Whose firm? German corporate sector resilience to financialization

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Abstract:

Using a novel firm-level data set, we investigate ownership structures and the use of funds of large, listed firms in Germany from 2000 to 2020. We find, on the one hand, ownership financialization and confirm global trends with increasing average ownership of international passive asset managers since 2009. On the other hand, we do not identify a financialization of funds in terms of rising payout rates, but instead find that ever larger shares of corporate funds are kept inside the firm as retained earnings. While firms in the U.S. "downsize-and-distribute" under the pressure of institutional investors, we hold that German firms *save-and-sit-on-it*. We develop three hypotheses to explain shareholder influence and firm behavior in Germany under ownership financialization: asset managers as new providers of patient capital, blockholdings and ownership structure preventing control financialization, and a stalemate situation in German corporate governance.

Keywords: Corporate Governance, Corporate Ownership, Germany, Political Economy, Financialization, Shareholder Value Orientation, Asset Manager Capitalism

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1. Introduction

What makes large, stock market-oriented companies in Germany unique? Until the turn of the millennium, this question was undoubtedly answered in terms of stakeholder-oriented corporate governance. Characterized by codetermination, concentrated ownership, cross-holdings of firms and strong relationships to house banks providing patient capital, these institutional characteristics were for one thing an expression of historically grown ties between finance, industry and labor. Speaking in terms of Varieties of Capitalism (VoC, Hall & Soskice, 2001), the way corporate governance was organized is complementary to other spheres of the economy, creating comparative advantage and making Germany the ideal type of a coordinated market economy. This stands in sharp contrast to liberal market economies like the United States (U.S.), in which corporate governance is dominated by short-term relationships, strong financial market and shareholder value orientation (SVO), as well as dispersed ownership. Yet, by the end of the 1990s, financialization emerged in Germany, ownership structures dissolved and firms increasingly adopted SVO in terms of transparent accounting, active investor policy, the pursuit of yield targets and variable executive pay (Höpner, 2003; Windolf, 2020).

In comparative political economy research, this led to the question of how resilient coordinated market economies are to the power of international capital, and whether Germany, for example, would soon become a liberal market economy. While VoC scholars argued for the stability of both coordinated and liberal market economies, others argued for convergence (e.g., Streeck, 2009). Still others stressed the incremental adaption of institutional characteristics of capitalist systems, e.g., changing ownership structures but solidity of industrial relations in Germany. The latter approach has led scholars to call for "diversity within capitalisms" (Lane & Wood, 2012, p. 12) and the changing landscape in coordinated market economies under liberalization pressures have been termed as processes of "hybridization" (Deeg & Jackson, 2007; Jackson, 2002), "negotiated shareholder value" (Vitols, 2004), or as "shareholder practices within stakeholder systems of capitalism" (van der Zwan, 2014). From that perspective, characteristics of capitalist modes of production can be located on a spectrum from coordinated to liberal. Yet, the question where to place Germany with respect to financialization of ownership, control and the use of funds after major changes in the late 1990s and early 2000s remains unsettled.

In this paper, we contribute to the understanding of the German corporate sector in face of financialization *after* the turn of the millennium. Employing a novel firm-level panel dataset that contains firms historically listed on the DAX and MDAX from 2000 to 2020, we investigate financialization in terms of ownership and use of funds and ask how financialization manifests and has affected corporate governance and behavior of large, public companies in Germany.

We find the following trends for the German corporate sector after the 2000s. First, as for ownership structure, international asset managers with passive investment strategies increasingly dominate large German corporations. This is in line with the literature on the U.S.-driven global rise of asset manager capitalism and money migrating from active to passive funds (Braun, 2021; Fichtner & Heemskerk, 2020; Fichtner et al., 2017).

Second, we find only a small share of payouts distributed in form of share buybacks, and rather stagnant payout rates over time when measured in assets, equity and net income. This stands in contrast to findings from the U.S., where an increasing share of institutional investors is associated with increasing payout rates, particularly in terms of share buybacks (Gutiérrez & Philippon, 2017; Kahle & Stulz, 2021; Lazonick, 2011, 2014; Lazonick & O'Sullivan, 2000; Lazonick & Shin, 2019). Consistent with macro-level findings on increased corporate savings resulting in a positive domestic and corporate balance since the early 2000s (Behringer & van Treeck, 2019; Kläffling, 2022; Redeker, 2019), we find that instead, retained earnings have strongly increased. In contrast to the U.S., where shareholder value orientation dominates and corporations mimic cash cows that "downsize-and-distribute" (Lazonick & O'Sullivan, 2000), we hold that German corporations resemble piggy banks that *save-and-sit-on-it*.

We discuss three hypotheses to explain shareholder influence and firm behavior in Germany under the prevalence of ownership financialization. First, we address the notion that particularly passive asset managers can be understood as new providers of patient capital that due to their business model have no superior interest in excessive payouts. Second, we investigate shareholder structure in German corporations. Given a small share of activist shareholders, we find that large blockholdings of strategic investors limit the influence of institutional investors pushing for higher payouts and hence, prevent financialization of control and of the use of funds. Third, we understand increases in retained earnings rates as a stalemate situation: Since retained earnings postpone the decision on the use of funds into the future and can in principle be used for the interests of employees, management and shareholders alike, they are a temporary solution to the firms' distributional conflict and represent the lowest common denominator of all parties involved. Overall, we hold that in face of the rise of international capital manifesting in ownership financialization, the German corporate sector remains resilient to other forms of financialization due to its specific corporate governance structure and the existence of controlling blockholders. It is precisely them that prevent the financialization of the use of funds, and thus excessive payouts, e.g., in form of share buybacks.

