CORPNET Working Paper

The New Permanent Universal Owners: Index Funds, (Im)patient Capital, and the Claim of Long-termism

Jan Fichtner & Eelke M. Heemskerk

Abstract

Fundamental change is happening in asset management – the shift from actively managed funds to index funds. This money mass migration into index funds has far-reaching consequences, because it leads to a concentration of corporate ownership in the hands of the 'Big Three' asset managers. We call BlackRock, Vanguard, and State Street the 'New Permanent Universal Owners' as they are invested indefinitely in thousands of member firms of stock indexes. We provide novel findings on the combined ownership of the Big Three in 17 major stock indexes from nine countries. Furthermore, we shed light on the impact of index funds on the dichotomy between 'patient' and 'impatient' capital. The Big Three have proclaimed themselves champions of long-termism. We analyze their voting behavior in five countries concerning two proxies for corporate short-termism: share buybacks, and mergers and acquisitions. So far, they have not unambiguously acted as champions of long-termism.

Keywords: Asset managers, index funds, corporate ownership, corporate governance, short-termism, varieties of capitalism

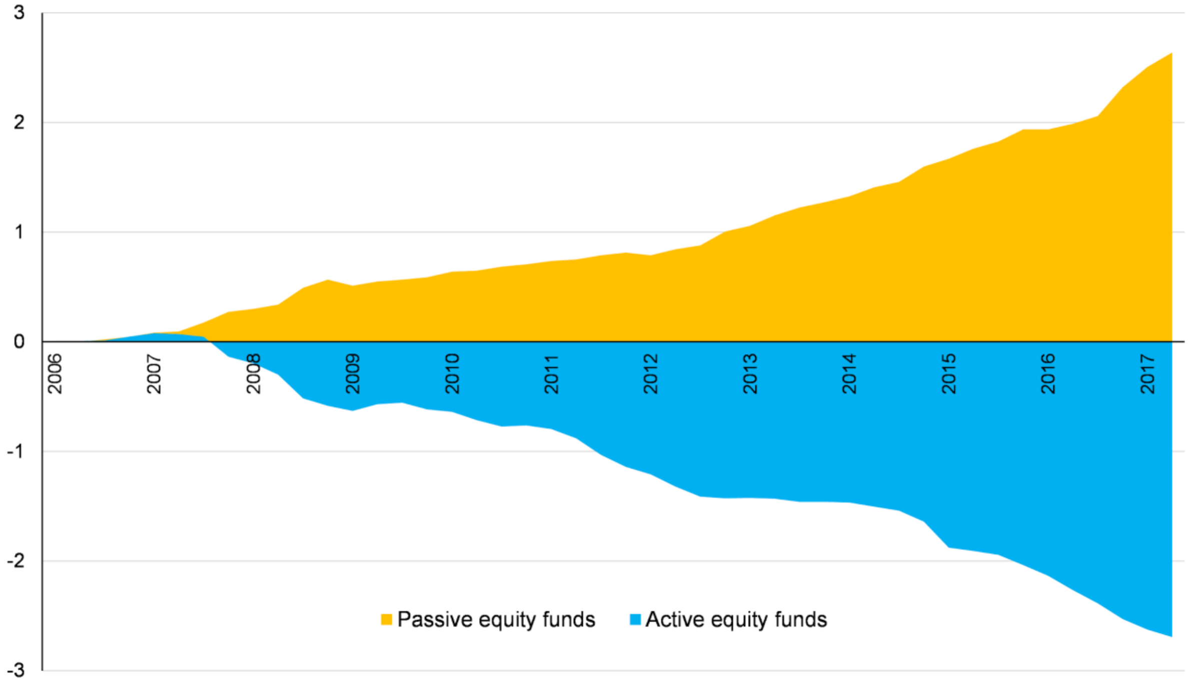
JEL classification: G23 non-bank financial institutions, G32 capital and ownership structure, P10 capitalist systems

1. Introduction

There is a fundamental change happening in the sphere of financial investment. Institutions as well as private investors are increasingly shifting money from actively managed mutual funds into passively managed index funds. Index funds replicate established stock indexes, such as the S&P 500 in the US or the FTSE 100 in the UK while minimizing investor fees. Because they do not actively buy and sell stocks based on expected future results but merely follow the market this is called passive asset management. The main reason for this capital migration is that index funds are much cheaper than actively managed funds but deliver similar returns compared to the vast majority of active funds. In this way, from 2006 to mid-2017 almost US$2.7 trillion has flown out of actively managed equity funds globally, while over US$2.6 trillion has flown into index equity funds (Sushko and Turner 2018). This money mass-migration of at least US$5.3 trillion constitutes an unprecedented shift in investment behavior in just one decade. A crucial difference between the actively managed mutual fund industry and the passively managed index funds industry is that the former is fragmented with many small players and only a few large ones, such as Fidelity and Capital Group, whereas the latter is highly concentrated in just three large US asset managers. BlackRock, Vanguard, and State Street, or simply the 'Big Three', together manage over 90 percent of all assets under management in passive equity funds (Fichtner, Heemskerk and Garcia-Bernardo, 2017, p.304). For the sake of brevity we use the term 'index' to denote the broader category of tools for passive investment strategies, including index mutual funds and exchange traded funds (ETFs). Because of the dominance of the 'Big Three' in the passive asset management industry the ongoing capital migration into index funds has far-reaching consequences for publicly listed corporations in many countries that have developed equity markets, because it is leading to a *concentration* of corporate ownership.

More and more investors have finally realized that a majority of active asset managers are not able to beat the returns of major stock indexes over a longer period time, but nonetheless charge substantially higher fees than passively managed index funds. Figure 1 shows the global flows out of actively managed equity funds and the inflows to index tracking equity funds (index mutual funds and ETFs) from 2006 to mid-2017. It is evident that there have been continuous (and growing) outflows from the diverse group of actively managed funds, which have reached almost US$2.7 trillion by mid-2017. On the other hand, the concentrated group of passive asset managers has recorded inflows of over US$2.6 trillion. It seems very likely that this money mass-migration is going to persist in the coming years. In fact, it could even accelerate because the adoption of index funds in Europe (and other regions) has been much less progressed compared to the United States. That may be about to change. In 2017 European index funds had a record growth rate of 40 percent, and recently implemented EU regulation such as MiFID II is widely seen as facilitating further growth in the next years (Thompson, 2018).

Figure 1. The global shift from actively managed to index funds in equities (trillion US$)



Source: Sushko and Turner (2018).

Corporate ownership determines corporate control, which, in turn, directly influences key corporate governance issues, such as executive remuneration, the conflictive relationship between (short-term) shareholder value maximization and long-term investment as well as a range of environmental and social concerns. The persistent investment shift into index funds, therefore, is leading to a *centralization* of significant proportions of corporate control primarily in the hands of just three American asset managers. The fragmented actively managed mutual funds industry is characterized by centrifugal market forces – there is no significant advantage from being much bigger than the competitors. In contrast, first-mover advantage combined with powerful economies of scale – centripetal market forces – make it unlikely that the dominant position of this trio of passive asset managers is going to be challenged in the near future. We thus call BlackRock, Vanguard, and State Street the 'New Permanent Universal Owners' as they are invested indefinitely in thousands of firms that are members of major international stock indexes, unless the composition of an index changes.

The Big Three passive asset managers form a kind of 'natural oligopoly' in the index fund industry. Perhaps surprisingly this dominant market position so far has led to a significant reduction of investor fees for both actively and passively managed funds (Bogle, 2016).

Index funds are a business of scale and therefore the Big Three try to attract as much inflows as possible (Jahnke, 2017). Lowering fees (temporarily) is one way of achieving that goal. Some have called this development the ‘democratization of investment’ (Novick, 2017), but concomitantly the Big Three may have become the ‘de facto permanent governing board’ (Haberly and Wojcik, 2015) for a quickly rising number of publicly listed corporations in the United States and other countries. A growing body of literature in the fields of law and economics argues that there is increasing ‘horizontal ownership’ (Elhauge, 2016) – which means that competing listed firms now often have the same ‘common owners’ (Schmalz, 2018), such as index funds or other large investors (e.g. Berkshire Hathaway, Fidelity or SoftBank). This situation could lead to less competition between listed firms active in the same market and thus potentially cause higher prices for consumers.

