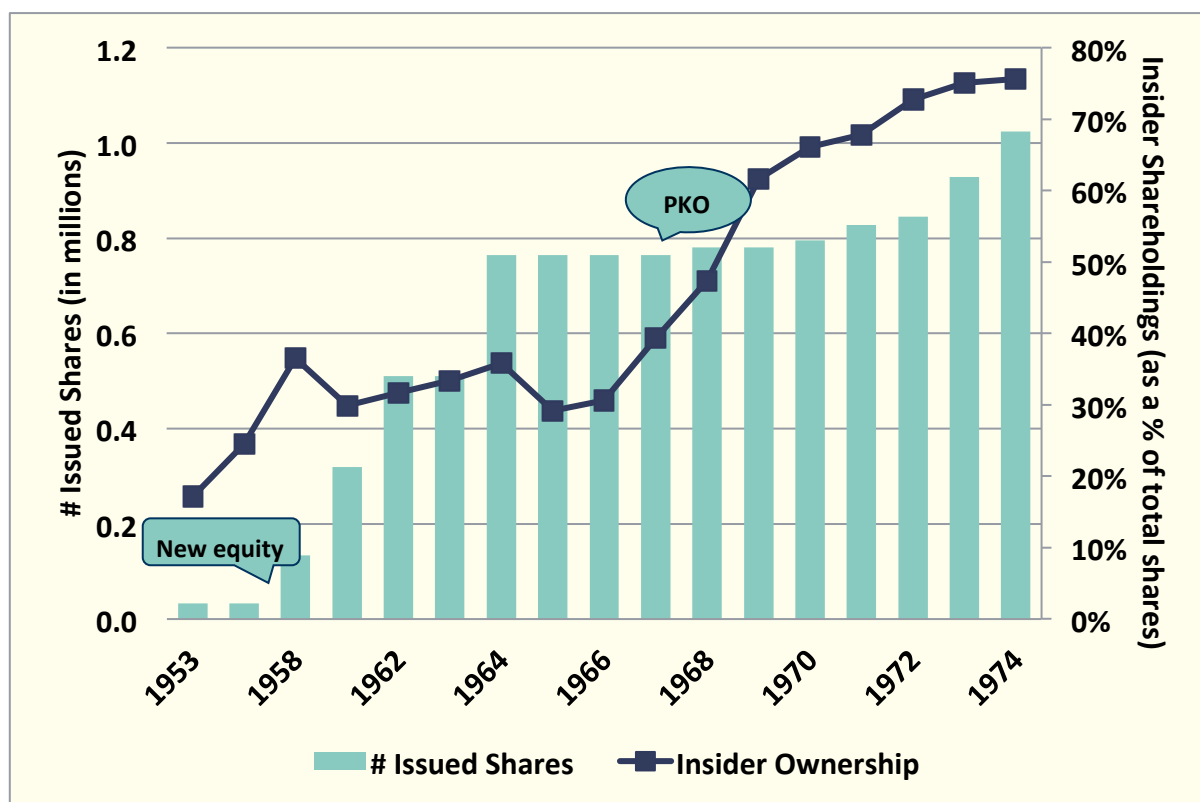
The role of business coordinators diminished from the 1920's onwards and their place was taken by the family firms, the zaibatsu which were incorporated during and after the First World War and in the 1930s listed their subsidiaries on the stock market. In this case the reputation of the zaibatsu families appears to have been important in facilitating access to stock markets. The dismantling of the zaibatsu in the aftermath of WW2 left a vacuum that individual investors failed to fill despite the existence of strong investor protection and instead was filled by an insider system of corporate control consisting of a combination of banks and corporations.<sup>29</sup>

The strengthening of investor protection in post WW2 Japan unexpectedly coincided with the emergence of an insider system of cross-shareholdings between companies and banks. There were three phases to this. The first occurred during the 1950s when high levels of financial distress in the Japanese corporate sector necessitated restructuring through workouts, in particular debt for equity swaps, and bankruptcy, resulting in the Japanese banking sector acquiring significant equity stakes in the corporate sector. The second was in the 1960s when a collapse in the stock market and a fear of foreign acquisitions of Japanese companies prompted a price keeping operation (PKO) that involved purchasing Japanese corporate equity and selling it on to insiders, in particular in the banking sector. The third phase was during the high growth era when companies raised substantial amounts of equity by placing equity with friendly shareholders at a discount, including the banks. The periods of financial distress, stock market collapse and the high growth era were therefore associated with a system of cross-ownership and insider control within the banking and corporate sector rather than outside control by individual and institutional investors. As the case of Toyota Motor illustrates in Figure 5, there was a close association of the growth of insider shareholdings with equity issues.

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<sup>29</sup> See Yishay Yafeh, Corporate Ownership, 1995, "Profitability, and Bank-Firm Ties: Evidence from the American Occupation Reforms in Japan, *Journal of the Japanese and International Economies*, 9, 154-173.

**Figure 5 Insider shareholdings and paid-in capital of Toyota Motor**



Source: Julian Franks, Colin Mayer and Hideaki Miyajima (2014) *op, cit.*

The experience of other high growth emerging markets is consistent with this. In China, the corporate sector is dominated by state ownership and in Korea by large family holdings, the *chaebols*. Both the state as owner in China and families in Korea played a critical role in the development of these economies. But this economic growth came against the background of mounting evidence of inefficiencies associated with block holdings by banks, families and the state. In particular, family holdings were linked with the pursuit of private family goals and “tunnelling” of profits to controlling owners. There are papers documenting the divergence between control and cash flow rights<sup>30</sup>, measuring the impact on firm value of these disparities<sup>31</sup>, and providing evidence of controlling shareholders expropriating minority

<sup>30</sup> Claessens, S., S. Djankov, and L. H. Lang. 2000. The separation of ownership and control in East Asian corporations. *Journal of Financial Economics* 58(1):81–112.

Claessens, S., S. Djankov, J. P. Fan, and L. H. Lang. 2002. Disentangling the incentive and entrenchment effects of large shareholdings. *The Journal of Finance* 57(6):2741–2771.

Faccio, M., and L.H. Lang. 2002. The ultimate ownership of Western European corporations. *Journal of financial economics* 65(3):365–395.

<sup>31</sup> Baek, J. S., J. K. Kang, and K. S. Park. 2004. Corporate governance and firm value: Evidence from the Korean financial crisis. *Journal of Financial economics* 71(2):265–313.

Ferris, S. P., K.A. Kim, and P. Kitsabunnarat. 2003. The costs (and benefits?) of diversified business groups: The case of Korean chaebols. *Journal of Banking & Finance* 27(2):251–273.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2002). Investor protection and corporate valuation. *The Journal of finance*, 1147–1170.

Lemmon, M. L., and K.V. Lins. 2003. Ownership structure, corporate governance, and firm value: Evidence from the East Asian financial crisis. *The journal of finance* 58(4):1445–1468.

Mitton, T. (2002). A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis. *Journal of financial economics* 64(2):215–241.

shareholders through tunnelling<sup>32</sup>. How did systems with such apparent inefficiencies associated with controlling block holders nevertheless sustain such high growth rates?

One answer is that the controlling shareholders pursued excessive growth and overinvestment at the expense of corporate viability. The collapse of the Japanese economy during the 1990s and 2000s is consistent with this over-investment, over-leveraged story. So too is the Asian crisis at the end of the 1990s which was widely attributed in the west to crony capitalism. Nevertheless these economies have since recovered and continue to display impressive levels of growth.

A second explanation is that there are countervailing benefits associated with controlling shareholders. In particular, in both China and Korea it is widely believed that their presence brought a stability and long-term focus to corporate activities which is missing from western economies and in particular from corporations in the UK and US with widely dispersed share ownership. Moreover, these financial groups may have substituted for missing financial institutions. Like conglomerates in the twentieth century that may have provided internal capital markets which substituted for an absence of active external capital markets.

While the state in China and the *chaebols* in Korea are credited with much of their economic success to date, significant concerns are emerging about their continuing stranglehold of corporate activities. In China, the concern is in regard to the bureaucracy and political interference that state ownership brings to what should be commercial decisions. In Korea, there has been much disquiet about the conflict between the interests of the *chaebols* and those of society more generally. But while reform may be needed, neither China nor Korea wish to move to UK or US style dispersed ownership systems. These are felt to be short-term in nature and too focused on profits at the expense of the wider interests of their societies. Instead, the question is whether an alternative long-term owner to the state in China and families in Korea can in due course be found and who that long-term owner should be. Meanwhile, what is emerging in Japan is a hybrid system of outside institutional, in particular, foreign institutional, shareholdings together with insider ownership by the corporate sector and domestic insurance companies. We return to recent developments in Section 7 of the Chapter.

## 6. The US

Becht and DeLong (2005) record some attributes of the US stock market. They claim that “most other countries have powerful family groups that control substantial numbers of corporations through large blocks, some held through pyramids of holding companies and special classes of shares with extraordinary voting rights. The United States, by and large, does not. Most other countries have holding or other parent companies that maintain

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Meyer, B. D. (1990). Unemployment insurance and unemployment spells. *Econometrica* 58(1):757–782.

Nenova, T. 2003. The value of corporate voting rights and control: A cross-country analysis. *Journal of Financial Economics* 68(3):325–351.

<sup>32</sup> Bae, K. H., J. K. Kang, and J. M. Kim. 2002. Tunneling or value added? Evidence from mergers by Korean business groups. *The Journal of Finance* 57(6):2695–2740.

Baek, J. S., J. K. Kang, and I. Lee. 2006. Business groups and tunneling: Evidence from private securities offerings by Korean *chaebols*. *The Journal of Finance* 61(5):2415–2449.