This paper continues as follows. Section two takes stock of what we know about the evolution of the corporate sector until the early 2000s, specifies characteristics of corporate governance in Germany and traces the theoretical debate between Varieties of Capitalism and convergence scholars. Thereafter, we develop stylized facts of financialization in Germany and discuss empirical trends in ownership and use of funds against evidence from the U.S. and a broad body of interdisciplinary literature. Section four discusses our hypotheses to explain shareholder influence and firm behavior in Germany. Section five concludes and identifies directions for further research.

2. The German corporate sector in face of financialization

The German corporate sector has for long served as a prime example of a bank-based system with stakeholder orientation, long-term funding and insider control (Detzer et al., 2017; Höpner, 2003). Traditionally, German medium-sized businesses and large, stock-market oriented firms alike established continuous relationships with employees, suppliers and the state as a core business characteristic to achieve enduring growth. In terms of ownership, cross-holdings of German firms, family ownership and close ties with house banks provided for patient capital (Windolf, 2020). Stock market-oriented corporate practices requiring large financial resources, such as hostile takeovers attempts, did not succeed until steelmaker Krupp's merger with Hoesch in 1992 and enjoyed poor reputation (Mager & Meyer-Fackler, 2017). Insider rather than outsider control by shareholders characterized corporate decision-making – a practice enforced through family ownership and management, as well as codetermination – while information was passed on via informal networks. Managers had mostly followed a career-path within the firm and worked their way from the factory halls to the executive floor. Executive compensation consisted of fixed, rather than variable, pay and was thus not tied to short-term financial targets formulated in terms of a company's stock market-oriented fundamentals (Höpner, 2003).

These characteristics represented a result of political orchestration as well as historically grown ties between finance, industry and labor in post-war Germany (Shonfield, 1965). Speaking in terms of Varieties of Capitalism (VoC, Hall & Gingerich, 2009; Hall & Soskice, 2001) corporate governance was complementary to other spheres of the economy, e.g., industrial and inter-firm relations characterized by incremental innovation, and vocational training and education directed at long-term employment. While each sphere is characterized by collaborative non-market relationships and informal contracting, taken together they build a stable equilibrium, create comparative advantage and constitute Germany as the ideal type of a *coordinated market economy*.

In contrast, the U.S. were stated as prime example of a *liberal market economy*, characterized by legal relationships and the arm's length principle under highly competitive market conditions. In terms of corporate governance, short-term relationships, market-based finance, *shareholder value orientation* (SVO) as well as dispersed ownership predominate. The VoC approach hence established a stable dichotomy of capitalist systems, allowing for the unthreatened coexistence of two modes of capitalist production with distinctive features that could be divided into stakeholder and shareholder-oriented systems.

In light of a globalizing world, however, Hall and Soskice (2001) speculated whether competitive deregulation would lead all coordinated economies toward the liberal market model. With more funds seeking investment opportunities globally, German corporate governance may be forced to embrace the requirements dictated by international capital and cause spillover effects into other spheres of the economy. In fact, "[f]inancial deregulation could be the string that unravels coordinated market economies" (Hall & Soskice, 2001, p. 64).

Financial deregulation indeed entailed a sea change in corporate governance in Germany. From 1990 to 2002, against the backdrop of the European Single Market, four national regulations were enacted to promote, integrate and harmonize financial markets in Germany (Mager & Meyer-Fackler, 2017). Slowly but surely, it appeared, the corporate sector began to turn its back on the stakeholder model (Höpner, 2003): Shareholder value-orientated business practices (Rappaport, 1986) were increasingly adopted in the largest 40 German corporations by the end of the 1990s, measured in terms of transparent and international accounting standards, active investor policy, the use of yield targets and variable executive compensation (Höpner, 2003).

For one thing, competitive pressures on international product markets, the rising influence of a growing body of institutional investors, and the danger of hostile takeovers, enabled by an emerging market for corporate control as described by Manne (1965), were identified as external forces that fostered SVO (Höpner, 2003). For another, SVO seemed of internal interest. Increasing professionalization and financial expertise of management as well as the internationalization of the executive labor market enhanced SVO. Executives, shareholders and labor representatives alike seemed to embrace accounting transparency and variable executive pay, such that a new constellation emerged with which all parties seemed to live well (Höpner 2003, p. 207).

With the turn of the millennium, change also became evident in ownership and financing structures, as the traditional providers of patient capital began to diversify their holdings, put their funds to other means and changed strategic direction. German banks internationalized activities, increasingly engaged in mergers and acquisitions and divested from German companies to avoid conflicts of interest. Moreover, modern risk management and financial innovation allowed transferring credit risk to other market participants via securitization and derivatives. As a result, monitoring of companies by house banks in form of supervisory board mandates became obsolete (Windolf, 2020). Furthermore, the implementation of the Act on Control and Transparency in Business (KonTraG) in 1998 enabled share buyback programs and geared corporate voting rights toward the U.S. model of "one share, one vote" (Winkler, 2006). In addition, the corporate tax reform of 2000 included the tax exemption of gains from the sale of corporate shares by corporations, as well as a corporate income tax reduction on retained earnings from 40 to 25 percent and on distributed earnings from 30 to 25 percent. As a result, corporations and holdings companies were incentivized to offer their holdings to globally integrating financial markets, while international shareholders gained influence in German corporations. Large blockholdings and interlocking directorates disintegrated, and the German company network dissolved in the beginning of the 2000s (Fichtner, 2015; Höpner & Krempel, 2004; Windolf, 2020).

Post-Keynesian economists and comparative political economy scholars subsumed these developments under the umbrella term *financialization*, a "wide-reaching process of structural change" (Davis, 2017, p. 1333) that entails the "increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies" (Epstein, 2005, p. 3). With respect to the corporate sector, financialization has for once been understood as a change in the macroeconomic regime of accumulation, hence investigating the nexus to investment, growth and distribution (see Davis, 2017 for an overview of studies). Seminal work emerged mostly on the U.S., where financialization began to unfold in the 1980s. On the one hand, increasing profits through financial activities rather than real investments – a process termed "profit financialization" by Deeg (2012) – were addressed (Krippner, 2005, 2011; Orhangazi, 2008; van Treeck, 2009a). On the other, increasing financial flows to financial markets in form of dividends, capital gains and share buybacks to the detriment of real investments were investigated (Crotty, 2005; Orhangazi, 2008; van Treeck, 2009b).