Despite the high relevance of the continuing rise of the Big Three US index fund providers for topics such as corporate governance and comparative political economy, the issue has received relatively little scholarly attention so far. Moreover, the few studies that exist have focused primarily on the United States (Appel, Gormley and Klein, 2016; Fichtner, Heemskerk and Garcia-Bernardo, 2017). In this paper, we provide novel findings on the combined ownership of the Big Three in 17 major stock indexes from nine countries. In addition, we analyze the voting behavior of the New Permanent Universal Owners in France, Germany, Japan, the United Kingdom, and the United States. As index funds are unable to sell shares of firms with whose behavior or performance they are dissatisfied, their primary channel of influence is through their voting at annual general meetings (AGMs). This is combined with and supported by private engagements with the management of investee companies. The Big Three are passive investors, but they are active owners (Appel, Gormley and Klein, 2016).

One specific topic that we bring to the fore in this paper is the impact of index funds on the dichotomy between ‘patient’ and ‘impatient’ capital. Traditionally, the ‘liberal market economies’ (LMEs) of the United States and the United Kingdom are associated with impatient capital in the form of financial market actors that demand widely-held listed firms to maximize short-term shareholder value. Activist hedge funds epitomize this impatient capital that continuously seeks to extract short-term financial gains (Buchanan, Chai and Deakin, 2018; Fichtner, 2015; Goyer, 2006, 2011). On the other end of the spectrum, Germany and Japan are often seen to possess patient capital - ‘ownership that allows for the realization of long-term management strategies' (Culpepper, 2011: 26) - in the form of long-term oriented banks and strategic blockholders, such as families or conglomerates (Culpepper, 2005, 2011; Hall and Soskice, 2001; Yamamura and Streeck, 2003). The rise of BlackRock, Vanguard, and State Street as the New Permanent Universal Owners adds an unexpected twist to this comparative political economy debate. Even though the Big Three are asset managers with clear American roots they could, at least theoretically, facilitate patient capital. Or, in the words of Braun (2015: 268), 'an economy dominated by asset managers seeking low-cost exposure to the market portfolio may, in principle, open up the possibility for the internalisation of externalities, the formation of long-term orientations, and the provision of "patient capital"'. And, in fact, the CEO of BlackRock, Larry Fink, has publicly confirmed this stance in his 2018 letter to CEOs (BlackRock, 2018):

> "BlackRock cannot express its disapproval by selling the company's securities as long as that company remains in the relevant index. As a result, our responsibility to engage and vote is more important than ever. In this sense, index investors are the ultimate long-term investors – providing patient capital for companies to grow and prosper."

The CEO of State Street Global Advisors, Cyrus Taraporevala (2018), concurs by stating: "We are essentially permanent capital and cannot turn the S&P 500 into the S&P 499. That means we need to take a long-term perspective on behalf of our clients. At a time when some activist shareholders are keen on extracting short-term profits from companies, we provide a healthy and necessary counterweight." We engage these statements with the appropriate amount of scholarly skepticism in this paper. It seems clear that the Big Three face increasing demands by their investors and the public to actively use their enormous voting rights to improve the corporate governance of their investee companies. In fact, they have a fiduciary duty to do so. However, it is still unclear whether they really have the intent and the capacity to actively influence corporate governance. BlackRock has increased its corporate governance department from 20 members in 2014 to 33 people in 2017 (out of a total staff of 13,000), Vanguard (with about 16,600 employees) more than doubled its corporate governance team from 10 in 2015 to 21 in 2017 (Bioy et al., 2017). However, compared to their thousands of international portfolio companies this is still very little. Previous research has found that in most cases the Big Three vote with management and rarely support shareholder proposals (Bioy et al., 2017; Fichtner, Heemskerk and Garcia-Bernardo, 2017). The New Permanent Universal Owners have accumulated unprecedented ownership positions in major listed corporations around the world but the precise level and nature of their influence is still opaque.

In order to shed light on these key developments, this paper is structured as follows. The next section discusses the literatures from political economy, economic sociology and management studies that are pertinent for this phenomenon. This includes the work by Useem (1996) on 'investor capitalism' and the rise of mutual funds, the 'universal owners' argument by Hawley and Williams (2000) and what they call 'fiduciary capitalism', and finally the 'new finance capitalism' thesis by Davis (2008). Subsequently, in section three we provide new data on the combined ownership of the Big Three in the publicly listed corporations of nine developed countries in 2018. In total, we analyze 17 major international stock indexes. We find that the aggregated mean ownership of the Big Three in the pivotal S&P 500 index has crossed the threshold of 20 percent for the first time by early 2018. This means that BlackRock, Vanguard, and State Street, seen together, are the largest shareholder in almost 90 percent of the largest American corporations. While the mean ownership of the Big Three in the British FTSE 100 is only about 10 percent, they are the largest shareholder in almost 60 percent of all member companies. In Germany and Japan, the New Permanent Universal Owners are already the largest shareholder in 40, respectively 30 percent of the members of the dominant national stock indexes. Section four focuses on the role of the Big Three passive asset managers for the provision of patient capital. Here we analyze the voting behavior of BlackRock, Vanguard, and State Street in five countries concerning two proxies for corporate short-termism: share buybacks as well as mergers and acquisitions. We find that, so far, the Big Three have not unambiguously acted as champions of long-termism. On the contrary, their voting has tended to support these two short-termist measures often demanded by activist shareholders (i.e. impatient capital). In addition, our analysis shows that the voting behavior of BlackRock, Vanguard, and State Street is highly congruent with recommendations by ISS and Glass Lewis, the dominant proxy voting advisors. This could be an indication that the Big Three de facto still outsource much of their voting at AGMs. The final section concludes by reflecting on the future role of the New Permanent Universal Owners in global corporate governance.

2. The political economy of asset managers

Arguably the first modern institutional investors were created in the late 1920s in the Boston area when mutual fund companies such as State Street and Wellington offered open-end funds that for the first time enabled the continuous issuance and redemption of shares (Fink, 2008). However, their size remained relatively small for nearly the next five decades and thus they did not play a key role for corporate control. Berle and Means found in their seminal study in the early 1930s that most listed companies did not have large controlling owners. Instead they argued that there was a separation of ownership and control: 'the dissolution of the old atom of ownership into its component parts, control and beneficial ownership.' (Berle and Means, 1967 [1932]: 8). The decades before the 1930s had been marked by concentrated ownership in the hands of business tycoons such as J.P. Morgan and J.D. Rockefeller. The rise of small private investors that Berle and Means had found evidence for meant that the power over publicly listed corporations had mostly shifted to management. About five decades later Chandler (1977) introduced the term 'managerial capitalism' to capture the powerful position of management: control over the firm was exercised by hired, professional managers not by shareholders (see Knafo and Dutta, 2016 for an account of the rise of financialized managerialism in the 1960s).

Two decades later, Useem (1996) coined the term 'investor capitalism' to acknowledge the fact that by the mid-1990s the management of US listed corporations had to take into account the interests of large institutional investors. Indeed, as Jahnke (2017) showed, institutional investors held more than 50 percent of US corporate equities for the first time in 1996, up from about 15 percent in 1965. According to Useem (1996: 206-207), the new relations between investors and managers resembled a nonhierarchical network – 'formal "principal-agent" relations (…) have given way to negotiated relations between coequals.' Hawley and Williams (2000) have extended the work of Useem by introducing the terms 'universal owners' and 'fiduciary capitalism'. Their argument primarily focused on US public pension funds, such as CalPERS, which through growth and diversification had become significant long-term owners in a great number of US listed corporations. As fiduciaries for their investors, they thus (should) had an interest in the long-term performance of the entire economy, not in the short-term performance of single companies.

However, during the next two decades the management of assets has increasingly shifted from public pension funds to privately owned and for the most part profit-oriented asset managers. Thus, Davis (2008) argued that there was a ‘new finance capitalism’ in which a small number of actively managed mutual funds, such as his main example Fidelity, have become large shareholders in a surprisingly high number of US listed firms. Though reminiscent of the era when J.P. Morgan and J.D. Rockefeller controlled many large American corporations, Davis (2008: 13) found that active mutual funds mostly eschewed active participation in corporate governance and therefore concluded that ‘networks of concentrated yet liquid ownership without control seem to be the distinctive feature of the new finance capitalism.’