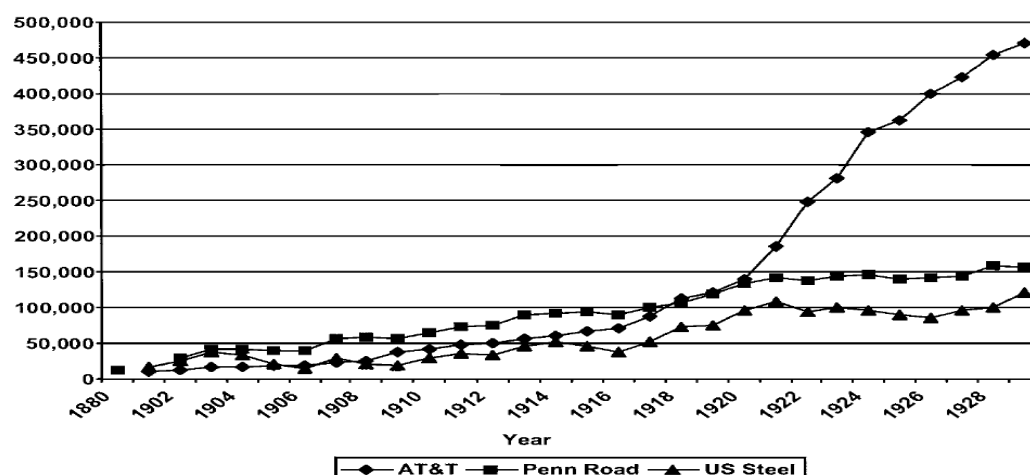
Bertrand, M. P. Mehta, and S. Mullainathan. 2002. Ferreting Out Tunneling: An Application to Indian Business Groups. *The Quarterly Journal of Economics* 117(1):121–148.

Cheung, Y. L., P. R. Rau, and A. Stouraitis. 2006. Tunneling, propping, and expropriation: evidence from connected party transactions in Hong Kong. *Journal of Financial Economics* 82(2):343–386.

substantial control over the affairs of publicly traded and listed operating corporations. The United States, by and large, does not: large parent companies do not have listed subsidiaries. Many other countries have large blocks of shares in individual corporations held or voted by financial intermediaries that play a key role in monitoring and supervising corporate managers. The United States by and large does not.”...In the United Kingdom, like the United States, ownership is diffused.”<sup>33</sup>

Becht and DeLong provide statistics (based upon Gardiner Means’ original data published in 1930) on the dispersion of ownership of three companies reproduced in Figure 6.<sup>34</sup> These show the number of shareholders in three telephone, railroad and steel companies - AT&T, Penn Railroad and US Steel. Over the period 1880 through to 1928 the number of shareholders rose dramatically from less than 50,000 before 1900 to between 100,000 and 150,000 for Penn Railroad and US Steel and more than 450,000 for AT&T. Means (1930) also reports the growth in numbers for a broader range of companies, including industrial as well as utilities and railroads, although it is worth noting that the average growth in industrials over the period was much smaller than for utilities, 410 per cent as against 2,622 per cent. Nevertheless the picture is the same- a very large growth in the number of shareholders.<sup>35</sup>

**Figure 6. The number of shareholders in the three largest US Corporations: AT&T, the Pennsylvania Railroad and U.S. Steel**



Source: Becht, M., & DeLong, J. B. (2005). Why has there been so little block holding in America?. In *A History of Corporate Governance around the World: Family Business Groups to Professional Managers* (pp. 613-666). University of Chicago Press. Based on data from Means (1930)

<sup>33</sup> See *A History of Corporate Governance around the World: Family Business Groups to Professional Managers*, ed. Randall K. Morck: 613-32

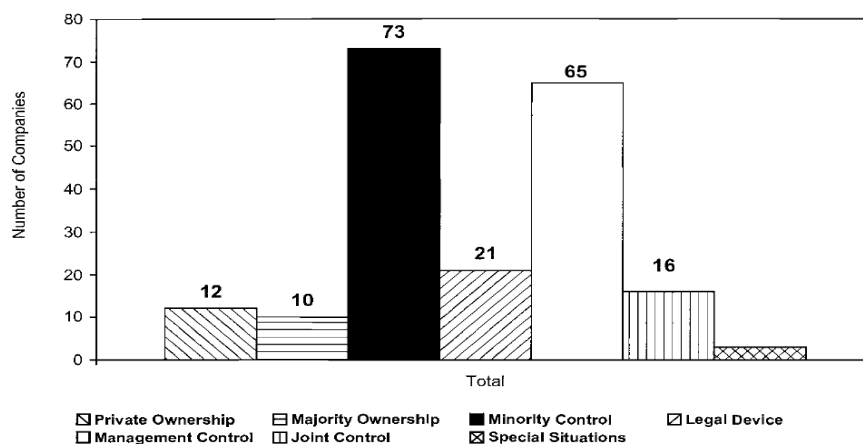
<sup>34</sup> Means, Gardiner, (1930) “The diffusion of stock ownership in the U.S.”, *Quarterly Journal of Economics* 44:561–600.

<sup>35</sup> Means may have overstated the extent of management control. For example, incumbent promoters and families still retained significant board control at some widely held companies, and, there would have been more, if it had not been for anti-trust regulation that forced out JP Morgan who occupied the boards of the trusts they had promoted and listed on the stock exchange. Also, family control through block ownership was more important than Means suggested because he focused on larger listed companies: in medium sized and small companies families were far more important. Finally, group structures and pyramids were important in the utilities sector, largely ignored in Means’ analysis (see Figure 11.9 of Becht and DeLong (2005)).



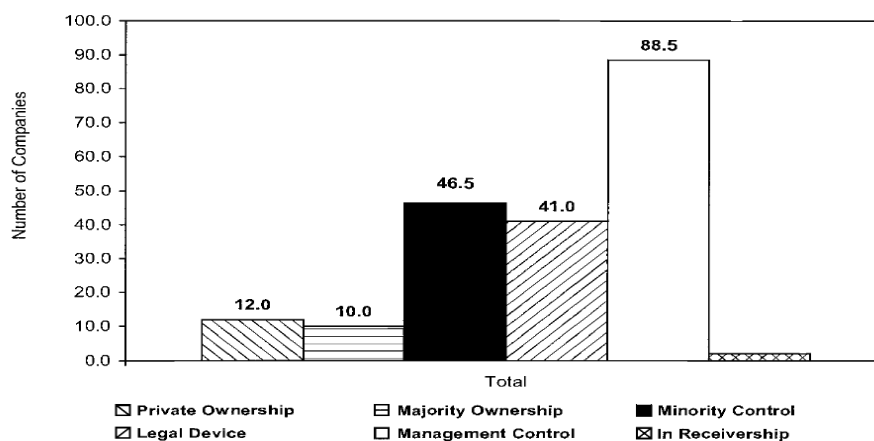
In Figure 7, Means goes beyond counting the number of shareholders and examines who ultimately controls 200 US corporations. He finds that for 65 firms management had control in so far as there was no shareholder with either a majority or minority interest sufficient to exert control. In another 73 firms there was minority control. Thus, in 138 of the 200 firms there was no majority controlling stake and control had by and large been separated from ownership. In Figure 8, Means identifies and classifies the ultimate shareholder who controls the firm and finds that the number of management controlled firms rose from 65 to 88.5, suggesting that management control was the dominant corporate form in almost 45 per cent of the largest American corporations. Means' view, later consolidated into Berle and Means' (1932) widely cited book, entrenched the notion that corporate American was largely controlled by management, principally because of the decline in block ownership and the large increase in the number of shareholders.<sup>36</sup>

**Figure 7: Ownership at the first tier of control in the 200 Largest American corporations**



Source: Becht, M., & DeLong, J. B. (2005). op. cit. Figure 11.4. Based on data from Means (1931)

**Figure 8: Ultimate corporate control in the 200 largest American corporations**



Source: Becht, M., & DeLong, J. B. (2005). op cit. Figure 11.5. Based on data from Means (1931).

<sup>36</sup> Berle, A.A., and G. Means (1932), *The Modern Corporation and Private Property* (Macmillan, New York).

However, Kandel, Kosenko, Morck and Yafeh (2015) have recently shed new light on the evolution of ownership in the US in the twentieth century.<sup>37</sup> They show that between 1926 and 1950 business groups were the most dominant force in the US stock market.<sup>38</sup> They comprised about one third of all corporate assets and one half of non-financial assets. In the 1930s they collectively controlled over 1000 member firms. They were important in utilities, railroads and transportation as well as in manufacturing. The largest among them, the Morgan Group, had revenues of \$46 billion dollars in 2005 prices; it was, relative to GDP, more than 50 per cent larger than Exxon-Mobil, which is the largest company in the world by equity market capitalisation.

While wealthy families, such as Morgan, Du Pont and Mellon controlled some business groups, others were ultimately (at their apex) widely held, particularly those in the utility industries. Figure 9 reproduces the number of business groups in the US and their ultimate owners for six selected years. For example, in 1932 of the 26 large business groups, 13 had ultimate owners that were widely dispersed and the remaining 13 were controlled by what the authors describe as ‘tycoons or business families’.

The decline of business groups in the US can largely be traced to regulation. The Securities Act of 1933 and the Securities and Exchange Act of 1934 were not explicitly aimed at business groups but by improving both transparency of accounts and shareholder rights, they curbed ‘tunnelling’ by the parent and other means by which the parent could transfer wealth from one part of the business group to another. In effect these two acts curbed private benefits of control, which was an important rationale for these business groups.

A third piece of legislation, the Double Taxation of Intercorporate Dividends, passed by Congress in 1935, was directly aimed at curbing business groups. It provided for double taxation of inter-corporate dividends, those that were passed up through the different layers of the business group. In effect it raised the cost of capital of these groups, or forced them to reduce inter-corporate dividends. The final piece of legislation aimed at curbing these business groups was the Investment Company Act (ICA) of 1940. It introduced much greater disclosure standards on listed firms whose assets primarily consisted of other companies’ shares. It also forced the firm at the apex of the group to adhere to strict leverage requirements and, most important, limited the control rights of the shareholder at the apex over the rest of the group, in effect making it a passive shareholder.<sup>39</sup>

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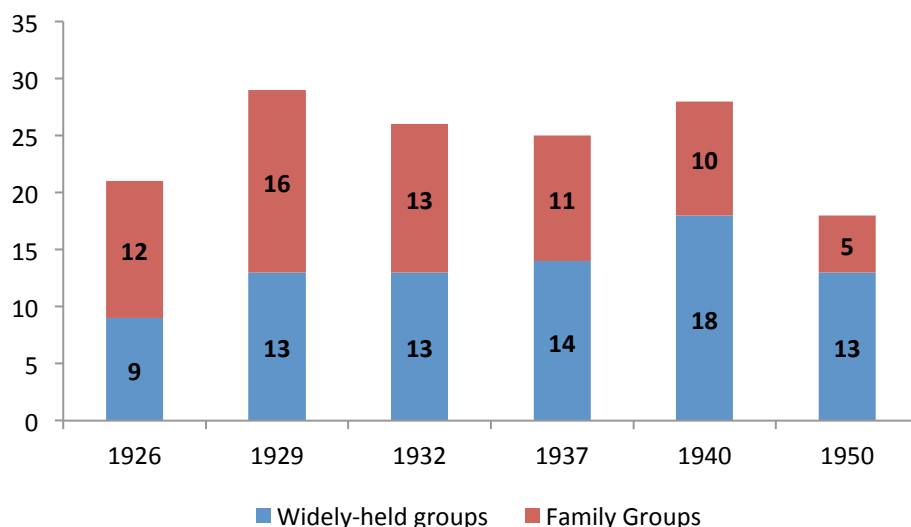
<sup>37</sup> Eugene Kandel, Konstantin Kosenko, Randall Morck, and Yishay Yafeh, 2013, *The Great Pyramids of America: A Revised History of US Business Groups, Corporate Ownership and Regulation, 1930-1950*.