At the firm level, financialization scholars have critically assessed SVO as an ideological construct, and they have analyzed the theoretical and empirical distributive implications from related business practices (van der Zwan, 2014). SVO is based on principal agency theory put forth by Jensen and Meckling (1976), which aims to solve the conflict of interest between management and shareholders arising from the separation of ownership and control (Berle & Means, 1932). Bearing the greatest financial risk and being the only party without prior contractual settlement of claims, according to shareholder value theory, shareholders are entitled to all residual claims (Rappaport, 1986). At the same time, managers potentially deviate from maximizing shareholder return due to selfish endeavors that manifest in empire building, while widely dispersed ownership limits the control of shareholders. As a result, the alignment of interests of management and shareholders is considered to solve the principal agency problem. Shareholders should be endowed with rights to actively challenge management, while executive pay should be aligned to stock market performance, providing beneficial incentives to management to maximize shareholder return.

From a critical management and political economy perspective, however, it is workers and the state alike bearing the risk of failing business. The firm is embedded in society and should be creating value by focusing on real investments and production entailing high-quality, low-cost products for shared growth and prosperity. The "innovative enterprise" operates in a corporate regime of "retain-and-reinvest", a configuration observed in the U.S. prior to financialization (Lazonick & O'Sullivan, 2000). The financialized firm, however, served financial markets rather than being served by them, while powerful alliances between shareholders and managers led to corporate looting: The regime of "downsize-and-distribute" reduces the firm's raison d'être to a cash cow, focusing on core competencies while distributing financial gains to shareholders through share buybacks and dividends (Lazonick & O'Sullivan, 2000).

The increasing importance, influence and power of institutional, financially oriented investors over the real economy has been coined "control financialization" (Deeg, 2012). For the U.S., there is evidence that a higher share of quasi-indexers[1] – institutional investors with low turnover and high diversification – implies a higher share of corporate payouts (Gutiérrez & Philippon, 2017). Either, the argument goes, because respective shareholders are short-term oriented, or because they exert pressure to tighten corporate governance (Appel et al., 2016). The latter comprises, on the one hand, circumventing management's empire building through overinvestment by demanding higher payouts. On the other, tighter corporate governance affects executive pay schemes: Consistent with SVO, Fernandes et al. (2013) find that a higher share of institutional investors leads to a higher share of stock-market oriented variable pay as well as overall higher executive pay levels. In that sense, control financialization implies the financialization of both the use of funds and executive pay.

In the context of VoC, financialization was understood as the driving force that would overcome the dichotomy of capitalist systems to the detriment of coordinated market economies (Deeg, 2012): Following convergence scholars, the German stakeholder model would soon liberalize further and turn into a fully-fledged shareholder-oriented system as financialization progresses. According to Streeck (2009), dissolving tendencies could also be observed in other spheres than corporate governance in an inherently dynamic and unstable political economy. Declining trade union membership rates, the dismantling of the social state and firms at the mercy of international investors enhancing market pressure were expressions of "disorganization".

Opposed to convergence scholars, divergence scholars have argued for institutional continuity of coordinated market economies and stakeholder-oriented systems, with only minor changes imposed by financialization (Vitols, 2004). In fact, much institutional change has been explained in terms that relate both systems, finding coordinated market economies to partially adapt to demands by international capital but remaining resilient to others, such that stakeholder systems are not

[1] The authors draw on Bushee's (1998, 2001) institutional investor classification, in which three types of institutional investors are identified: Dedicated owners with low diversification and turnover, quasi-indexers with high diversification and low turnover, and transient owners with both high diversification and turnover.

subject to fundamental change. Cioffi (2000), for example, states for Germany that despite increasing internationalization and greater dispersion of ownership, employee representation and influence remains intact and powerful through codetermination. In 2005 the German codetermination system survived a reform process that eventually "confirmed the basic rules of board-level co-determination" (Faust, 2012, p. 160). Whereas the majority of U.S. public firms have a unitary board of directors elected by shareholders, German stock corporations are characterized by a dual board structure consisting of executive board and supervisory board, while the latter is entrusted with monitoring and controlling the former. Depending on company size, the supervisory board is made up of different numbers of employee representatives elected by the workforce, and employer representatives elected by shareholders.[2]

Within the VoC debate, the incremental adaption of institutional characteristics of capitalist systems, i.e. changes in ownership structures but solidity of industrial relations in Germany, have led historical institutional scholars to call for "diversity within capitalisms" (Lane & Wood, 2012, p. 12). Perceiving institutions as historically grown constructs that change with societal development and underlying power relations, "institutional heterogeneity is viewed as a social constant" and represents the rule rather than the exemption (ibid). While gradual but transformative institutional change is explained in modes of "displacement", "layering", "drift", "conversion" and "exhaustion" (Streeck & Thelen, 2005), the changing landscape in coordinated market economies under liberalization pressures have been termed as processes of "hybridization" (Deeg & Jackson, 2007; Jackson, 2002), "negotiated shareholder value" (Vitols, 2004), or as "shareholder practices within stakeholder systems of capitalism" (van der Zwan, 2014). From that perspective, characteristics of capitalist modes of production are subject to endogenous change and can be located on a spectrum from coordinated to liberal, rather than placed in the rigid bifurcation of the VoC approach.