Then came the global financial crisis. Similar to many other politico-economic domains, the crisis has caused significant change in the sphere of investing. The most important change was the shift towards passive investing. Arguably, Braun (2015) was the first social scientist to study this influential change and to provide some cogent conclusions. He identified the development of ETFs (exchange traded funds) as a crucial new ‘market device’ for the ‘socio-technical agencement’ of passive investors. Moreover, Braun (2015: 268) argued that index investors are – in principle – in a good position to provide ‘patient capital’ to their investee companies, which could foster the ‘internalisation of externalities’ and the development of long-term orientations. Fichtner, Heemskerk and Garcia-Bernardo (2017) built upon the contributions by Davis (2008) and Braun (2015); for the first time they identified that the growth of index investing has led to the rise of the ‘Big Three’ US passive asset managers BlackRock, Vanguard and State Street. Making both an empirical and a theoretical contribution, Fichtner, Heemskerk and Garcia-Bernardo (2017) found that the Big Three utilize coordinated voting strategies in the annual general meetings of their investee companies and thus employ centralized corporate governance strategies. Moreover, they determined that the Big Three, seen together as one investor block, already constituted the largest shareholder in 88 percent of all S&P 500 firms in 2015. The Big Three generally are not able to sell (‘exit’ in the vocabulary of Hirschman, 1970), because they are almost entirely passive asset managers – the proportion of actively managed equity funds that they offer is well below twenty percent of their total assets under management in equities and declining. Fichtner, Heemskerk and Garcia-Bernardo (2017) argued that they are able to ‘voice’ concerns to management in their thousands of ‘private engagements’ every year. This could also result in the situation that the Big Three exert forms of ‘hidden power’ because company executives may be prone to internalizing the known objectives of their large permanent investors.

The rapidly rising inflows since 2008 (see Figure 1) mean that the Big Three have become ever larger owners in ever more publicly listed firms in the United States, but increasingly also in other countries. In this way, the rise of the New Permanent Universal Owners is profoundly changing global corporate ownership. We argue that the institutional investors that Hawley and Williams (2000) wrote about – primarily large US pensions funds – have not been truly universal owners, because, even though they held a large quantity of small stakes in hundreds of listed corporations in the United States, they did not hold the entire stock market in their portfolio, as the Big Three practically do. And outside the United States, their holdings remained quite limited. In hindsight, the group of investors addressed by Hawley and Williams should arguably be better characterized as very broad yet *transient* owners, because even though they partly used internal index tracking strategies they still retained the possibility to sell individual companies. For them, index tracking was just a discretionary strategy to reduce cost, which could be changed frequently. In contrast, low-cost index tracking is the dominant business model for BlackRock, Vanguard, and State Street and therefore they are *permanent* and truly universal owners that are unable to sell individual companies.

3. The global corporate ownership of the New Permanent Universal Owners

To shed empirical light on the claim of universal ownership by the Big Three we collected data from Bureau van Dijk's ORBIS, an authoritative and often used database for academic research into patterns of corporate ownership (Fichtner et al 2017; Garcia-Bernardo et al 2017; Vitali et al 2011). A few numbers demonstrate the near universal ownership by the Big Three passive asset managers. By mid-2018, BlackRock held ownership in at least 9,390 publicly listed corporations around the world. Vanguard even held positions in over 10,160 companies. State Street is somewhat smaller and held ownership in approximately 5,910 firms. The best comparison to these new private universal owners is the large sovereign wealth fund (SWF) of Norway, which held shares in over 8,500 listed firms globally. However, most of its holdings are much smaller compared to the Big Three.

BlackRock, Vanguard and State Street are American asset managers. Both index mutual funds and ETFs have been developed in the United States, and it is here that the adoption of these passive investment vehicles is most pronounced. Hence, it is understandable that most of this emerging literature on passive asset managers has focused on the United States (Appel, Gormley and Keim, 2016; Fichtner, Heemskerk and Garcia-Bernardo, 2017). However, we would like to shed new light on some of the existing blind spots. Consequently, we have analyzed the holdings of the New Permanent Universal Owners in many more countries than just the United States. Table 1 shows the three and five percent blockholdings of BlackRock, Vanguard and State Street in 25 countries by early 2018.

Table 1. Global ownership profiles of the New Permanent Universal Owners

	BlackRock		Vanguard		StateStreet		Norway	
Country	**3%**	**5%**	**3%**	**5%**	**3%**	**5%**	**3%**	**5%**
US	2428	2011	2523	1797	1283	355	22	4
UK	346	229	216	12	47	4	63	9
Japan	190	141	12	0	0	0	39	2
Australia	81	70	135	31	5	5	15	1
Germany	65	35	21	1	1	0	67	7
Taiwan	60	6	204	0	0	0	0	0
France	51	31	8	0	1	0	12	2
Canada	46	25	31	5	1	0	0	0
Bermuda	41	29	33	26	13	3	4	1
Ireland	33	25	26	17	16	4	1	1
Netherlands	29	15	12	5	5	1	6	2
Cayman Isl.	28	13	16	7	2	1	1	1
Brazil	26	10	12	0	0	0	3	0
South Korea	25	4	1	0	0	0	12	2
Switzerland	24	9	10	2	3	0	8	0
Spain	22	6	6	0	0	0	15	0
South Africa	17	4	52	0	0	0	5	0
China	17	16	2	0	0	0	2	2
Mexico	15	4	7	0	0	0	5	0
Italy	15	14	1	0	0	0	7	0
Sweden	14	5	7	0	1	1	15	4
Finland	12	6	3	0	0	0	4	0
India	10	0	8	0	0	0	10	0
Belgium	9	2	2	0	0	0	4	0
Hong Kong	7	2	3	0	1	1	0	0
Total	3611	2712	3351	1903	1379	375	320	38

Source: Authors' calculations based on Orbis (2018).

Three percent is the threshold when ownership in a publicly listed corporation has to be reported in many countries, five percent is the reporting threshold in the United States and widely used in the literature on American corporate governance. As a comparison we have added the Norwegian SWF, which is the largest state-owned investor. The majority of blockholdings of the Big Three are located in the United States. Vanguard owns three percent blockholdings in over 2,500 listed firms in the United States, and BlackRock owns only slightly less. However, it becomes evident that BlackRock has 'deeper' ownership as it holds over 2,000 five percent blocks, whereas Vanguard owns only about 1,800. State Street also has a very broad ownership profile in the US with almost 1,300 three percent blocks but is generally significantly smaller than the other two index fund giants.

The country in which the New Permanent Universal Owners have their most blockholdings after the United States is, perhaps unsurprisingly, the United Kingdom. The UK is also considered as a liberal market economy, in which financial markets play a central role. BlackRock and Vanguard hold hundreds of blockholdings in British listed corporations. State Street is smaller, but the UK also is the second largest country for them, similar to BlackRock and Vanguard. But there are also some significant regional differences. BlackRock has 190 three percent holdings in Japanese corporations, whereas Vanguard only has 12 and State Street none. In contrast, Vanguard has significantly more blockholdings than BlackRock in Australia and Taiwan. This can either be because of specific index funds investing in these countries that have become popular with American (or European) investors, or because BlackRock and Vanguard have gained significant assets under management from investors based in these countries that invest domestically. In the vast majority of countries shown here, the number of blockholdings by the Big Three is below one hundred and thus much smaller than in the United States.

Another interesting finding evident in Table 1 is the surprisingly high number of blockholdings of BlackRock, Vanguard, and State Street in three relatively small jurisdictions that act as prominent offshore financial centers catering to multinational corporations: Bermuda, the Cayman Islands and Ireland (Fichtner, 2016; Garcia-Bernardo, Fichtner, Takes and Heemskerk, 2017). Big Chinese internet corporations domicile holding companies in the Cayman Islands in order to list their shares abroad (e.g. Alibaba, Baidu and Tencent), whereas some large US corporations have shifted their legal domicile for tax reasons to Ireland through so-called 'corporate inversions' (e.g. Accenture, Allergan and Medtronic). Hence, the blockholdings in these tax havens in reality mostly are ownership positions in large American and Chinese corporations. In general, the global ownership profiles of the Big Three are concentrated in the developed economies of the OECD world. The number of blockholdings in 'emerging economies' such as Brazil, China and India are quite low, especially 5 percent blockholdings. However, it has to be noted that Vanguard holds over 50 blockholdings in South African corporations.