<sup>38</sup> A business group is defined as three publicly listed companies under common control through ownership; see Kendall et al (2013).

<sup>39</sup> Another important piece of legislation was the 1935 Public Utilities Holding Companies Act (PUHCA). The Act required the [Securities and Exchange Commission](#) (SEC) to regulate the activities of utilities and in particular to restrict the use of holding companies structures.

### Figure 9 Widely held and family controlled business groups in the US, 1926-1950

The figure presents the number of business groups by year. A group is defined as having three or more public companies controlled by the same owner.



Source: Eugene Kandel, Konstantin Kosenko, Randall Morck, and Yishay Yafeh, 2013, *The Great Pyramids of America: A Revised History of US Business Groups, Corporate Ownership and Regulation, 1930-1950*. NBER working paper 19691, December.

So, despite the much-publicized dispersion of ownership in the US in the first half of the twentieth century, family ownership persisted in business groups for most of that period. It was only with the regulatory and legislative changes of the 1930s that family owned business groups were extinguished by the second half of the twentieth century. And, as we will see in the next section, notwithstanding what happened to family business groups in the US, there remains a marked difference in the prevalence of family ownership between the US and UK to the present day.

## 7. The Twentieth Century in Perspective

In summary, all of the UK, Germany, Japanese and US stock markets were thriving at the beginning of the twentieth century. The number of listed companies expanded appreciably, large amounts of equity were issued and dispersion of ownership increased rapidly in all four countries, and all of this in the absence of strong investor protection anywhere. Family ownership was widespread and together with local stock exchanges in the UK, bank equity intermediation in Germany, business coordinators in Japan and business groups in the US, it helped to promote the development of stock markets.

But then a profound change in public policy of corporations and equity markets occurred around the middle of the 20<sup>th</sup> century. Regulation of equity markets was intensified in response to the stock market crash and great depression resulting in the virtual extinction of family business groups in the US. After the Second World War and the involvement of the zaibatsu in the Japanese war effort, the US authorities dismembered the Japanese family firms. In the UK, regulatory changes in the second half of the 20<sup>th</sup> century made it increasingly difficult for families to be able to retain control of their firms.

As a consequence, family business groups disappeared in the US, large family firms were extinguished in Japan and they went into unrelenting decline in the UK. The one country that escaped the decimation of family firms was (perhaps ironically in light of their role in the

Second World War) Germany. Corporate ownership remained remarkably resilient in Germany despite the effects of two world wars and an allied occupation.

The response to the upheaval in the UK and the US was a continuation of the process of dispersal of ownership first in the form of increasing shareholdings by individuals, particularly in the US often through mutuals, and institutional investors, in the form of life insurance firms and pension funds in the UK. The response in Japan was quite different. Contrary to what was both intended and expected by the allied occupying forces, Japan did not move towards a dispersed outside system of ownership (or if it did it was very short-lived) but a new form of inside ownership by banks and the corporate sector.

We therefore come towards the end of the twentieth century with rising dispersion of ownership in the UK and US and an increasing hold over the Japanese equity market by banks and corporations. It looked as if the world had bifurcated into two systems - the stock market dominated outsider systems of ownership in the UK and US and insider ownership by families firms in Germany and banks and corporations in Japan. But the twenty first century was to witness another great reversal.

## 8. Twenty-First Century Developments

### *The Eclipse of the Public Corporation*

As the introduction to the chapter described, Figure 1 recorded a steady decline in the number of listed firms in the UK and US from around 30 per million of population in 1990, almost three times the world average of 10 per million of population, to a level that is much closer to the world average. Germany in contrast was below the world average in 1990 and moved closer to it by 2012.

Interestingly, the difference in growth of stock markets between Germany and Japan on the one hand and the UK and the US is not simply a reflection of the number of companies coming to the stock market for the first time. As Table 8 shows, IPOs in the UK have been around two and a half times those in Germany during the century and in the US more than twice those in Japan. On that basis one would have expected an increase in the number of listed companies in the UK and US relative to Germany and Japan.

**Table 8. Number of IPOs in Germany, Japan, UK and USA, 1995-2015**

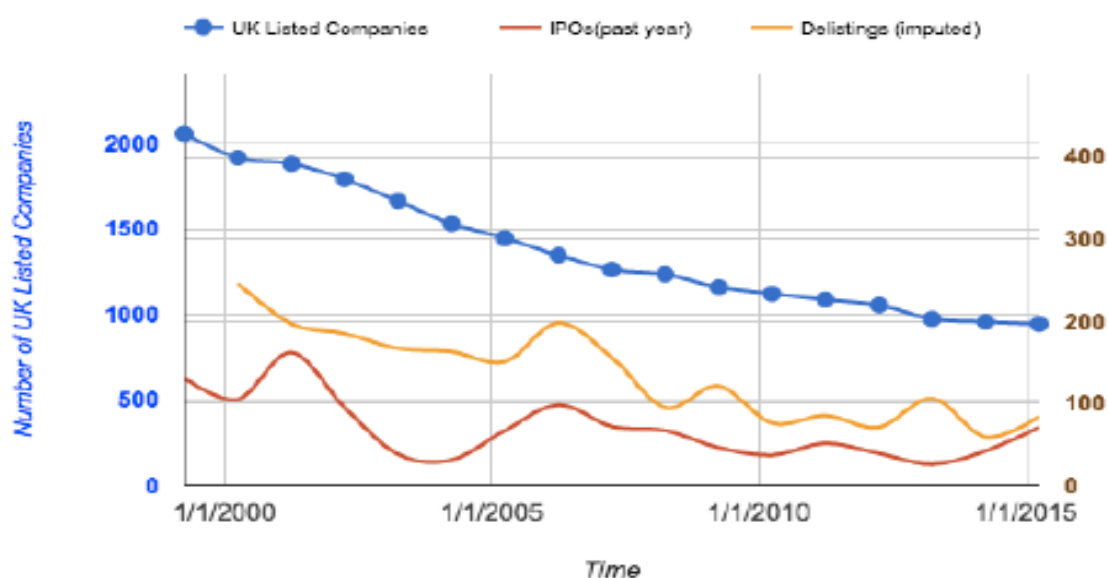
	No. of IPO transactions			
	Germany	Japan	UK	USA
1995	15	108	56	526
1996	10	84	131	761
1997	25	70	101	517
1998	61	73	51	325
1999	142	102	55	477
2000	126	200	185	355
2001	21	163	76	89
2002	3	123	42	84
2003	0	121	62	74
2004	6	172	160	185
2005	38	308	181	340
2006	69	180	132	174
2007	42	115	82	173

2008	5	48	15	28
2009	1	19	2	43
2010	11	21	24	100
2011	7	36	21	111
2012	5	47	17	118
2013	5	54	55	164
2014	8	76	78	219
2015	15	91	36	130
<b>Total</b>	<b>615</b>	<b>2,211</b>	<b>1,562</b>	<b>4,993</b>

Source: London Business School

While there have been a relatively large number of new listings on the UK market (albeit on a declining trend), the number of delistings has been persistently higher since the beginning of this century and, as Figure 10 shows, this has resulted in the number of companies listed on the main market halving from 2000 to 1000 companies between 2000 and 2015.

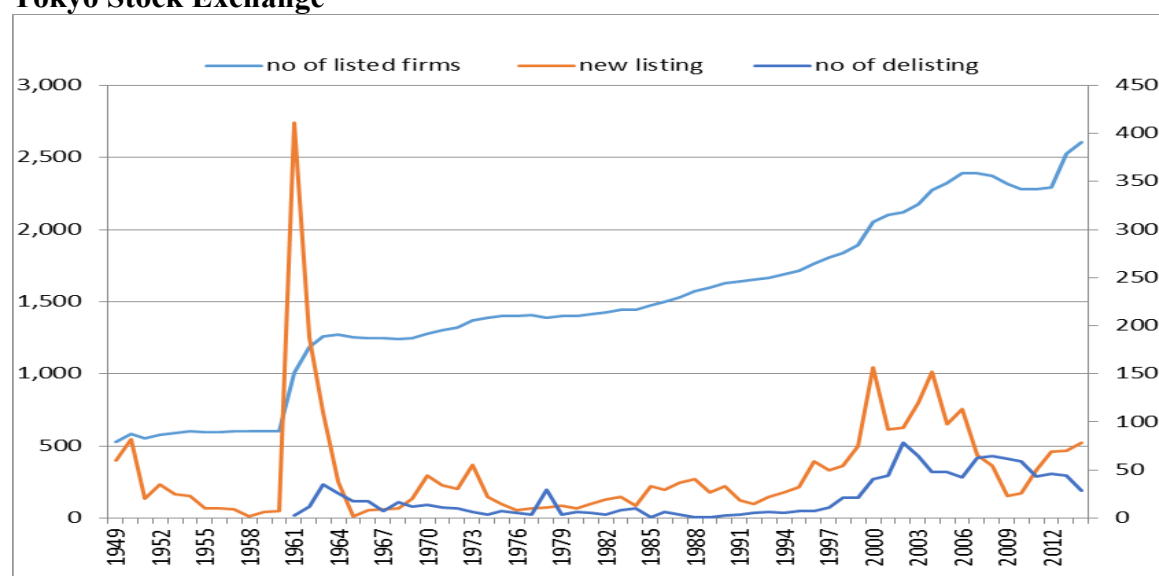
**Figure 10. Number of Listed Companies, IPOs and Delistings in the UK**



Source: Original data from the London Stock Exchange, compiled by Margarita Economides, Yannick Lakoue-Derant and Zhanna Smirnova, in *Causes and Consequences of the Decline of the Public Corporation*, April 2016, London Business School.