3. Resilience to financialization? Stylized facts for large firms in Germany

Especially with respect financialization of ownership structures and use of funds, the question of where on the spectrum from coordinated to liberal Germany can be placed after major changes in the late 1990s and early 2000s remains unsettled. We shed light on these questions and trace the development of the German corporate sector with a view on large, public firms after the turn of the millennium, while drawing on a rich body of interdisciplinary literature and findings from the U.S. First, we aim to understand to which extent ownership financialization prevails in Germany

[2] In companies with 500 to 2000 employees, one third of the supervisory board is made up of employee representatives and two thirds of employer representatives; companies with more than 2000 employees have a supervisory board with equal representation. In the event of a tie, however, the chairperson of the supervisory board delegated by the employer has two votes (Section 29 of the Codetermination Act 1976).

by investigating changing ownership structures and the prevalence of different kinds of shareholders, particularly asset managers. Secondly, we address financialization in terms firm behavior and investigate the use of funds, particularly payouts to shareholders and retained earnings.

3.1 Data

We create an original panel dataset comprising nonfinancial firms for those years in which they were listed in one of the two largest German stock indices, DAX and MDAX. We include yearly observations from 2000 and 2020 at the cut-off date December 31, which coincides with the end of the firms' fiscal year. The selection of the sample is motivated by the size and information availability of respective companies: Firms listed in the DAX and MDAX have the highest market capitalization in Germany and, due to their financial market exposure, are subject to regular examination of financial analysts as well as standardized reporting requirements (Bundesbank, 2014). Accordingly, the data set is not a random sample, but a selection of companies that should be understood as the spearhead of the German corporate sector.

The dataset combines information on ownership and financials and was built in a multi-step process from several sources. First, companies listed in the indices between 2000 and 2020 were identified using the constituents list from Qontigo, the index provider of Deutsche Börse, and the respective historical constituents list from Refinitiv. Second, financials data were taken from the Refinitiv Worldscope database for the same period. Financials are in nominal euros and comprise items from corporate annual reports including balance sheet, income statement, statement of changes in equity and cash flow statement. Some items are aggregated, however. For example, item WC04751 is the only suitable proxy for share buybacks, but it comprises among other things conversion of preferred into common stock. Hence, we also obtain items from the Refinitiv Company Fundamentals database, e.g. item TR.F.ComStockBuybackNet, which represents net share buybacks. Third, shareholders' history reports were collected manually for each firm and year from the Refinitiv Ownership, Insiders and Institutional Profiles database. Ownership data are not available for companies that have been delisted in the meantime, so the number of companies in different years varies. Variables denominated in U.S. dollars are converted using the corresponding euro exchange rate from Refinitiv at the reporting date. Refinitiv collects information from multiple sources including regulatory bodies (such as 13-F filings to the Securities and Exchange Commission), global stock exchanges, fund portfolios, corporate registers, corporate websites and annual reports. Ownership positions are assigned to the specific security issued, identified by the ISIN number. Only a few firms in our sample have issued (only) preferred shares. Since ownership positions of two types of securities cannot be meaningfully aggregated and we are also interested in control rights, we restrict the sample to ownership of common stock and drop observations related to preferred shares. While data on ownership is available starting 2000, its quality increases over time: The statutory reporting threshold was lowered from 5 to 3 percent of holdings in 2007 in Germany, leading to higher reporting and better coverage starting in 2007 (section 21 of the German Securities Trading Act, §21 WpHG). To adjust nominal euros to inflation, we use the CPI from the International Monetary Fund's International Financial Statistics with base year 2000 and 2007, respectively. Lastly, we exclude financial firms from the sample. The final dataset contains 139 nonfinancial firms, 1,375 observations and is a ready-for-use panel dataset.

3.2 Ownership: International asset managers invest passively

To assess trends in ownership, we look at percentage of shares outstanding held, hence the percentage of the total number of shares issued and actively held by owners. We compare this with position (number of shares held) times value (nominal U.S. dollar value of shares held adjusted to 2000 euros), which yields similar results. Total coverage of ownership increases from 48.17 percent in 2000 to 69.08 percent in 2020. Due to the beforementioned changes in reporting requirements, ownership data before 2007 should be taken with a grain of salt. Refinitiv accounts for duplicates and consolidated holdings, but holdings below 3 percent are reported voluntarily and may not be reported equally across shareholders. We assume that unreported shares belong to minority shareholders with no influence on corporate governance, however, underreporting is likely and numbers need to be understood as lower bound of reported ownership.