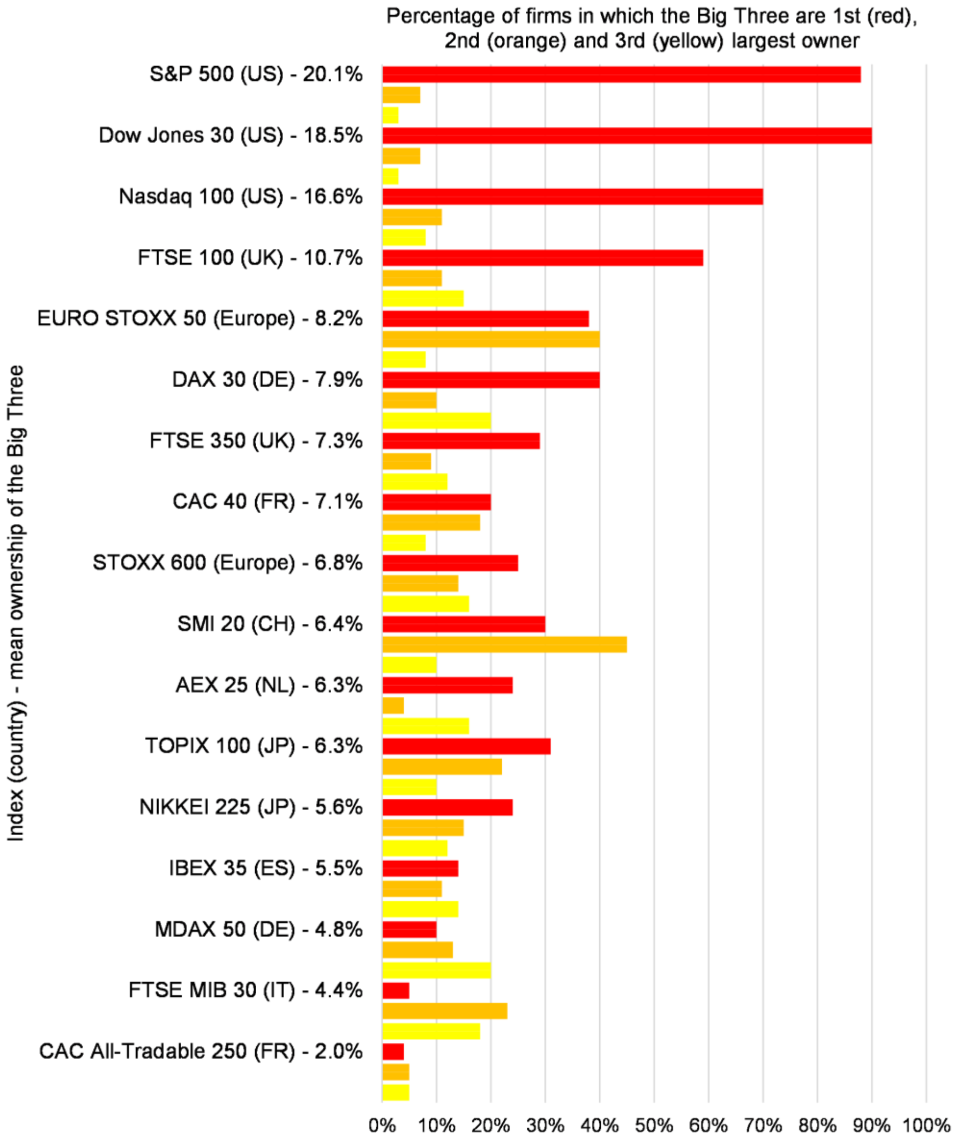
The comparison with the Norwegian SWF is instructive. The state-owned fund is not bound by any specific investment strategy, such as index tracking or particular country weights but does follow a portfolio approach to diversify its investments internationally. Therefore, the ownership profile is much more evenly balanced than those by the Big Three. The number of blockholdings in American corporations is much smaller than those of State Street, the smallest of the three large passive asset managers. However, it has to be noted that in hundreds of companies the Norwegian SWF holds stakes of one or two percent, which thus do not appear in this table. This partly explains the surprisingly low number of blockholdings in American corporations. In other countries, such as Germany and Sweden, Norway even holds more three percent blockholdings than BlackRock. Thus, Norway is a quasi-universal owner but in contrast to the Big Three this large SWF is not necessarily a permanent owner as it is continually adjusting its strategy and has, for example, decided to divest from coal, tobacco and weapons-producing companies (Carrington, 2015).

One could also set the bar higher and analyze blockholdings of more than ten percent, which can be seen as very influential. In mid-2018 BlackRock held about 860 of such substantial ownership positions globally with the vast majority being located in the United States, but also some in the UK, e.g. in the Anglo-Australian mining giant BHP Billiton. Vanguard held 510 such blockholdings, most of them in American corporations, including household names such as Goodyear Tire and Xerox. State Street's ownership is not as deep and therefore it only held 14 blockholdings above ten percent, which, however, include large aerospace and defence corporations such as United Technologies, Lockheed Martin and Northrop Grumman. The SWF of Norway has 15 ten percent blockholdings, which are mostly in medium-sized Norwegian companies (Orbis, 2018).

The absolute number of blockholdings by country is an important aspect of the global ownership by the Big Three index fund providers but it is certainly not the only relevant one. The raw number of blockholdings does not tell much about the level of corporate control potentially exerted by the New Permanent Universal Owners because it does not take into account the different national ownership structures. The traditional view is that in LMEs (primarily the US and the UK) the ownership of publicly listed corporations is dominated by many different small investors and thus remains fragmented (i.e. the separation of ownership and control). In contrast, the corporate ownership in coordinated market economies (CMEs) has been more concentrated in the hands of strategic blockholders. In Germany, for many decades this had been large private banks and insurance companies, but in the late 1990s these investors mostly sold their blockholdings due to new domestic tax legislation and the aim to expand abroad through mergers and acquisitions (Höpner and Krempel, 2004; Jackson and Sorge, 2012). Their position as large owners was mostly taken over by private investors, such as families, which held blockholdings of at least 25 percent in almost one third of the 160 largest listed German corporations in 2011 (Fichtner, 2015). Lehrer and Celo (2016) thus use the term 'German family capitalism' to characterize this political economy. In Japan, large conglomerates (known as *keiretsu*) still have many block- or crossholdings in listed corporations (Witt and Reading, 2013), although their role has declined somewhat in the last two decades. In other countries, the state is a large owner of publicly listed corporations. This is partly the case in France, but much more so in the 'state-permeated market economies' (Nölke et al., 2014) of Brazil, China and India. Hence, existing national corporate ownership structures largely determine the level of corporate control that (foreign) private investors, such as BlackRock, Vanguard and State Street are able to exert.

In the next step, we analyze the level of potential corporate control by the Big Three passive asset managers in 17 major stock indexes from nine countries. We analyze the combined ownership position of BlackRock, Vanguard and State Street because together they dominate the global index fund industry. Being almost entirely index tracking asset managers gives the Big Three similar incentives to behave in terms of corporate governance (Fichtner, Heemskerk and Garcia-Bernardo, 2017). Another reason why company executives likely see them as one fairly homogenous group of permanent owners is the fact that their voting behavior is very similar (Bubb and Catan, 2018). In Figure 2, we provide the mean ownership of the Big Three in each stock index. This is a good indicator for how much assets under management the three passive asset managers have in that particular stock market; again, this could be due to cross-border investment, e.g. American investors buying index funds that invest in Germany or due to domestic investment, i.e. German investors buying index funds that track the national stock market. In addition, we show the proportion of firms in which BlackRock, Vanguard and State Street, seen together, are the largest, second largest and third largest owner.

Figure 2. Ownership of the Big Three in major stock indexes in early 2018



Source: Authors' calculations based on Orbis (2018).

The mean ownership of the Big Three is highest in the S&P 500 index. In 2015, the combined mean ownership in the 500 largest American corporations had been 18.8 percent, according to Fichtner, Garcia-Bernardo and Heemskerk (2017). By early 2018, the combined ownership by the New Permanent Universal Owners has jumped over the threshold of 20 percent. This means that the Big Three are the largest owner in almost 90 percent of the S&P 500 firms. The remaining roughly ten percent are dominated by large private blockholders, e.g. Larry Page and Sergey Brin control Alphabet (i.e. Google), Jeff Bezos holds almost 17 percent of Amazon, Facebook is controlled by Mark Zuckerberg, and the Walton family owns the majority of Walmart. The relative absence of these privately controlled corporations explains why the dominance of the Big Three is slightly larger in the Dow Jones 30 than in the S&P 500, even though the mean ownership is lower in the former than in the latter index. Lower mean ownership and the fact that quite a few technology companies have blockholders explains the smaller proportion of 70 percent of Nasdaq 100 firms in which the Big Three represent the biggest shareholder.