In contrast, as Figure 11 records, the number of new listings in Japan has consistently exceeded delistings since the 1960s resulting in a progressive increase in the number of companies listed on the Japanese stock market.

**Figure 11 Time series of number of companies, new listings and delistings on the Tokyo Stock Exchange**



Source: Franks, Julian, Colin Mayer and Hideaki Miyajima (2017), *Equity Finance and Ownership of Japanese Firms*, working paper, March 5th

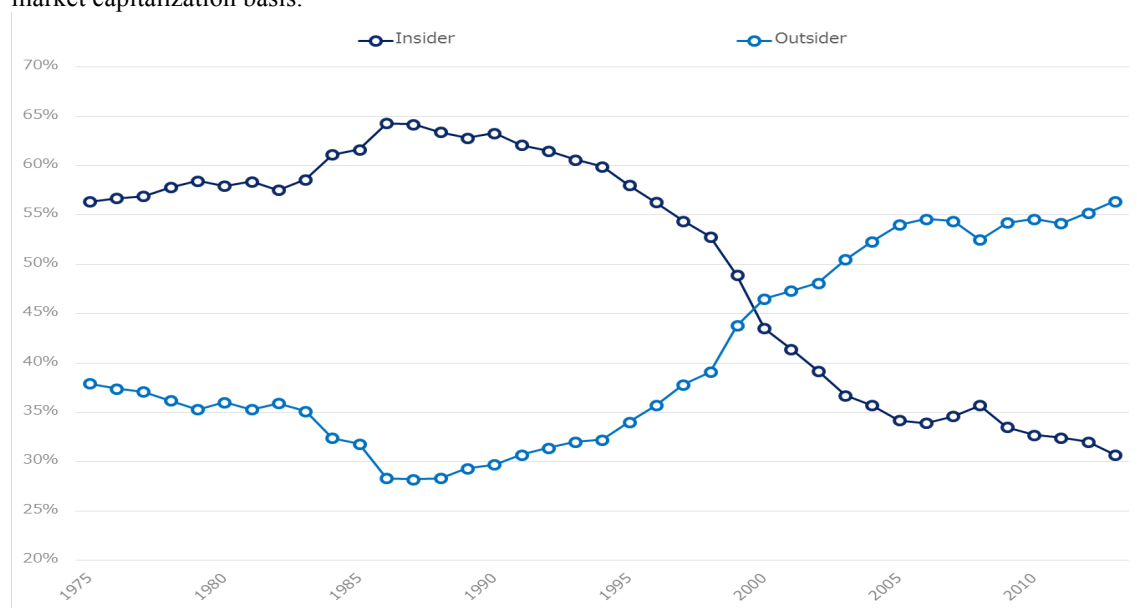
### *The Persistence of Blockholders*

While the eclipse of the public corporation is very much in evidence in the UK as a consequence of the high level of delistings, it is not in Japan. On the contrary, the Japanese stock market continues to thrive. As Figure 12 shows, this comes against the background of pronounced changes in the ownership of Japanese firms and an economy with very low growth. Section 5 of the chapter described the rise of insider ownership in Japan. This peaked in the second half of the 1980s and has been in decline ever since. Bank holdings of Japanese corporate equity have declined and foreign institutional investments have increased appreciably. In one respect, Japan has reverted from being an insider system of corporate equity with dominant bank and inter-corporate shareholding to an outsider system with significant foreign institutional ownership.

The stability of shareholding is even more pronounced in Germany. Table 9 shows that in Germany there has been a significant shift away from both bank and inter-corporate holdings of corporate equity but with families retaining a very high level of ownership and controlling stakes; and by some accounts their ownership has increased in recent decades.

**Figure 12 Long-term trends in insider and outsider ownership in Japan**

The figure shows insider and outsider ownership ratios based on the *Share ownership Survey* reported by the Tokyo Stock Exchange. The insider ratio is the aggregate ratio of banks (excluding trust accounts of trust banks), insurance companies, other financial institutions, and corporations. The outsider ratio is the aggregated ratio of foreign investors, individuals, mutual funds, and pension funds. The ownership ratio is aggregated on a market capitalization basis.



Source: Franks, Julian, Colin Mayer and Hideaki Miyajima (2017), op. cit

**Table 9. Proportion of German companies with large shareholders in 1990, 2009, 2014**

Column (1) shows data from Franks and Mayer (2001), Table 1. Columns (2) to (5) show data for a firm sample constructed from two snapshots of the OSIRIS/ORBIS database (December 2009, December 2014). In columns 2 and 3 the sample includes a balanced panel of firms listed in both 2009 and 2014. In columns 4 and 5 the sample includes the 200 largest firms, by market capitalization, in each year. Ownership data are processed to identify controlling blockholders as in Lins, Volpin and Wagner (2013).

Franks and Mayer (2001)	Franks, Mayer and Wagner (2015)		Franks, Mayer and Wagner (2015)	
Proportion of firms with a single share stake in excess of 25% for a sample of 171 large industrial quoted firms	Proportion of firms with share stakes in excess of 25% held directly or indirectly, <u>fixed panel</u> of non-financial quoted firms		Proportion of firms with a share stake in excess of 25% held directly or indirectly, <u>200 largest non-financial quoted firms</u>	
Year: 1990	Year: 2009	Year: 2014	Year: 2009	Year: 2014
(1)	(2)	(3)	(4)	(5)
0.28	0.21	0.1	0.2	0.07
0.02				
0.13	0.02	0.05	0.03	0.08
0.21	0.37	0.36	0.33	0.39
0.1	0.04	0.13	0.06	0.12
0.06	0	0	0.01	0.01
0.05	0.02	0.02	0.04	0.03

0.02	0.02	0.06	0.01	0.01
0.15	0.31	0.28	0.34	0.32
1	1	1	1	1
N=171	N=484	N=484	N=200	N=200

Source: Franks, Julian, Colin Mayer and Hannes Wagner (2015), The Survival of the Weakest: Flourishing Family Firms in Germany, Special Issue of Journal of Applied Corporate Finance, 2016

Both Japan and Germany therefore demonstrate the continuing prominence of core stable shareholders – other companies in the case of Japan and families in Germany. Table 10 reveals that the presence of families as dominant owners in listed companies persists in many Continental European countries – France and Italy as well as Germany – in contrast to the UK and Japan where just 3% of listed companies are family owned

**Table 10. International ownership, concentration and family-controlled firms in 2006**

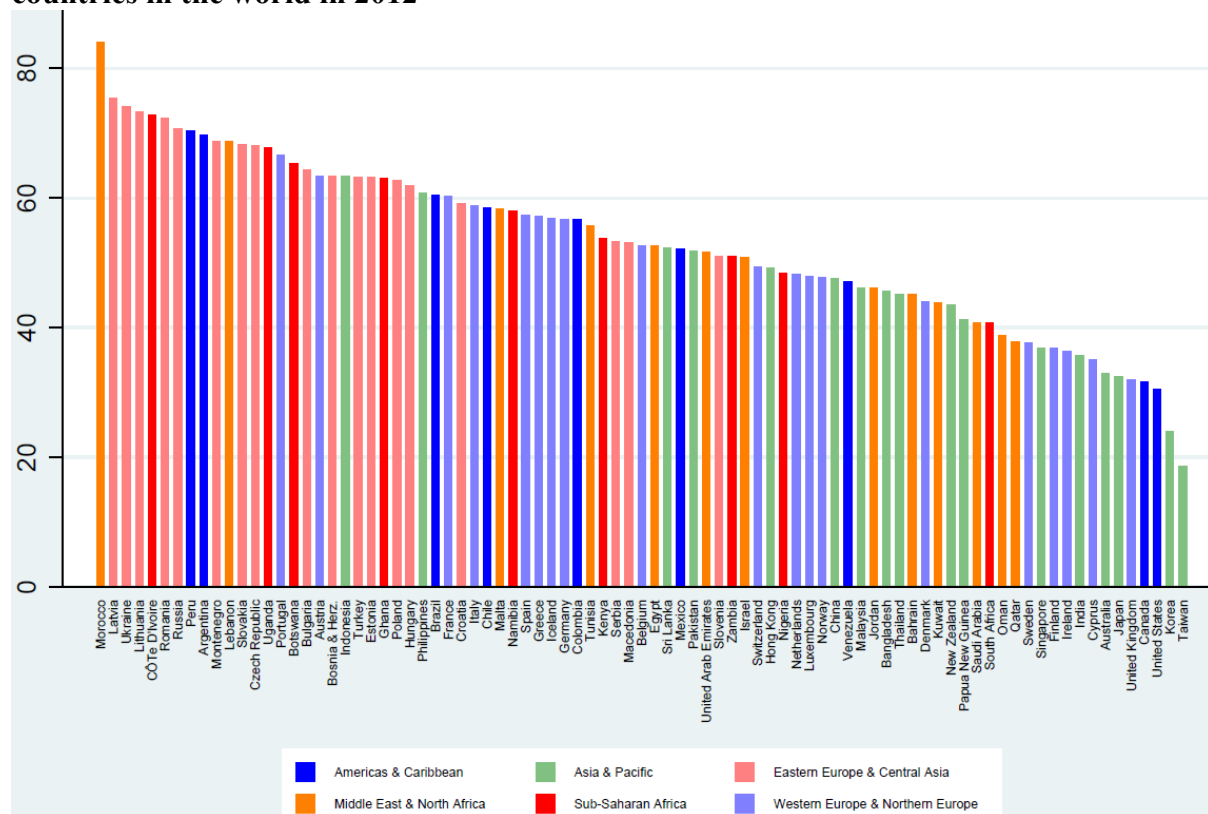
This table reports statistics for all non-financial publicly traded companies in France, Germany, Italy, and the United Kingdom. Firms are separated into the following categories: (1) ultimately controlled by a family, (2) ultimately controlled by a nonfamily blockholder, and (3) widely held. A firm that is ultimately controlled by a family is one in which the ultimate stake of the family (members) in aggregate exceeds the 25% threshold. A non-family-controlled firm is one with an ultimate blockholder at the 25% threshold that is not affiliated with a family. Non-family-controlled firms include firms known to have multiple blockholders that collectively exceed the 25% threshold (so the firm is not widely held) but individually do not control the firm at the 25% threshold. A widely held firm is a company that is known to have no ultimate owner at the 25% threshold of control. Data are from Lins, Volpin and Wagner (2013) and Franks, Mayer and Miyajima (2017).