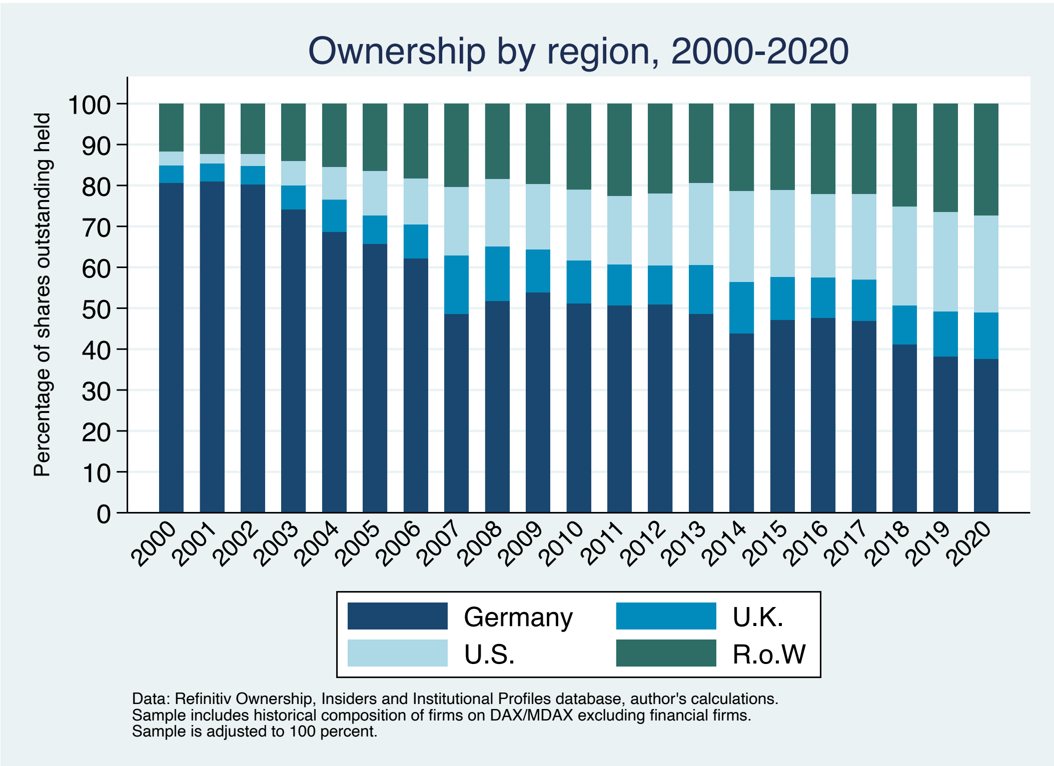
3.2.1 Internationalization of holdings

Figure 1 shows relative ownership by region, adjusting sample coverage to 100 percent. Consistent with cross-holdings of German companies, family ownership and patient capital, the early 2000s are clearly dominated by German investors, providing evidence for the German company network. Dissolving tendencies can be observed starting in 2003, where investors from Anglo-Saxon countries and the rest of the world increasingly become holders of German equity. The internationalization of ownership continues over time, with German average ownership decreasing from 80.61 percent in 2000 to 48.55 percent in 2007 to 37.69 percent in 2020. Meanwhile, U.S. investors' holdings increase from 16.67 percent in 2007 to 24.34 percent in 2019, while U.K. holdings decrease by 3.35 percentage points in that same period. The rest of the world increases their average holdings from 20.37 percent in 2007 to 27.33 percent in 2020.

The finding of increasing international investors' holdings in Germany confirm earlier studies that employ different data, e.g. Bundesbank (2014). For the U.S. and using financial accounts data, Braun (2021) shows that the share of owners from the rest of the world in U.S. equity rises from around 10 percent to roughly 17 percent from 2000 to 2020. The internationalization tendency for Germany hence appears to be stronger than in the U.S., while U.S. investors engage globally. At the same time, it is less pronounced for a comparative sample for Germany that includes all company-years for the entire period, as might be expected given the lower financial market exposure of firms not listed in the DAX and MDAX.

Overall, these developments could be viewed as an internationalization or Americanization of holdings. In terms of the origin of shareholders, identification difficulties prevail with regard to subsidiaries. For example, the Asia-Pacific subsidiary of J.P. Morgan Chase & Co. is assigned to Hong Kong, although the investment banking company is a U.S. investor. Since most asset managers originate from the U.S., the data assigns some ownership shares to the rest of the world, which we consider U.S.-based. Thus, we find it reasonable to speak of both Americanization and internationalization of holdings.

Figure 1. Ownership by region, 2000-2020.

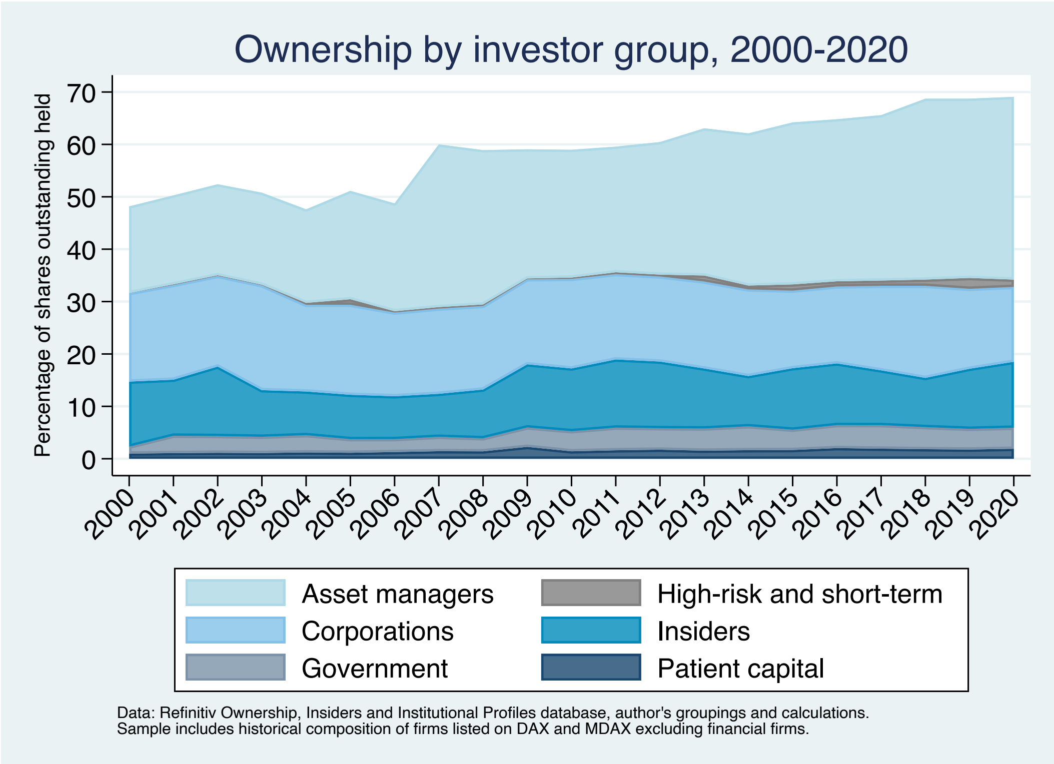


3.2.2 Asset managers at the forefront

The Refinitiv Ownership, Insiders and Institutional Profiles database categorizes 22 types of shareholders which we classify into six groups (see *Table A1, Annex*). *Figure 2* shows the development of average outstanding shares held by investor group from 2000 to 2020, while an increase in reported holdings in 2007 due to changes in disclosure regulation is observable.