As mentioned above, the UK is the second largest market for BlackRock, Vanguard and State Street. Here their mean ownership in the FTSE 100 companies is almost 11 percent. This translates into the situation that the Big Three are the largest owner in approximately 60 percent of the FTSE 100 corporations. In addition, they are the second and third largest owner in another 25 percent. Note that in the FTSE 350, which contains smaller and more domestically oriented corporations, the Big Three have a mean ownership of about seven percent and are the dominant owner in only 30 percent of member firms. We have analyzed two stock indexes that include companies from multiple countries, the widely used EURO STOXX 50 (which includes the largest companies from the Eurozone) and the broader STOXX 600 (which also includes companies from countries such as Switzerland and the UK). The EURO STOXX 50 shows that it is instructive to also show the proportion of firms in which the Big Three are the second largest owner. With 40 percent this is actually slightly higher than the number of corporations in which they are the largest. On balance, this means that BlackRock, Vanguard and State Street are the largest or second largest owner in almost 70 percent of the 50 largest corporations based in the Eurozone countries. Hence, the Big Three are increasingly occupying a very influential position in European corporate governance. This argument is also substantiated by the fact that the three US passive asset managers are already the largest owner in 40 percent of the largest 30 German publicly listed corporation with a mean ownership of almost eight percent. In the German MDAX 50 index, which contains many family-controlled firms, their role is much less influential. Their position is slightly less dominant in France, where the proportion of firms in which the Big Three are the largest owner is 20 percent in the CAC 40 index; in the broad CAC 250 their ownership is almost negligible.

The case of Switzerland is very interesting because a number of very large multinational corporations are based there, such as ABB, Nestlé, Novartis, Roche and UBS. Interestingly, the SMI 20 is one of the few indexes in which the proportion of firms in which the Big Three are the second biggest owner (45 percent) is larger than the share in which they are the largest (30 percent). The fact that they are among the largest shareholders in over 75 percent of the largest listed corporations makes the New Permanent Universal Owners a central factor for Swiss corporate governance. In the Dutch AEX 25 index the mean ownership by the Big Three of about six percent is similar to that in Switzerland, but the proportion of firms in which they are the largest shareholder is slightly lower with 25 percent.

For Japan we have analyzed the two dominant stock indexes, the TOPIX 100 and the Nikkei 225. Although the mean ownership of the Big Three is relatively low in both indexes with around six percent, the proportion of firms in which they are the largest or second largest owner is surprisingly large: over 50 percent in the TOPIX 100 and almost 40 percent in the Nikkei 225. However, it is not clear whether the massive buying of ETFs by the Bank of Japan is reflected in the data. Therefore, more research is needed on Japan. Finally, in Spain (IBEX 35) and Italy (FTSE MIB 30) the Big Three do not yet occupy a pivotal role in corporate ownership, most likely due to the combination of a low adoption of index funds and the existence of domestic blockholdings. However, they are already among the three largest shareholders in more than 40 percent of the member firms of the dominant national stock indexes.

In short, BlackRock, Vanguard and State Street have become a crucial factor concerning corporate ownership in the United States and the United Kingdom. Seen together, they are the largest owner in the majority of member firms of the dominant American and British stock indexes. In continental Europe, the ownership of the Big Three is slightly smaller, but nonetheless they are among the largest owners of most large listed corporations – and index funds are growing considerably there. The same holds for Japan, where despite the persistence of *keiretsu* and corporate crossholdings the Big Three have become a major owner in the two most important stock indexes. Hence BlackRock, Vanguard and State Street have become major corporate owners in liberal and in coordinated market economies alike.

We have shown above that the rise of the New Permanent Universal Owners is having a profound impact on the corporate ownership in many countries as money is increasingly flowing into index funds. Thus, in the next section we analyze the voting behavior of the Big Three regarding two issues that are decisive for the dichotomy between patient and impatient capital.

4. The impact of index funds on patient capital, and the claim of long-termism

It has often been argued that patient capital constitutes a central feature of coordinated market economies, such as Germany or Japan, because it protects corporations from hostile takeovers, 'thus freeing them from obsessive concern with short-term market indicators' (Culpepper, 2005: 175). In the liberal market economies of Anglo-American pedigree firm behaviour generally is much more oriented towards the maximization of short-term profits, often driven by 'impatient capital' in the form of activist hedge funds and other investors (Buchanan, Chai and Deakin, 2018; Fichtner, 2015; Goyer, 2006, 2011). As already mentioned above, BlackRock portrays itself as a champion of long-termism and patient capital by stating that 'index investors are the ultimate long-term investors – providing patient capital for companies to grow and prosper' (BlackRock, 2018). In addition, Braun (2016) has rightly argued that index fund providers such as the New Permanent Universal Owners should – in principle – be able to foster long-term firm strategies and thus supply patient capital. This connects to an argument made by Hawley and Williams (2000: xv) almost twenty years ago: 'A universal owner's cumulative long-term return is determined not merely by the performance of each individual firm it owns, but by the performance of the economy as a whole.' They even go as far as claiming that universal owners 'occupy a quasi-public policy position as having an economic interest in the long-term health and well-being of the whole society' (Ibid.).

In his 2018 letter to CEOs, Larry Fink in fact has implicitly argued along the same lines as Hawley and Williams (2000). Fink has explicitly asked corporations to formulate strategies for long-term growth and not to focus too much on quarterly results. Together with Jamie Dimon, the CEO of JPMorgan Chase, Fink has called on companies to drop quarterly profit forecasts in order to curb short-termism (Norton, 2018). Moreover, in his annual letter Larry Fink has even stated that companies also have to serve a *social* purpose in addition to making profits: 'To prosper over time, every company must not only deliver financial performance, but also show how it makes a positive contribution to society' (BlackRock, 2018). From a publicly listed and therefore profit-driven asset manager these are strong and unprecedented words. As social scientists, we approach this statement with the necessary dose of skepticism and thus seek to empirically analyze whether the Big Three have acted as champions of long-termism through their voting behavior at corporate AGMs or whether they have supported short-termism, i.e. acted as impatient capital.

Short-termism is a much debated and important phenomenon which, however, is not easy to measure empirically. Jackson and Petraki (2011: 5) provide a good definition by arguing that ‘short-termism involves situations where corporate stakeholders (...) show a preference for strategies that add less value, but have an earlier payoff relative to strategies that would add more value in the long run’. Furthermore, they argue that corporate short-termism arises from a complex social interaction between various stakeholders – primarily shareholders and managers but also gatekeepers such as rating agencies and auditors – in which a shortening of time horizons is produced by mutually reinforcing orientations and incentives (Ibid.).

Deeg and Hardie (2016) have provided a very useful framework to distinguish between patient and impatient capital, which is based on three consecutive questions or dimensions. The first dimension is the investment time horizon (i.e. short or long-term), the second is whether the investor uses ‘voice’ to push for measures to increase the share price in the short-term, and the third is whether the long-term investor that does not engage in pursuit of short-term performance then ‘exits’ (sells) due to concerns concerning the short-term performance of the firm. Note that a long-term investment time horizon is a necessary but not sufficient condition for patient capital in this framework. Deeg and Hardie (2016) ascribe a high level of patience to index funds because of their inability to exit and their high degree of loyalty. While we agree that index funds tend to be *loyal by design*, we argue that it is crucial to analyze the concrete voting behavior of investors in order to be able to assess whether they have encouraged short-termism or long-termism in their investee firms.

To study whether the Big Three passive asset managers have contributed to short- or long-termism (i.e. patient or impatient capital) of publicly listed firms we select two of the arguably most significant proxies for corporate short-termism: share buybacks and mergers and acquisitions. Share buybacks represent immediate payoffs to shareholders and the funds used for buybacks cannot be used for measures that could increase long-term firm value, such as research and development or the retraining of employees. The main intended effect of share buybacks is that they reduce the number of outstanding (i.e. publicly traded) shares. This improves a range of financial firm ratios that have been advocated by proponents of shareholder value maximization, such as earnings per share (EPS). Repurchased shares are either canceled or kept as treasury shares (with the primary aim to use them for mergers and acquisitions and/or for stock-based executive remuneration). As such, share buybacks constitute pure short-term financial engineering to increase the share price; they have no effect on firm revenues or total profits. However, they reduce the amount of funds that are available for long-term research and development, and other kinds of physical investment. In fact, in the United States share buybacks had been considered as illegal market manipulation until 1982 when the Securities Exchange Commission under John Shad, the first ex-Wall Street banker to lead the agency, allowed them (Lazonick, 2015).

Lazonick (2015) has argued that the ascent of the 'buyback corporation' and the concomitant paradigm shift of many publicly listed corporations from a model of 'retain-and-reinvest' to 'downsize-and-distribute' has led to an overly focus on short-term financial aims. The volume of buybacks in the United States alone is staggering. From 2004 to end-2016, the companies of the S&P 500 have spent approximately US$5,900 billion for repurchasing their own shares, according to our calculations based on Lazonick (2015) and FactSet (2016). In fact, in the period from 2000 to mid-2018 the US stock market has facilitated *negative* net equity issuance (gross equity issuance minus retirements, which comprise stock repurchases as well as mergers and acquisitions) of over US$5,700 billion (Federal Reserve 2018). Hence, the US stock market has reversed its function during the last thirty years, changing from an institution that transports capital from investors to firms that use it for investment into a mechanism that channels money out of publicly listed corporations to their owners. While we certainly need more research on the consequences of share buybacks it seems reasonable to conclude that they constitute a form of extreme corporate short-termism that favors 'easy' and seemingly certain financial benefits over more difficult and uncertain long-term strategies that involve research and development.