Country	Family-controlled	Non-family-controlled	Widely held	N
France	0.36	0.35	0.29	366
Germany	0.32	0.37	0.31	292
Italy	0.32	0.44	0.24	149
United Kingdom	0.09	0.15	0.77	1,036
Japan	0.03	0.21	0.76	958
Average from 35 countries	0.11	0.25	0.64	8,584

Aminadav and Papaioannou (2016) provide a more comprehensive description of the extent of concentration of ownership around the world. Figure 13 reproduces their results and shows the remarkable extent to which concentrated ownership remains a global phenomenon. The ownership stake of the three largest shareholders (C3) was on average more than 50% in a majority of 85 countries in 2012.



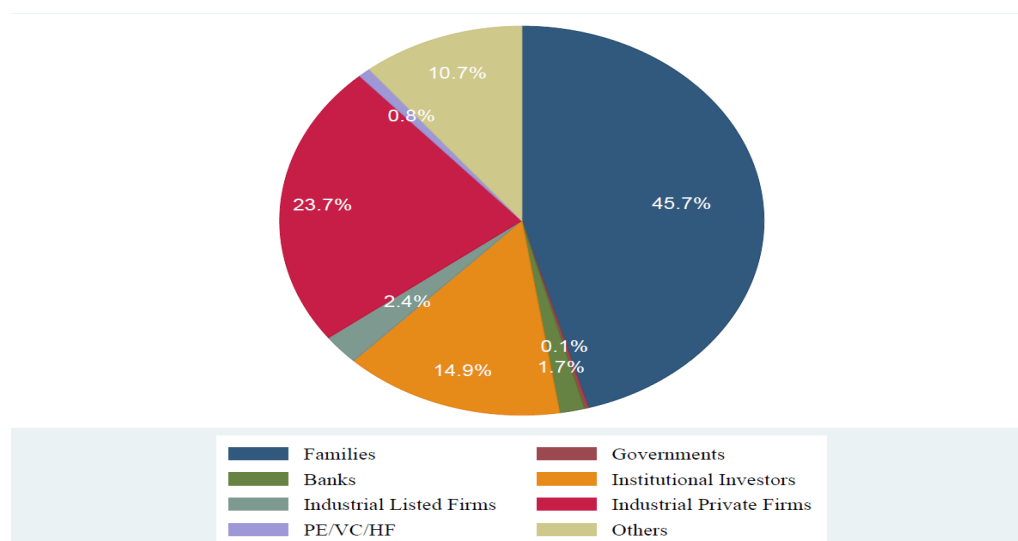
**Figure 13 Ownership stakes of the three largest owners in 26,843 companies in 85 countries in the world in 2012**



Source: Aminadav, Gur and Elias Papaioannou (2016), “Corporate Control around the World”, Working Paper, London Business School.

Figure 14 identifies the owners of the largest blocks are: families are by far and away the largest owners of companies around the world, with private industrial firms being the next largest and institutional investors only being in third place. Banks and the state are very rarely significant owners.

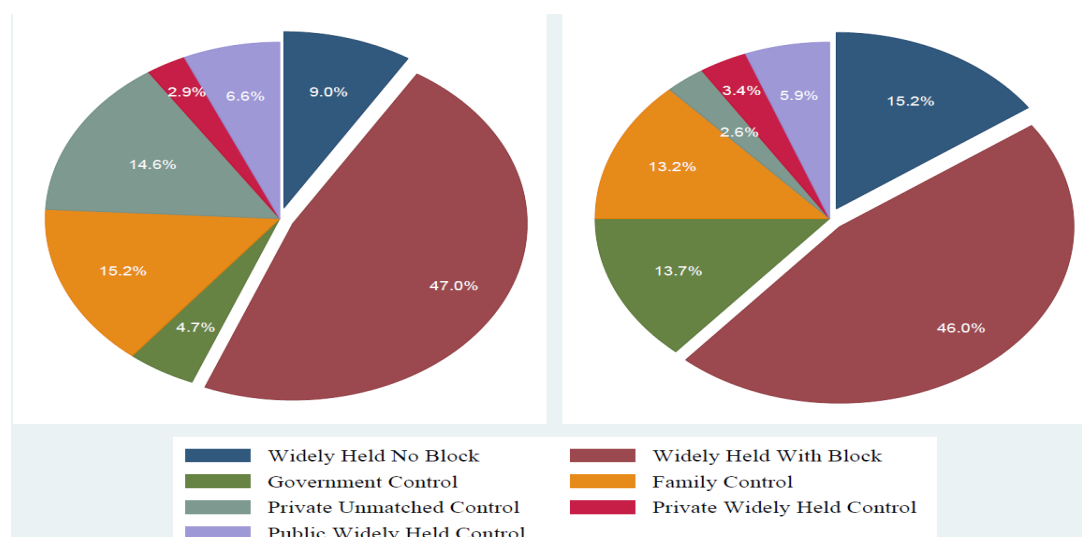
**Figure 14 Ownership type in 28,643 companies in 85 countries in 2012**



Source: Aminadav, Gur and Elias Papaioannou (2016), *op. cit.*

Tracing through levels of ownership to the company or shareholder with ultimate control in Figure 15 reveals that (i) a majority of companies are widely held with at least one controlling block of shares, (ii) a significant proportion of companies are family owned and, (iii) only a small number of companies are either government controlled or widely held without a controlling block. In other words, the patterns that we have observed elsewhere in the chapter of the prevalence of family ownership and controlling blockholders in widely held companies are a general feature of companies around the world.

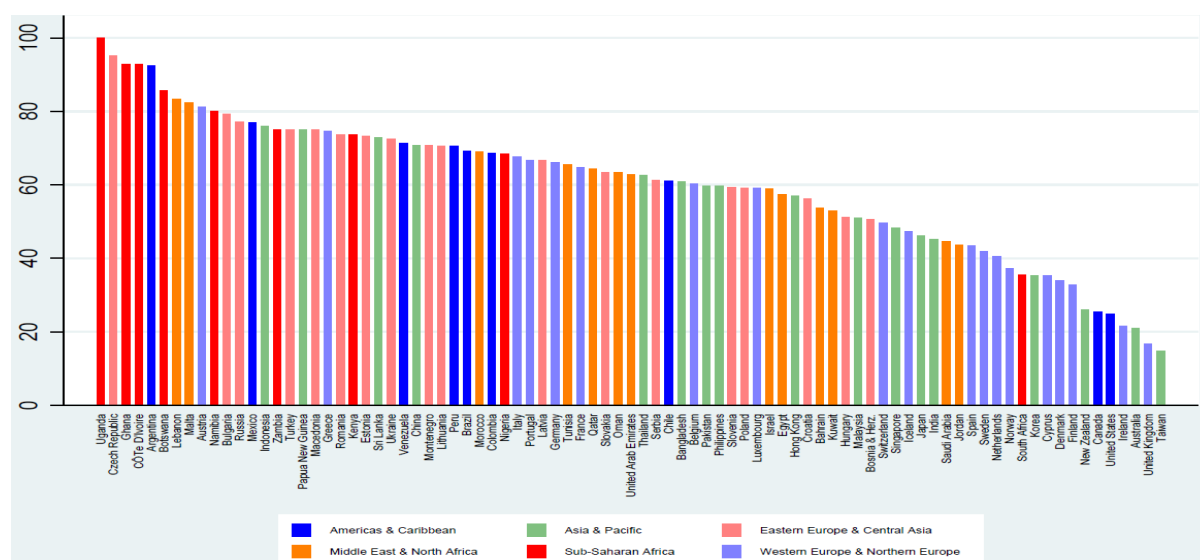
**Figure 15 Type of control in 26,843 companies in 85 countries in 2012**



Source: Aminadav, Gur and Elias Papaioannou (2016), *op. cit.*

This picture is further reinforced in Figure 16, which shows the proportion of companies where the ultimate shareholder has a controlling interest. In a majority of countries around the world, the pervasive picture is that most companies have a controlling shareholder. Aminadav and Papaionannou report that only 9% of widely held companies globally do not have a blockholder, defined as a stake greater than 5 per cent of voting rights.

**Figure 16 Share of controlled firms in 26,843 companies in 2012**



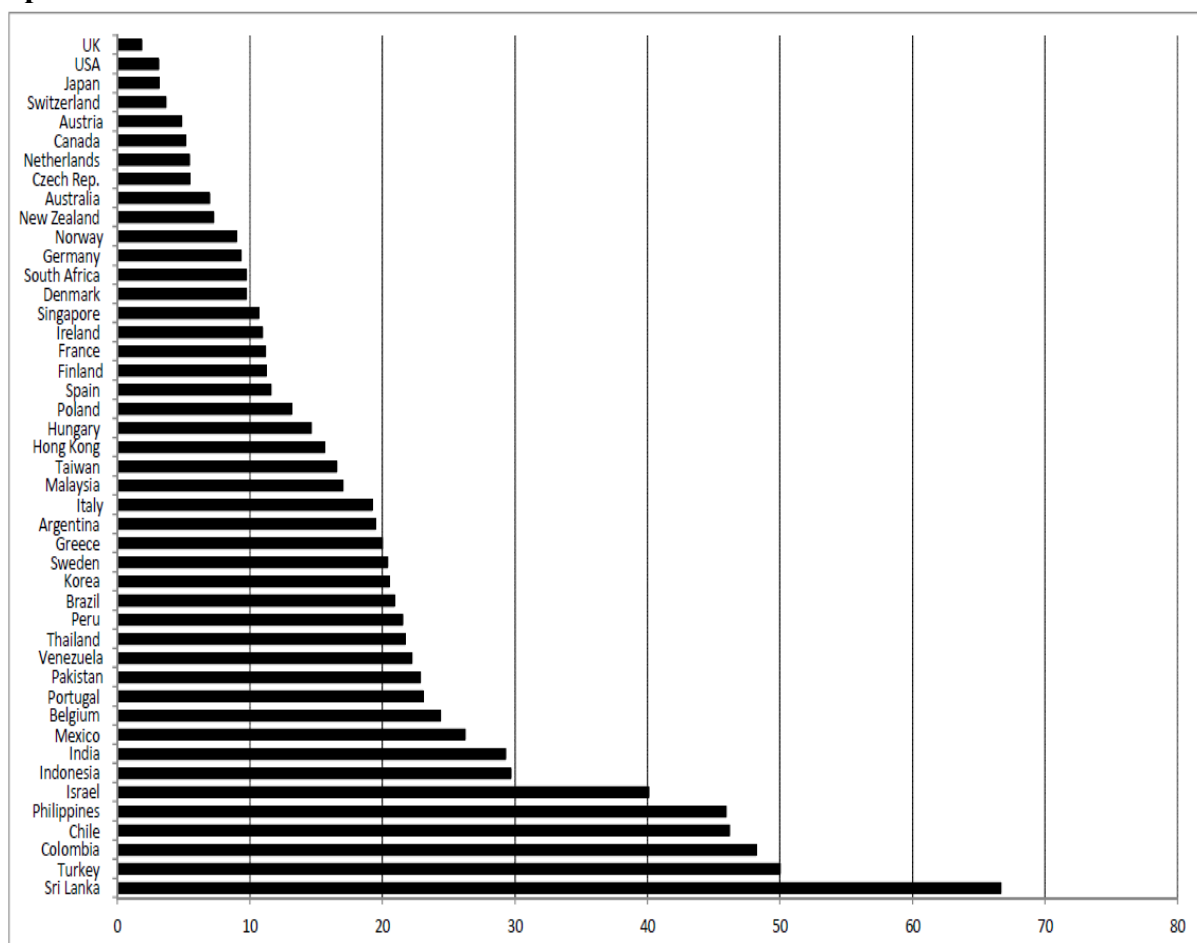
Source: Aminadav, Gur and Elias Papaioannou (2016), *op. cit.*