Ownership of traditional patient capital, such as banks, insurers and foundations, ranges between 0.98 percent to 2.04 percent over time. Somewhat higher are outstanding shares held by government and sovereign wealth funds, which increase their holdings from on average 2.49 percent in 2008 to 4.57 percent in 2014. High-risk and short-term investors, such as private equity and hedge funds, hold less than 1 percent between 2000 and 2012, and from then on increase their holdings to 2.06 percent in 2019.

Figure 2. Ownership by investor group, 2000-2020.



Increases in holdings are further observable for insiders, who increase their average holdings from 8.19 percent in 2007 to 12.57 percent in 2020. Insiders include primarily families. In addition, managers with share-based compensation who have realized their equity grants after a corresponding vesting period are included. Corporations and holding companies show steady holdings of on average 16.48 percent throughout the observed period.

The investor group outstanding massively are asset managers, who we define as institutional investors that pool and invest funds in a fiduciary capacity on behalf of their clients, whether private households or other institutional investors such as pension funds. Asset managers have increased their average holdings from 16.54 percent in 2000 to 31.06 percent in 2007 to almost 35 percent in 2020, meaning they have more than doubled their equity holdings throughout the observed period. In addition, the increasing coverage in shares outstanding held from 2009 to 2020 can be attributed almost entirely to asset managers.

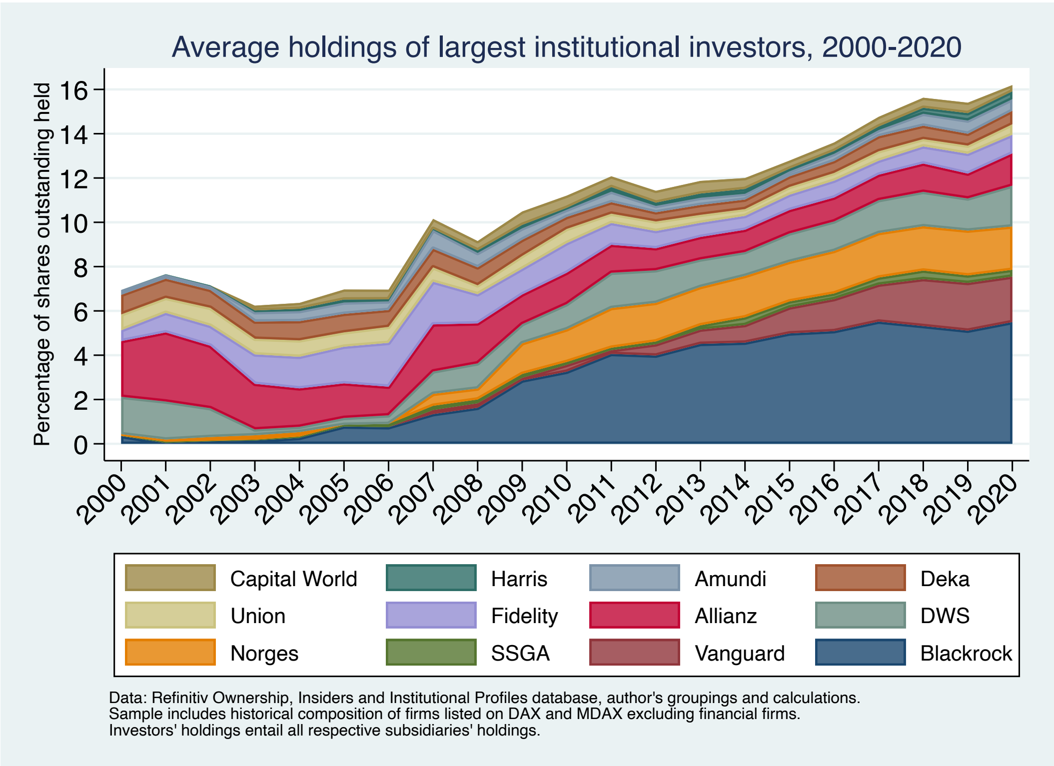
The growth of asset managers is consistent with findings from the U.S., which draw on the Thomson Reuters 13-F database covering funds invested in U.S. public corporations with assets under management of over 100 million U.S. dollars (e.g., Bushee, 1998, 2001; Gutiérrez & Philippon, 2017). Gutiérrez and Philippon (2017) find that particularly investors with high diversification and low turnover, so-called quasi-indexers, have substantially increased their ownership position in U.S. corporations. Braun (2021) shows a substantial increase in U.S. equity holdings of asset management firms, particularly of mutual funds, which increase their holdings from roughly 5 percent in beginning of the 1990s to around 20 percent in 2020. He identifies the rise of "asset manager capitalism" as a corporate governance regime, in which asset managers dominate corporate ownership structures. While the U.S. asset management industry has been ascending since the 1990s, its growth has been particularly pronounced following the 2008 financial crisis. This can be explained, on the one hand, by subsequent banking regulation, which allowed new types of financial actors belonging to the shadow banking system to proliferate. In addition, at a time of historically low interest rates, global savings increased in search of profitable investment opportunities. Asset managers take on this task by pooling large sums of money for a variety of owners, from individuals to insurance companies, and by investing them in financial markets often through the use of highly diversified and passive funds.