In past annual letters to CEOs, BlackRock has argued against an excessive use of share buybacks. And this is clearly consistent with the statement that 'with BlackRock's growth, especially in our index business, comes an evolving responsibility. A crucial part of that responsibility is advocating on behalf of our clients for practices that we believe enhance long-term returns.' (BlackRock, 2017: 20). But the crucial question is whether BlackRock and the other two index fund giants have voted against share buybacks or not.

Figure 3 shows our analysis of their voting behavior at AGMs using data from ProxyInsight. For each year from 2012 to 2017 we show the number of company meetings where each of the Big Three has voted on stock repurchases/buybacks in five countries – the United States, the United Kingdom, France, Germany and Japan. In addition, we present the proportion of votes each asset manager has cast for the management proposal to repurchase shares as well as the percentage of votes that match the recommendations of the two dominant proxy voting advisors, ISS and Glass Lewis, as provided by ProxyInsight. For paying clients, ISS and Glass Lewis supply recommendations how to vote in thousands of AGMs in many countries. Thus, a high level of congruence with the recommendations of ISS and Glass Lewis could mean that BlackRock, Vanguard and State Street largely outsource their voting to these proxy advisors, which would not be surprising as they are invested in thousands of companies around the world and generally seek to keep costs low.

In order to facilitate a quick understanding of our findings we have color-coded the cells from green, which means a medium level of congruence with management proposals/proxy advisor recommendations, to red, which indicates a very high match. Note that there is no single cell in which the value is below 50 percent. It is immediately visible that all three passive asset managers throughout all countries and years display a very high level of congruence with management recommendations and the two proxy advisors. This means that their overall voting behavior has been very supportive of share buybacks and very management-friendly. Moreover, the New Permanent Universal Owners have often followed ISS and Glass Lewis, which seem to have recommended buybacks in a very high proportion of AGMs. This high congruence with management and proxy advisors does not appear to change over time.

The number of AGMs in the ProxyInsight data on buybacks varies a lot between countries. This can be due to the fact that in some countries not that many companies are actually publicly listed (i.e. Germany) or because share buybacks are not very popular with management (potentially Japan). For the United States there is also another reason for the low number of votes: surprisingly, it is not mandatory for management to let shareholders vote on buybacks. This means two things: First, due to the very low number of meetings for listed American corporations, the ProxyInsight data are not that meaningful for the United States; second, if BlackRock (as well as Vanguard and State Street) would be really concerned about buybacks, the rational reaction would be to launch a coordinated campaign together with other asset managers to force management to put buybacks up for vote by shareholders. This would only be logical as most other issues that significantly impact corporations, such as mergers and acquisitions, are voted upon by shareholders. Hence, BlackRock could do much more to curb short-termism that is driven via massive share buybacks.

Figure 3. Approve stock repurchase/buybacks.

Country	Year	BlackRock # of meetings	BlackRock For (%)	BlackRock ISS Match (%)	BlackRock GL Match (%)	Vanguard # of meetings	Vanguard For (%)	Vanguard ISS Match (%)	Vanguard GL Match (%)	State Street # of meetings	State Street For (%)	State Street ISS Match (%)	State Street GL Match (%)
US	2012	3	100	100	100	1	100	100	100	2	100	100	100
	2013	2	100	100	100	2	100	100	100	2	100	100	100
	2014	2	100	100	67	2	100	100	100	2	100	100	100
	2015	3	100	100	75	4	100	100	100	2	100	100	100
	2016	4	100	100	100	4	100	100	100	4	100	100	100
	2017	3	67	100	100	2	50	100	100	1	100	100	100
UK	2012	327	100	100	100	111	100	100	100	172	100	100	100
	2013	316	100	100	100	309	100	100	100	512	100	99	99
	2014	341	100	100	100	324	100	100	100	546	100	99	99
	2015	334	100	100	67	343	100	100	100	403	100	100	100
	2016	312	100	100	75	308	100	100	100	330	99	98	98
	2017	186	99	100	98	201	99	99	98	215	97	99	96
France	2012	129	78	100	93	13	80	75	100	80	83	95	100
	2013	141	72	88	92	156	100	80	86	151	69	99	100
	2014	144	75	95	96	144	100	87	94	151	75	99	100
	2015	159	66	99	77	151	100	85	94	155	77	99	92
	2016	151	76	93	86	147	98	78	92	150	66	99	84
	2017	102	85	88	94	101	100	79	94	106	70	100	76
Germany	2012	1	100	100	100	0	N/A	N/A	N/A	1	100	N/A	N/A
	2013	3	100	100	100	2	100	100	100	3	100	100	100
	2014	6	100	100	100	6	100	100	N/A	4	100	100	N/A
	2015	18	100	83	100	16	100	83	N/A	17	79	100	77
	2016	4	100	100	100	4	100	100	100	4	100	100	100
	2017	1	100	100	100	1	100	100	100	1	100	100	100
Japan	2012	4	100	100	100	1	100	100	N/A	1	100	100	N/A
	2013	6	100	100	100	6	100	100	N/A	6	100	100	N/A
	2014	4	75	67	100	4	50	67	100	4	75	100	50
	2015	5	100	100	100	5	100	100	100	5	100	100	100
	2016	3	100	100	67	5	100	100	67	5	100	100	67
	2017	0	N/A	N/A	N/A	2	100	100	50	1	100	100	100

Source: Authors' calculations based on ProxyInsight (2018).

The second proxy for short-termism that we selected is mergers and acquisitions (M&A). While arguably a less extreme indicator for corporate short-termism than buybacks, M&A do represent a short-term measure that is often demanded by impatient capital such as activist hedge funds (Jackson and Petraki, 2011). Likewise, Rappaport (2011) sees M&A as one possible indicator for short-termism. Significant dangers and risks concerning many M&A transactions involve empire-building by CEOs, paying large fees to lawyers and investment banks, and wealth transfers from the acquiring to the acquired company. In addition, globally rising numbers and values of M&A deals have been a significant contributing factor that corporate debt has reached record levels, which represents a serious long-term risk for highly leveraged corporations and the global economy as a whole.

Figure 4 shows the voting behavior of BlackRock, Vanguard and State Street on M&A in the US, the UK, France, Germany and Japan between 2012 and 2017. The color codes are similar to the figure on the voting behavior on buybacks with green cells indicating low to medium congruence with management proposals/proxy advisor recommendations and red cells meaning very high similarity.

There are slightly more cells that indicate low to medium levels of congruence with management/proxy advisors than concerning buybacks. Especially in Japan we register some pushback against management proposed M&A. This could be due to transactions between different companies belonging to one *keiretsu* that often offer inferior returns to minority investors (Lewis, 2018). However, overall the Big Three clearly do not exert a voting behavior that is much different from buybacks. In the majority of cases across countries they support management recommendations concerning M&A and do not diverge significantly from the recommendations by ISS and Glass Lewis. By supporting massive buybacks and the ongoing global merger wave, the New Permanent Universal Owners thus have not acted as champions of long-termism.

Figure 4. Approve mergers & acquisitions.