### *Anglo-American Exceptionalism*

Two countries stand out as exceptions to the concentrated ownership picture: the UK and US. Companies with pure dispersed ownership are largely to be found only in the UK and the US. Indeed, the conventional view is that Anglo-American stock markets are the archetypal examples of stock markets that are widely dispersed, a view that has been significantly influenced by the evidence of Berle and Means cited earlier. As Section 6 described, the elimination of family controlled business groups in the US is a post WW2 phenomenon and Figure 17 confirms that there are now very few business groups in both the UK and the US. However, closer inspection reveals that there remains a pronounced difference between the two countries.

These differences are revealed in Holderness (2010), who compares the US with 13 Western European countries, including Belgium, France, Germany and Sweden, and nine Asian countries including Hong Kong, Singapore, and South Korea. In total, his sample includes 7500 listed companies. The common denominator for many of the countries in his sample is that they are known for having stock markets that are either dominated by companies with large blockholders, often families, or at least stock markets where blockholders have a strong presence. South Korea, Hong Kong and Germany are significant examples of family-dominated stock markets.

**Figure 17 Proportion of Listed Firms in the US Affiliated with Business Groups, based upon data around 2000.**



**Source:** Family Business Groups around the World: Financing Advantages, Control Motivations, and Organizational Choices, Ron Masulis, Peter Phan, and Jason Zein, review of *Financial Studies*, 2011: 3556-3600. Reproduced in: *The Great Pyramids of America: A Revised History of US Business Groups, Corporate Ownership and Regulation, 1930-1950*, Eugene Kandel, Konstantin Kosenko, Randall Morck, and Yishay Yafeh, working paper, April 13, 2015.

Holderness finds that blockholders in the US, defined as having more than 5 per cent of outstanding common stock, hold on average 39 per cent of all outstanding common stock. This exceeds the 36 per cent held by their counterparts in the other 22 countries. Medians tell a similar story with 37 per cent aggregate ownership by blockholders in US companies and 33 per cent in non-US companies.<sup>40</sup>

Using the same sample of listed companies, Holderness also reports the fraction of US firms that have at least one blockholder with 5 per cent or more of outstanding stock, and compares them with the other 22 countries. Whereas 96 per cent of US companies have at least one blockholder with more than 5 per cent of common stock, the equivalent number is 93 per cent for non-US companies. Figure 18 plots the data for each of the 23 countries, including the US, with average aggregate block ownership plotted against the proportion of companies with at least one blockholder. The figure shows that the US stock market is in the middle of the pack with block concentration levels close to Hong Kong, Norway and Belgium, countries noted for having a stock market with concentrated ownership. In contrast, the UK, the other half of Anglo-American stock markets, is both to the left of the US and below it, signifying that it has lower average aggregate concentration and a lower proportion of companies with blockholders.

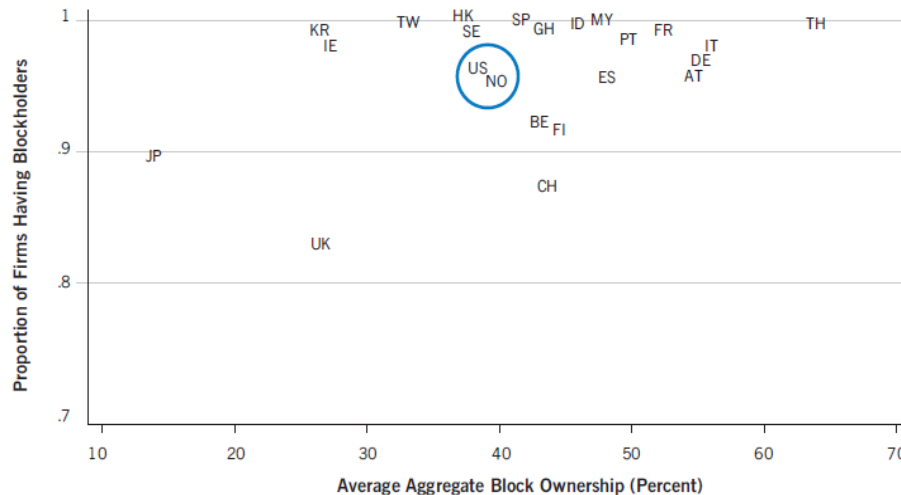
Even then Holderness claims that this comparison understates the relative concentration of ownership in the US, since US stock markets contain on average larger companies than their non-US counterparts. Amassing a block of 5 per cent in a large company requires more capital than a similar block in a smaller company. Controlling for the market value of a firm's equity, the industry, and stock volatility, Holderness finds that the overall conclusion holds: US companies have an ownership concentration that is similar to stock markets in the rest of the world. His conclusions are controversial; they are particularly relevant to the law and finance literature cited earlier in the chapter, where the US was held up as an important, if not the most important, example of a country with common law, diffuse ownership and a large stock mar

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<sup>40</sup> Amit and Villalonga (2010) estimate that of 2,110 listed firms in the US, 71% are family owned or controlled. Family control is however, skewed towards the smaller companies. Anderson and Reeb (2003) find that among the Fortune 500 firms, family ownership is about 40%. See Amit, Raphael, and Belen Villalonga, 2010, Family Control of Firms and Industries, *Financial Management*, Volume 39, 3, Autumn. Anderson, R. and D. Reeb, 2003, "Founding Family Ownership and Firm Performance: Evidence from the S&P 500," *Journal of Finance* 58, 1301-1329.

**Figure 18 Scatter diagram of large-block ownership at public corporations from the US and 22 other countries**

X-axis is the country average of the aggregate percent common stock ownership of all shareholders in a firm who own at least 5% of the voting power of the common stock. Country abbreviations are: US (United States of America), AT (Austria), BE (Belgium), CH (Switzerland), DE (Germany), ES (Spain), FI (Finland), FR (France), HK (Hong Kong), ID (Indonesia), IE (Ireland), IT (Italy), JP (Japan), KR (South Korea), MY (Malaysia), NO (Norway), PH (Philippines), PT (Portugal), SE (Sweden), SG (Singapore), TH (Thailand), TW (Taiwan), UK (United Kingdom).



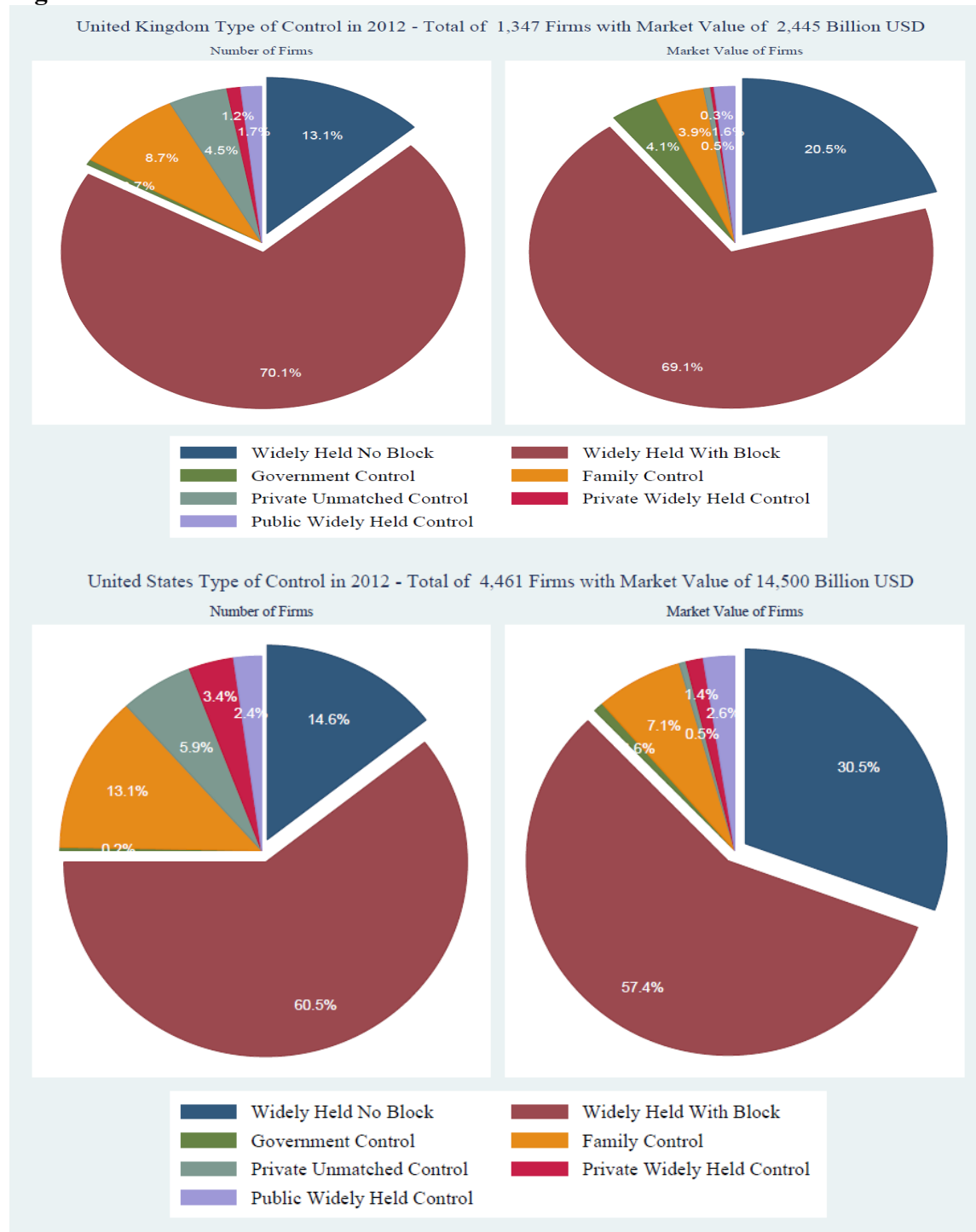
Source: Blockholders Are More Common in the United States Than You Think, Clifford Holderness, Journal of Applied Corporate Finance, vol 2, 4, Fall 2010

Figure 18 suggests that the UK is less concentrated than the US. It has less aggregate block ownership and the proportion of companies with at least one block owner is lower than in the US. Why does the UK stand out as having such a large number of purely widely held companies?