Features of the corporate governance regime are for once that large asset managers hold concentrated ownership stakes in form of highly diversified portfolios across sectors and entire economies. This finding is particularly pronounced for the "Big Three" asset managers – Blackrock, Vanguard and State Street Global Advisors (SSGA) – which together are the largest owner in roughly 90 percent of the S&P 500 Index, with the remaining 10 percent held by individuals (Fichtner & Heemskerk, 2020; Fichtner et al., 2017). The Big Three hold a mean ownership of almost 18 (12/9/3) percent in listed U.S. companies, where they are the combined largest (second/third/fourth largest) shareholder (Fichtner et al., 2017). While the analysis of the Big Three mostly focusses on their activities in Anglo-Saxon countries and considers ownership structures in certain years, the authors state that the Big Three "have become major corporate owners in liberal and coordinated market economies alike. It is clear that they have indeed become truly universal owners." (Fichtner & Heemskerk, 2020, p. 506)

Taking a closer look at the largest institutional investors in Germany, *Figure 3* shows the dominant role of Blackrock and its subsidiaries. Owning on average less than 1 percent before 2007 and 5.49 percent of the firms in our sample in 2020, Blackrock has massively increased its holdings in German DAX and MDAX corporations over the observed period. While Vanguard has overhauled the Norwegian sovereign wealth fund Norges in 2018 with average holdings of 2.05 percent, holdings of the third asset manager of the Big Three, SSGA, falls behind its position in the U.S.

economy. As of 2020, SSGA is only a blockholder of more than 3 percent in two corporations of the DAX and MDAX, and shows on average negligible equity holdings of less than one percent. Hence, the Big Three asset managers in Germany are Blackrock, Vanguard and Norges, followed by DWS, the asset manager of Deutsche Bank. An interesting case is Allianz, which holds on average 3.12 percent as of 2001, but then decreases holdings over time. This position consolidates both holdings of Allianz insurance as well as the international investment arm of the German insurer. Small average shares are held by Deka and Union, the asset managers of the German Savings Banks and People's Banks and other asset managers from the U.S., such as Capital World, Fidelity and Harris. Overall, these findings suggest that asset managers increasingly dominate corporate ownership structures in Germany, while Blackrock is by far and large the most prevalent asset manager.

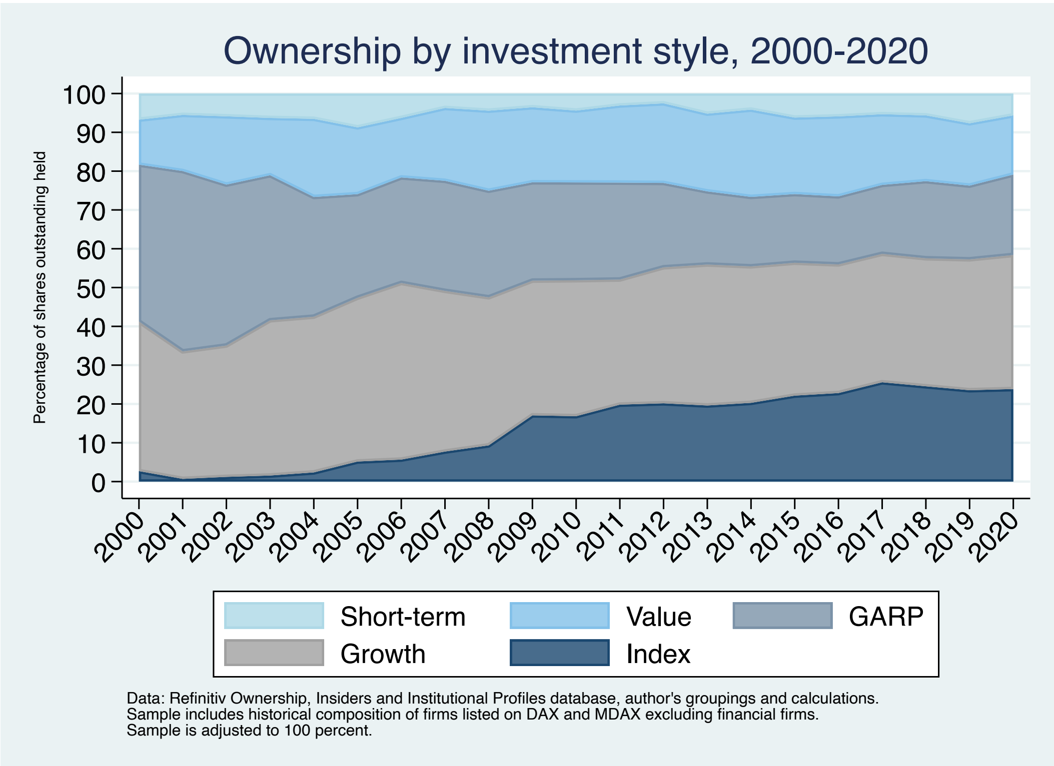
Figure 3. Average holdings of largest institutional investors, 2000-2020.



3.2.3 The rise of index investing

Figure 4 represents the relative ownership distribution according to investment style, of which groupings and definitions can be found in *Table A2* in the *Annex*. Holdings from short term-investors that pursue, e.g., momentum strategies, are rare in German corporations and range between 2.53 percent and 8.71 percent throughout the observed period. Although their shares held decrease from 41.41 percent in 2007 to slightly below 35 percent in 2020, growth investors still dominate investment strategies in German corporations. They buy if earnings are expected to rise at above average rate compared to a respective industry or market. GARP (growth at a reasonable price) investors, on the other hand, combine value and growth investing and focus on firms with earnings growth above broad market levels and yet no extremely high valuations. GARP investing decreases by 7.63 percentage points from 2007 to 2020. Value investing – a long-term, fundamentals-oriented trading strategy that draws on stock picking of shares that appear to be trading below intrinsic or book value – decreases by 3.53 percentage points in that same period.

Figure 4. Ownership by investment style, 2000-2020.