Country	Year	BlackRock # of meetings	BlackRock For (%)	BlackRock ISS Match (%)	BlackRock GL Match (%)	Vanguard # of meetings	Vanguard For (%)	Vanguard ISS Match (%)	Vanguard GL Match (%)	State Street # of meetings	State Street For (%)	State Street ISS Match (%)	State Street GL Match (%)
US	2012	96	100	100	96	66	100	100	100	67	100	100	100
	2013	141	99	98	96	149	99	97	94	118	98	97	93
	2014	101	99	100	99	119	99	100	98	91	97	98	98
	2015	131	99	97	97	142	99	99	97	106	96	96	97
	2016	186	100	99	97	184	100	100	98	150	97	99	98
	2017	156	99	99	98	81	99	99	98	145	99	99	98
UK	2012	9	89	100	100	8	100	100	100	7	86	100	100
	2013	4	75	100	100	5	80	100	100	2	100	100	100
	2014	5	80	100	75	6	83	100	100	12	83	100	67
	2015	10	100	100	89	13	92	100	100	13	92	100	100
	2016	12	100	100	92	13	100	100	100	11	91	100	100
	2017	6	100	100	100	3	100	100	100	9	78	100	83
France	2012	3	100	N/A	17	2	71	100	0	1	100	N/A	0
	2013	4	100	100	100	4	100	100	100	4	100	100	100
	2014	3	100	100	100	4	100	100	100	5	100	100	100
	2015	6	100	100	100	6	100	100	100	6	63	100	67
	2016	3	100	67	100	3	100	67	100	3	67	100	100
	2017	2	33	100	0	2	100	33	33	3	50	100	25
Germany	2012	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2013	2	100	100	100	2	100	100	100	1	100	N/A	100
	2014	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2015	1	100	N/A	100	1	100	N/A	100	N/A	N/A	N/A	N/A
	2016	1	100	0	N/A	1	100	0	N/A	1	0	100	N/A
	2017	1	100	100	100	1	100	100	100	2	100	100	100
Japan	2012	7	86	100	100	1	100	100	N/A	4	75	100	50
	2013	10	100	20	83	11	46	100	50	11	46	100	50
	2014	3	50	100	0	3	67	100	0	3	67	100	0
	2015	5	80	100	80	6	83	100	83	6	83	100	83
	2016	6	100	100	100	6	100	100	100	8	88	100	100
	2017	6	100	100	83	6	83	100	100	13	69	100	85

Source: Authors' calculations based on ProxyInsight (2018).

5. Conclusion and Reflection

Fundamental change is happening in asset management – the shift from actively managed funds to index funds. While the former sector is fragmented, the passive fund industry is highly concentrated in just three large US asset managers – BlackRock, Vanguard and State Street. The ongoing capital migration into passive investment is therefore leading to a concentration of corporate ownership. Our analysis shows that by early 2018 the Big Three seen together are the largest owner in almost 90 percent of the S&P 500 firms, holding on average 20 percent of the ownership. The Big Three have now emerged as what we call the New Permanent Universal Owners in many other markets beyond the United States as well. BlackRock, Vanguard and State Street, seen as one investor block, are the largest shareholder in 60 percent of the British FTSE 100, 40 percent of the German DAX, 25 percent of the Dutch AEX and 20 percent of the French CAC 40. In the Japanese Topix 100 they are the largest owner for 30 percent of the firms. The Big Three have thus become major corporate owners in liberal and in coordinated market economies alike. The rise in passive asset management is therefore anything but a narrow technical phenomenon that only affects businesses and processes in the asset management industry. It may well change the fabric of capitalism, impacting the concentration of corporate control, corporate behavior concerning short-termism and other key issues.

As the New Permanent Universal Owners, the interests of these asset managers diverge from the dominant notion of shareholder interests. Rather than seeking to invest in tomorrow's winners in a market, they invest in entire markets. Not only can they not pick and choose; they are also unable to exit and sell their shares. Their interest is therefore with the long-term performance of markets, and this is indeed what they claim themselves as well. However, when we critically scrutinize whether they use their sizable and growing shareholder power to push management away from short-term and towards a long-term orientation, we have to conclude this is not (yet) the case. By and large they support management, also when it concerns decisions to boost short-term shareholder value through massive share buybacks. This presents us with a puzzle. Why do these New Permanent Universal Owners not use their shareholder power to steer the firms they have significant influence over towards their self-proclaimed goal of long-term value creation? We see at least three possible answers to this puzzle.

A first answer is that the Big Three influence corporations behind closed doors, through private engagements with management. The voting power at the Annual General Meeting of shareholders gives them leverage over management. They need this stick because they lack the traditional source of shareholder power: the possibility to exit and sell their shares. From this perspective, the Big Three take up the role of critical friends of management. They want management to internalise their own longer term goals, but they prefer to do so without using their only source of leverage too often. However, given the small size of their corporate governance departments the nature of the engagements needs to remain relatively limited. We would expect significant influence of the Big Three only in high profile cases such as proxy fights. They may exert their influence in particular cases when it comes down to it. Even if this speculative statement is close to the truth, this is something markedly different from ongoing shareholder attention to long-term value creation in the firms they invest. For now, the New Permanent Universal Owners by and large support management and if anything they steer us back to the age of managerialism.

A second answer to the puzzle attributes a more strategic reasoning to the Big Three and their corporate governance agenda. Consider the counterfactual where the Big Three do develop activist voting behaviour on selected topics. It is extremely likely that this would lead to serious concerns. It would trigger a debate on accountability: how would the asset managers make sure they act in the best interest of their clients? BlackRock CEO Larry Fink indeed has argued that ‘we are not the real owner, we are the advisors to the real owners’ (NYTC 2018). But how can you accommodate the interests of ‘real owners’ when most of them invest in your index funds. For ETFs it is even more nagging, because due to the technical nature of these funds the end investors are not known to the asset managers themselves. How can you act on behalf of clients you do not know? A more fundamental concern that may be raised when they engage in an active voting strategy relates to the decoupling of risk and voting power. While the asset manager holds shares in corporations, it has transferred the financial risks and gains to their clients (Shenkar et al 2017). They thus exert voting rights without running any financial risk. This presents a fundamentally problematic situation. From a strategic point of view it makes sense to avoid such (public) discussions and therefore refrain from actively using the voting power while at the same time slowly but steadily engaging with management. We see some support for this strategy when BlackRock used its shareholder power and asked tough questions to gunmakers in the aftermath of the early 2018 school shooting in Florida (Kerber, 2018). We may see a slow, gradual, but persistent development towards a more active role of the New Permanent Universal Owners.

A third answer to the puzzle underscores that the interest of the Big Three is not so much with the wellbeing of individual firms, but rather with the wellbeing of the entire market. Their main interest and objective is to have steady growth and stable markets as this provides them with the best competitive advantage vis-à-vis active investors. Engaging with corporate governance decisions at the firm level is not only costly, it is also relatively irrelevant from the point of view of *universal* ownership. Rather, universal owners can be expected to focus on the general norms and practices regarding corporate governance as well as on the institutional framework that governs the markets they invest in. The hiring of former prominent policymakers on both sides of the Atlantic could be an indication supporting this interpretation.

We believe that the rise of the New Permanent Universal Owners may well change the fabric of the varieties of capitalism framework that has been widely adopted and criticised over the past three decades. Berle and Means (1967 [1932]: 8) famously pointed at the 'the dissolution of the old atom of ownership into its component parts, control and beneficial ownership'. We are now witnessing the nascent re-fusion of the atom of ownership through the rise of the New Permanent Universal Owners. How this will unfold is difficult to predict. If they indeed develop into the champions of long-termism they claim to be the impact cannot be understated as it (re)introduces long-term patient capital in the US and beyond. The Big Three themselves face a strategic dilemma. The concentration of ownership in their fund families was never on purpose; the concentration of voting power is a side effect of their successful business model. How can they now develop a responsible stewardship role without increasing their operational costs, without raising antitrust concerns and without undermining their business model? But now that the sleeping financial giants are awakening it will be difficult to put them back to sleep.

6. Bibliography

Appel, I., Gormley, T. and Keim, D. (2016) ‘Passive investors, not passive owners’, *Journal of Financial Economics*, **121**, 111–141.

Berle, A. and Means, G. (1967 [1932]). *The Modern Corporation and Private Property*, New York, Macmillan.

Bioy, H., Bryan, A., Choy, J., Garcia-Zarate, J., Johnson, B. (2017) ‘Passive Fund Providers Take an Active Approach to Investment Stewardship’, *Morningstar Manager Research*. accessed at https://www.morningstar.com/content/dam/marketing/shared/pdfs/Research/Morningstar-Passive-Active-Stewardship.pdf

BlackRock (2017) ‘Chairman's Letter to Shareholders from BlackRock's 2017 Annual Report’, accessed at https://www.blackrock.com/corporate/investor-relations/larry-fink-chairmans-letter

BlackRock (2018) ‘Larry Fink’s Annual Letter to CEOs: A Sense of Purpose’, accessed at https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter

Bogle, J. C. (2016) ‘The Index Mutual Fund: 40 Years of Growth, Change, and Challenge’, *Financial Analysts Journal*, accessed at: http://www.cfapubs.org/doi/pdf/10.2469/faj.v72.n1.5

Braun, B. (2016) ‘From performativity to political economy: index investing, ETFs and asset manager capitalism’, *New Political Economy*, **21**, 257–273.