#### *The Death of the British Family Firm*

As Figure 19 shows, the primary difference is the small proportion of family controlled firms in the UK. The proportion of widely held firms with significant blockholders is if anything slightly greater in the UK than the US but the proportion of family controlled firms is notably lower and vastly lower than the world average in Figure 16

**Figure 19 Control of UK and US Firms**



Source: Aminadav, Gur and Elias Papaioannou (2016), *op. cit*

Why does the UK have so few companies with family control? As described in Section 3, the low level of family ownership in the UK is in part the result of the high level of dilution that occurred in the 20<sup>th</sup> century when family owned firms issued equity to fund their growth, particularly through acquisitions. As Table 11 records that pattern persists through to the 21<sup>st</sup> century. It shows the relatively high level of attrition of family firms in the UK. even over just a ten-year period between 1996 and 2006.

**Table 11 Survival Between the years 1996 and 2006 of the Largest 1000 Firms by Sales in 1996 in France, Germany, Italy and the UK**

			If survived: Owner type in 2006				
	Number of firms in 1996	Number of firms surviving to 2006	Family(%)	Widely held(%)	State(%)	Mult. Blocks, widely held by parent, or other block (%)	Controlled by unknown owner (%)
Firms controlled by family in 1996							
Germany	356	182		68	9	0	9
France	425	285		65	7	2	0
UK	206	138		50	8	1	0
Italy	507	335		72	5	2	6

Source: Franks Julian, Colin Mayer, Paolo Volpin and Hannes Wagner (2012), “The Life Cycle of Family Ownership: International Evidence” *The Review of Financial Studies*, 25, 1675-1712

One reason given for the low level of family control in the UK is regulation, which mitigates against holding blocks. For example, there is a mandatory bid rule that prevents shareholders holding 30 per cent or more without making a bid for all the outstanding shares. Although this does not include companies that list for the first time through an IPO, there are considerable obstacles to large blockholders exercising control. The company must have independent directors whose primary interest is the protection of the non-blockholders, and in a number of important decisions, the blockholder may not be able to vote its shares, particularly where its interests potentially conflict with those of other shareholders. The rationale for such rules is to create a level playing field and avoid the private benefits of control that blockholders can otherwise exert.<sup>41</sup>

It is often suggested that these private benefits of control come at the expense of minority investors. As Table 12 reports, this can indeed be the case. The table reports the premia at which blocks of shares trade in relation to those of minority shareholders. In Italy the premia of trades of share blocks average 37%. However, in the other countries reported in Table 12, mainly the Scandinavian countries, block premia are small or non-existent. This suggests that blocks are not necessarily incompatible with a high level of investor protection.<sup>42</sup>

**Table 12. Block premia by country**

Block Premium as Percent of Firm Equity							
Country	Mean	Median	Standard Deviation	Minimum	Maximum	No. of Observation	No. of Positive Observation
Denmark	0.08	0.04	0.11	-0.01	0.26	5	3
France	0.02	0.01	0.11	-0.1	0.17	4	2
Germany	0.1	0.11	0.14	-0.24	0.32	17	14
Italy	0.37	0.16	0.57	-0.09	1.64	8	7
Japan	-0.04	-0.01	0.09	-0.34	0.09	21	5
Norway	0.01	0.01	0.05	-0.05	0.13	12	8
Sweden	0.07	0.03	0.09	-0.01	0.22	11	10

<sup>41</sup> These rules, particularly one share one vote, are based less on empirical evidence and more on principles of fairness.

<sup>42</sup> Although the study is dated, the conclusions continue to hold.

UK	0.01	0	0.04	-0.06	0.17	41	21
US	0.01	0.02	0.09	-0.2	0.25	46	27

Source: Dyck, Alexander and Luigi Zingales. "Private Benefits Of Control: An International Comparison," *Journal of Finance*, 2004, v59(2,Apr), 537-600

In many countries, control by families and founders is reinforced by dual class share in which dominant shareholders have a disproportionate share of the voting rights of companies in comparison to their cash flow claims. As Table 13 shows, dual class shares are widespread in many Continental European countries.

**Table 13. Dual class shares: number and as a percentage of listed Firms**

Country	Market capitalization scaled by GDP, 1999	Number of listed firms, including OTC, 1999	% of all listed firms that are dual class	Value of control-block votes/Firm Value
Denmark	60.39	233.00	75%	0.008
France	105.00	968.00	2%	0.281
Germany	69.00	933.00	17%	0.095
Italy	63.00	241.00	41%	0.294
Korea	75.82	725.00	42%	0.289
Norway	44.00	195.00	14%	0.058
Sweden	165.00	277.00	63%	0.01
UK	214.00	1945.00	1%	0.096
US	191.00	7651.00	1%	0.02

Source: Nenova Table1, working paper and Nenova Table3, JFE

They are less pronounced in the US but as Table 14 shows some of the most prominent US companies, such as Facebook, Google, Linkedin and the New York Times, have used dual class shares.

**Table 14: Some US Companies with Dual Class Shares**

Google	Class A common stock one vote per share
Oracle	Class B 10 votes per share
	Larry Page, Sergey Brin and Eric Schmidt
	37.6% of votes; executives and directors 61.4%
Linkedin	Class A common stock one vote per share
	Class B 10 votes per share
	Class B shareholders give to all pre-IPO investors
	Reid Hoffman 21.7% increasing over time
Other companies with dual class shares	Facebook, New York Times company, Washington Post, Dow Jones, Berkshire Hathaway have similar structures



Furthermore, in contrast to the UK, US companies may include anti-takeover provisions in their articles of association. Table 15 records the frequency with which US IPOs include anti-takeover provisions and dual class shares in their articles. In the former it is more than one fifth and in the latter five per cent.

**Table 15: IPOs with Anti-Takeover Provisions and Dual-Class Shares**

Industry	Anti-Takeover Provisions	Dual-Class Shares
Apparel	18%	10%
Communication	17%	38%
Industrial Services	24%	10%
Metal, Plastics	34%	15%
Average All IPOs	22%	5

Source: Field, Laura Casares. "Control considerations of newly public firms: The implementation of antitakeover provisions and dual class shares before the IPO." (1999).

In contrast, dual class shares are now almost non-existent amongst listed companies in the UK. One of the reasons for this is regulation by UK listing authorities which stipulates that what are termed "premium listed" companies cannot have dual class shares. The rule reflects a desire for a 'level playing field' and a concern about the possible discrimination against minority shareholders associated with dual class shares and the potential exploitation of private benefits by controlling shareholders at the expense of the public benefits of minority shareholders.<sup>43</sup>

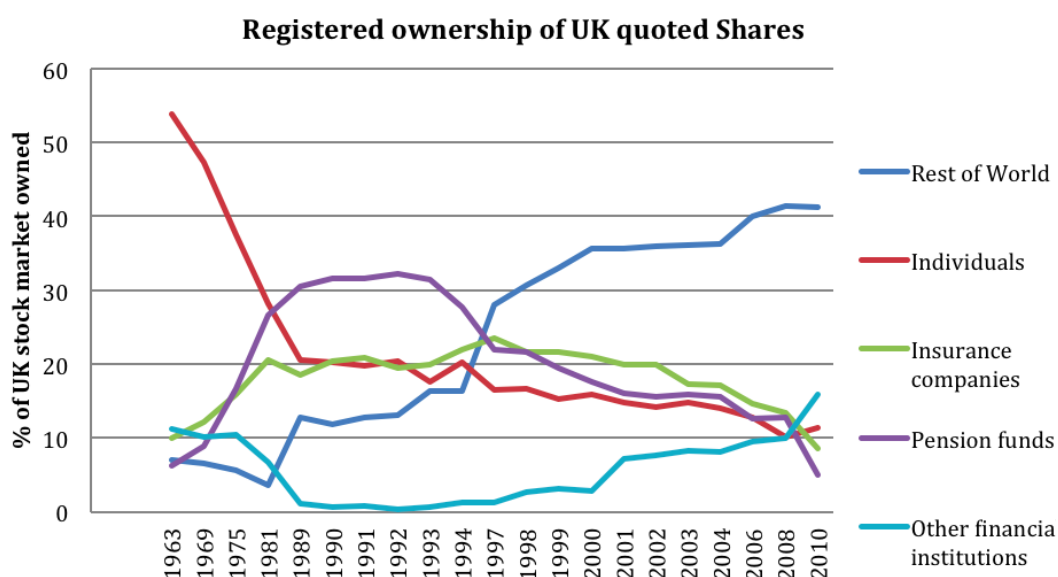
While Table 13 records that shares with enhanced voting rights do often trade at substantial premia relative to other share classes, it also shows that this is not universally the case. In Denmark, Germany, Norway, Sweden, and US, voting right premia are 10% or less. Minorities need not therefore always be disadvantaged by the presence of controlling shareholders and dual class shares. On the contrary, their absence may be disadvantageous to minorities if it creates a corporate governance vacuum.