Bubb, R. and Catan, E. (2018) ‘The Party Structure of Mutual Funds’, accessed at https://dx.doi.org/10.2139/ssrn.3124039

Buchanan, J., Chai, D. H. and Deakin, S. (2018) ‘Unexpected corporate outcomes from hedge fund activism in Japan’, *Socio-Economic Review*, accessed at https://doi.org/10.1093/ser/mwy007

Carrington, D. (2015) ‘Norway confirms $900bn sovereign wealth fund's major coal divestment’, *The Guardian*, accessed at https://www.theguardian.com/environment/2015/jun/05/norways-pension-fund-to-divest-8bn-from-coal-a-new-analysis-shows

Chandler, A. D. (1977) *The Visible Hand: The Managerial Revolution in American Business*, Cambridge, MA, Belknap.

Culpepper, P. D. (2005) ‘Institutional change in contemporary capitalism’, *World Politics*, **57**, 173–199.

Culpepper, P. D. (2011) *Quiet Politics and Business Power: Corporate Control in Europe and Japan*, Cambridge, Cambridge University Press.

Davis, G. F. (2008) ‘A new finance capitalism? Mutual funds and ownership re-concentration in the United States’, *European Management Review*, **5**, 11–21.

Deeg, R, and Hardie, I. (2016) ‘What is patient capital and who supplies it?’, *Socio-Economic Review*, **14**, 627–645.

Elhauge, E. (2016) ‘Horizontal Shareholding’, *Harvard Law Review*, **129**, 1267–1317.

FactSet (2016) ‘BuyBack Quarterly’, accessed at: https://insight.factset.com/hubfs/Buyback%20Quarterly/Buyback%20Quarterly%20Q3%202016_12.19.pdf

Fichtner, J. (2015) ‘Rhenish Capitalism Meets Activist Hedge Funds: Blockholders and the Impact of Impatient Capital’, *Competition & Change*, **19**, 336–352.

Fichtner, J. (2016) ‘The anatomy of the Cayman Islands offshore financial center: Anglo-America, Japan, and the role of hedge funds’, *Review of International Political Economy*, **23**, 1034–1063.

Fichtner, J., Heemskerk, E. M. and Garcia-Bernardo, J. (2017) ‘Hidden power of the Big Three? Passive index funds, re-concentration of corporate ownership, and new financial risk’, *Business and Politics*, **19**, 298–326.

Fink, M. (2008) *The Rise of Mutual Funds An Insider's View*, Oxford, Oxford University Press.

Federal Reserve (2018) ‘Equity Issuance and Retirement’, accessed at https://www.federalreserve.gov/releases/efa/efa-project-equity-issuance-retirement.htm

Garcia-Bernardo, J., Fichtner, J., Takes, F. W. and Heemskerk, E. M. (2017) ‘Uncovering Offshore Financial Centers: Conduits and Sinks in the Global Corporate Ownership Network’, *Nature Scientific Reports*, **7**, Article no. 6246.

Goyer, M. (2006) ‘Varieties of institutional investors and national models of capitalism: The transformation of corporate governance in France and Germany’, *Politics and Society*, **34**, 399–430.

Goyer, M. (2011) *Contingent Capital: Short-Term Investors and the Evolution of Corporate Governance in France and Germany*, Oxford, Oxford University Press.

Haberly, D. and Wójcik, D. (2017) ‘Earth Incorporated: Centralization and Variegation in the Global Company Network’, *Economic Geography*, **93**, 241–266.

Hall, P. A. and Soskice, D. W. (eds). (2001) *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, Oxford, Oxford University Press.

Hawley, J. P. and Williams, A. T. (2000) *The Rise of Fiduciary Capitalism: How Institutional Investors Can Make Corporate America More Democratic*, Philadelphia, University of Pennsylvania Press.

Hirschman, A. (1970) *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*, Harvard, Harvard University Press.

Höpner, M. and Krempel, L. (2004) 'The politics of the German company network', *Competition & Change*, **8**, 339–356.

Jackson, G. and Petraki, A. (2011) 'Understanding Short-Termism: The Role of Corporate Governance', Stockholm, Glasshouse Forum.

Jackson, G. and Sorge, A. (2012) 'The trajectory of institutional change in Germany, 1979–2009', *Journal of European Public Policy*, **19**, 1146–1167.

Jahnke, P. (2017) 'Voice versus Exit: The Causes and Consequence of Increasing Shareholder Concentration', accessed at https://dx.doi.org/10.2139/ssrn.3027058

Kerber, R. (2018) 'BlackRock poses tough questions to gunmakers and sellers', *Reuters*, accessed at https://www.reuters.com/article/us-usa-guns-blackrock/blackrock-poses-tough-questions-to-gunmakers-and-sellers-idUSKCN1GE2I3

Kim, N. (2018) 'S&P Warns High Corporate Debt Could Trigger Next Default Cycle', *Bloomberg*, accessed at https://www.bloomberg.com/news/articles/2018-02-05/s-p-warns-high-corporate-debt-could-trigger-next-default-cycle

Knafo, S. and Dutta, S. J. (2016) 'Patient capital in the age of financialized managerialism', *Socio-Economic Review*, **14**, 771–788.

Lazonick, W. (2015) 'Stock buybacks: From retain-and-reinvest to downsize-and-distribute', Brookings, accessed at: https://www.brookings.edu/wp-content/uploads/2016/06/lazonick.pdf

Leaver, A. and Montalban, M. (2013) 'Aventis and the complexity of capitalist organization', *Competition and Change*, **14**, 1–22.

Lehrer, M. and Celo, S. (2016) 'German family capitalism in the 21st century: patient capital between bifurcation and symbiosis', *Socio-Economic Review*, **14**, 729–750.

Lewis, L. (2018) 'Japan's M&A wave risks rolling over minority shareholders', *Financial Times*, accessed at https://www.ft.com/content/5c091484-e35c-11e8-8e70-5e22a430c1ad

Nölke, A., ten Brink, T., Claar, S. and May, C. (2014) 'Domestic structures, foreign economic policies and global economic order: Implications from the rise of large emerging economies', *European Journal of International Relations*, **21**, 538–567.

Norton, L. (2018) BlackRock's Larry Fink: The New Conscience of Wall Street?. *Barron's*, accessed at https://www.barrons.com/articles/in-defense-of-social-purpose-1529716548

Novick, B. (2017) 'How Index Funds Democratize Investing', *The Wall Street Journal*, accessed at https://www.wsj.com/articles/how-index-funds-democratize-investing-1483914571

NYTC (2018) 'The Six-Trillion-Dollar Man and His Social Message', accessed at https://youtu.be/DeAj9zeP-0g

Orbis (2018) 'Orbis database', *Bureau van Dijk*, accessed at https://www.bvdinfo.com/en-gb/our-products/data/international/orbis

O'Sullivan, M. (2005) 'Typologies, ideologies and realities of capitalism', *Socio-Economic Review*, **3**, 547–558.

ProxyInsight (2018) 'ProxyInsight Online', accessed at https://www.proxyinsight.com/products/proxy-insight-online/

Rappaport, A. (2011) *Saving Capitalism from Short-Termism: How to Build Long-Term Value and Take Back Our Financial Future*, McGraw-Hill, New York.

Schmalz, M. C. (2018) 'Common-Ownership Concentration and Corporate Conduct', Annual *Review of Financial Economics*, **10**, accessed at: https://ssrn.com/abstract=3046829

Shenkar, C., Heemskerk, E. M. and Fichtner, J. (2017) 'The New Mandate Owners: Passive Asset Managers and the Decoupling of Corporate Ownership', *Competition Policy International Antitrust Chronicle*, **1**(3) pp. 51-57.

Sushko, V. and Turner, G. (2018) 'The implications of passive investing for securities markets', *BIS Quarterly Review*, accessed at https://www.bis.org/publ/qtrpdf/r_qt1803j.htm

Taraporevala, C. (2018) 'Index funds must be activists to serve investors', *Financial Times*, accessed at https://www.ft.com/content/4e4c119a-8c25-11e8-affd-da9960227309

Thompson, J. (2018) 'European ETF market leaps 40% in strongest showing since 2009', *Financial Times*, accessed at https://www.ft.com/content/7bf9c734-f5fa-11e7-88f7-5465a6ce1a00.

Useem, M. (1996) *Investor Capitalism: How Money Managers are Changing the Face of Corporate America*, New York, Basic Books/HarperCollins.

Vitali, S., Glattfelder, J. B., and Battiston, S. (2011) 'The Network of Global Corporate Control', *PLoS ONE*, **6**, e25995.

Witt, M. and Redding, G. (2013) 'Asian business systems: institutional comparison, clusters and implications for varieties of capitalism and business systems theory', *Socio-Economic Review*, **11**, 265–300.

Yamamura, K. and Streeck, W. (2003) *The End of Diversity? Prospects for German and Japanese Capitalism*, Ithaca, NY, Cornell University Press.