Indeed, the rapidly declining number of listed companies does not suggest that minority investor protection has promoted a flourishing UK stock market. Not only, as noted above, has the number of listed companies in the UK declined dramatically but also, as Figure 20 shows, the ownership of those that remain listed has changed substantially. Until the 1960s, individuals dominated the ownership of UK listed firms. Holdings by life insurance and pension funds then increased to over 50% during the 1980s and the first half of the 1990s.

<sup>43</sup> The evidence that dual class shares disadvantage non voting shareholders is evenly balanced; see Renee Adams and Daniel Ferreira (2008), One Share – One Vote: The Empirical Evidence, *Review of Finance*, 12, 51-91.

**Figure 20 Registered Ownership of U.K. Listed Firms, 1963-2010**

The figure shows the percentage of equity in U.K. listed firms held by different shareholder types. Data: Office for National Statistics



Since then domestic pension fund and life insurance shareholdings have declined to less than 15% in 2010 and instead they have been replaced by a combination of foreign institutional shareholding and holdings by other financial institutions, most notably hedge funds and private equity. If there is one message from all this evidence, it is that there is no single causal story that explains financial development; law and finance and investor protections plays a role but it is not the only one.

Hedge fund and private equity investors have moved in over the last few decades in the UK to fill the vacuum that first families and then pension funds and life insurance firms left behind. Hedge funds and private equity are performing the governance function that families provide in Continental Europe and other corporates supply in Japan. The main distinction between the two groups is that, while the holdings of families and other corporates tend to be very long-term in nature, those of hedge funds and private equity are a matter of a few years rather than decades. Hedge funds and private equity are examples of institutions exercising control to address agency issues but in the process potentially threatening longer-term relations between the parties to a firm. Family and corporate blocks provide long-term stable ownership that is conducive to building and sustaining relationships but create a risk of dominant shareholders extracting private benefits of control.

However, there is more to it than this. While the above suggests that there may be merits to blockholdings providing stable ownership, it does not explain the significance of family shareholdings as distinct from institutional ones. In particular it does not identify the potential advantages as well as detriments of private benefits of control. Goshen and Hamdani provide an explanation in what they describe as “idiosyncratic ideas.”<sup>44</sup> These are ideas based on visions of the founders and entrepreneurs that are difficult to communicate to

<sup>44</sup> Goshen, Z. and Hamdani, A. (2016) ‘Corporate Control and Idiosyncratic Value’, *Yale Law Review* 125, 560–617.

outside investors. While well-informed long-term owners can be beneficial,<sup>45</sup> placing control in the hands of uninformed investors may threaten the adoption of visionary innovations that are valuable to the company in the long-term. Instead, investors might in some circumstances be better off binding themselves to the mast of the entrepreneur and standing by their initial judgements. Goshen and Hamdani illustrate this in the case of Henry Ford:

“Ford did not invent the automobile, nor did he own any valuable intellectual property in the technology. He was competing with hundreds of other entrepreneurs attempting to create a ‘horseless carriage.’ Ford, however, had a unique vision regarding car production. The first firm that he founded, the Detroit Automobile Company, was controlled by investors. While Ford’s investors demanded that cars be immediately produced and sold, Ford insisted on perfecting the design prior to production, leading to delays, frustration on both sides, and the eventual shutdown of the firm by the investors. Ford’s second attempt, the Henry Ford Company, was also controlled by investors. Again, after designing a car, Ford resisted investors’ pressure and interference, and he did not move directly into production. Eventually, his obstinacy led to the investors replacing Ford with Henry Leland, changing the company name to the Cadillac Automobile Company, and producing the car designed by Ford with great success. In his third attempt, the Ford Motor Company, Ford insisted on retaining control. This time, with no outside investor interference, Ford transformed his ideas for car design and production (his idiosyncratic value) into one of the great corporate success stories of all time. Finally, with yet another move along the spectrum of ownership structures, Ford’s grandson, Henry II, took the corporation public in 1956 with a dual-class share structure, ensuring that control stayed with the Ford family to this day.”

It is not just stable long-term owners that are required; it is people as well as institutions. Through eliminating families at the helm of companies, British capital markets may have extinguished the spark that is required to ignite ideas and promote vision in large as well as small companies. Indeed that is precisely the justification that Larry Page and Sergey Brin gave for the adoption of a dual class structure in Google: “we believe the stability afforded by the dual class structure will enable us to retain our unique culture and continue to attract and retain talented people who are Google’s life blood”.<sup>46</sup> It has done no harm to the minority shareholders in a company’s whose share price has increased by a factor of nearly ten over the twelve years since it went public in 2004.

#### *The Twenty First Century in Perspective: The Story So Far*

The first two decades of the 21<sup>st</sup> have observed a reversal in stock markets on a similar scale to the one that Raghu Rajan and Luigi Zingales report as having occurred during the 20<sup>th</sup> century. The formerly mighty UK and US stock markets have been in decline while those of Germany and Japan have respectively remained constant and grown appreciably. While some of the traditional controlling shareholders, most notably banks, have faded in both Germany and Japan as foreign institutional investments have increased, others, namely families and corporations, have remained. In contrast, dispersed shareholdings owned by

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<sup>45</sup> Where management’s idiosyncratic value is sufficiently large, it may simply launch a management buyout, with management owning control and cash-flow rights and investors providing debt. See Kaplan, S. (1989) ‘The Effect of Management Buyouts on Operating Performance and Value’, *Journal of Financial Economics* 24, 217–254. This is an example of how a large informed shareholder can be beneficial.

<sup>46</sup> Google 2004 Founders’ IPO Letter.

long-term institutions in the UK and US have given way to foreign institutional investors, hedge funds and private equity firms. Ironically, the previously leveraged positions of German and Japanese banks are now observed in the form of private equity ownership in the UK and US, and the share blocks of families and corporations in Germany and Japan are mirrored in hedge fund holdings in the UK and US, albeit with a shorter time horizon.

We can no longer talk about either an outsider stock market system in the UK and the US or an insider bank oriented system in Germany and Japan. We have family controlled firms in Germany, a combination of institutional and cross-corporate shareholdings in Japan, some persistent family ownership in the US and little or none in the UK. In some respects Japan is now closer to the UK than Germany and the US to Germany than the UK. More likely none of this taxonomies are either helpful or durable.

Contrary to the view that share blocks are a manifestation of a failure of regulation, the presence of share blocks appears to be a requirement for stock markets to persist. Instead of looking to the eradication of persistent family and corporate ownership of the largest listed companies in the world, we should be considering how significant long-term engaged institutional shareholding can be promoted in dispersed stock market economies. The long foretold convergence of stock markets around the world may be in progress but not as predicted on the Anglo-American dispersed systems but on various hybrids of the controlling shareholdings of the stock markets of the rest of the world.

## **9. Conclusions**

The UK, Germany, Japan and the US illustrate that it was not investor protection that allowed stock markets to develop at the beginning of the 20<sup>th</sup> century. In all four cases, stock markets flourished and ownership was dispersed in the absence of strong investor protection. Instead, other institutions and individuals were important in upholding relations of trust between investors and firms. In the case of the UK it was local stock markets, in Germany the banks, in Japan business coordinators and zaibatsu families and in the US business owned family groups. Where regulatory reform attempted to prescribe a particular type of financial system in post WW2 Japan it had the entirely unintended consequence of promoting the emergence of an insider rather than an outsider system of corporate control. Strong investor protection was therefore neither a necessary condition for the development of outsider systems of corporate ownership as illustrated by each of the UK, Germany, Japan and the US in the first half of the 20<sup>th</sup> century, nor a sufficient condition as demonstrated by Japan in the second half of the 20<sup>th</sup> century.

Equity markets may be important for economic development but dispersed ownership and control by outside shareholders may not. Providing corporations with access to external sources of equity finance from stock markets is not the same as conferring control on those outside investors. The experience of the UK, Germany, Japan and the US in the first half of the twentieth century and that of China, Japan and Korea in the second half of the century are illustrative of that. Ownership was dispersed in the first four countries in the absence of strong investor protection and the last three countries displayed remarkable growth in the presence of dominant insider owners and the absence of external shareholder control.

What emerges as a fundamental determinant of the development of equity markets is a different institutional function than the ones of formal regulation or corporate control that have been emphasized to date. It is the ability of investors to be able to establish relations of trust with the different parties to the firm. The fulfilment of trust is a two-way process

involving not only investors being willing to support firms over longer periods of time but also companies reflecting the interests of their investors in contrast to their executives.

Dispersed shareholder systems are highly vulnerable to agency problems and it is not therefore surprising that new forms of corporate control in the guise of hedge fund activism and private equity have emerged. However, these come at a price in terms of the maintenance of the long-term relations between investors and firms that are often required for companies to flourish. Perennial concerns about short-termism in UK and US stock markets may be a manifestation of that.

The co-existence of blocks of shares with dispersed ownership in many stock markets around the world offers both possible solutions and risks. In principle, dominant shareholders can provide the stability that dispersed shareholders cannot. On the other hand, blockholders are a source of private benefit exploitation at the expense of minority investors. Evidence from the premia at which blocks and dual class shares trade suggests that this is a possible but not necessary failure of controlling shareholder systems. Combined with sufficient protection of minority shareholder interests, they may be able to offer the monitoring and control that prevention of agency failings requires and at the same time avoid exploitation of minority investors. But there is a more fundamental argument that suggests that not only can private benefits be controlled, they may in fact be desirable. They may be the source of idiosyncratic ideas on which companies, economies and societies flourish and the persistence of families as owners with ideas may be critical to the generation and implementation of innovation in large firms as well as entrepreneurship in small.

One clear conclusion to emerge is that no single form of ownership and governance arrangement offers a panacea for the issues that confront all companies. Companies have very different ownership and governance requirements depending on the activities in which they are engaged, the markets in which they operate, and the social and political conditions that they confront.<sup>47</sup> Not only is heterogeneity rather than homogeneity required but so too is experimentation. As technology, societies and standards change so should companies. Prescriptive regulation is unjustified by both our paucity of knowledge about optimal governance arrangements and the diverse and changing needs of firms. We should not only let many flowers bloom but encourage them to do so by adopting enabling rather than prescriptive regulation and accepting that today's institutions of trust and control will not be tomorrow's.

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<sup>47</sup> For evidence on this see Carlin, W. and Mayer, C. (2003). "Finance, Investment and Growth", *Journal of Financial Economics*, 69, 191-226.