The most striking change is apparent in index investing, which increases remarkably from on average 7.74 percent in 2007 to almost 24 percent in 2020. Index investing is a passive investment strategy that aims to copy the composition of a benchmark index, e.g., the DAX or MDAX. By purchasing and selling shares at their given portfolio weight and respective share price, index investing usually takes the form of passive mutual funds or exchange-traded funds (ETFs). Theoretically, passive investing is based on premises of the efficient market theory according to which the market beats the stock picker over the long-term (Fama, 1970). In practice, it is particularly attractive due to low costs charged by the asset manager in form of a percentage fee on total assets under management. The rise in passive investment strategies is in line with a fundamental change in global investment strategies from active to passive funds, described as "money mass migration" by Fichtner and Heemskerk (2020). Particularly asset managers increasingly follow a passive rather than active investment strategy, and Blackrock, Vanguard and SSGA offer more than 80 percent of their total assets under management in equity in passively operating funds.

Overall, our data confirm global trends for the spearhead of the German corporate sector. Ownership structures in Germany around the turn of the millennium are increasingly characterized by international investors and dominated by asset managers, most of whom pursue a passive investment strategy. Hence, we identify ownership financialization in Germany.

3.3. Financials: Stable payout rates, increasing retained earnings

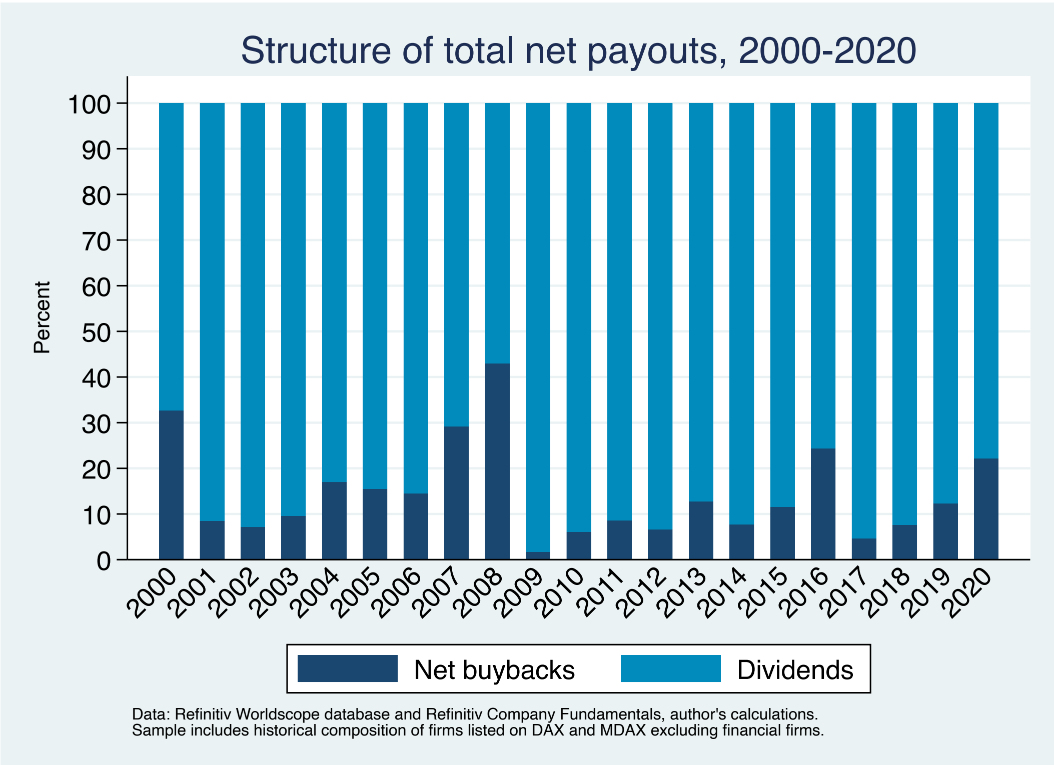
Payouts to shareholders, especially in form of share buybacks, have soared drastically in the U.S. in the age of financialization, and particularly in the 2000s (Kahle & Stulz, 2021; Lazonick, 2011, 2014; Lazonick & Shin, 2019). For a sample from 449 companies of the S&P 500 from 2003 to 2014, Lazonick (2014) finds that gross share buybacks account for 54 percent of earnings and dividends for 37 percent. Kahle and Stulz (2021) find that volumes of net share buybacks have overhauled dividend payments after 1997, accounting for more than half of total payouts in all but a few years characterized by economic downturns. The authors identify a net average payout rate of 33.68 percent from 2000 to 2019, with net repurchases averaging 19.27 percent of operating income and dividends accounting for 14.42 percent. The growth in the average payout rate is fully attributed to net repurchases. The respective payout rate is above 40 percent in 2007, and then again reaches almost 50 percent in 2016 and 2018. In terms of assets, the authors find aggregate net payouts to average 4.4 percent from 2000 to 2019. Gutiérrez and Philippon (2017), for a similar sample, find an increasing trend in payouts over assets from 2005 to 2015 with a gross share buyback rate of on average 3 percent per year. Davis (2018) identifies increasing gross repurchases over outstanding equity from 1982 onwards and shows procyclicality of share buyback growth. From a critical management perspective, these increasing payout rates are an indicator of the regime of "downsize-and-distribute". Particularly the dominant use of share buybacks can be understood as a SVO practice, as companies claim to distribute excess liquidity to shareholders. The distribution of an increasing share of funds to the benefit of shareholders can further be considered a financialization of the use funds.

3.3.1 On the structure of payouts

Figure 5 shows the structure of payouts for our sample, consisting of dividends and net share buybacks. Share buybacks account for an average of almost 43 percent of total net distributions at their peak in 2008. Similarly to the U.S., the course of share buyback growth is procyclical, hence share buybacks rise sharply until 2008 and then fall after the financial crisis. On average, they account for 14.12 percent of net payouts over the observed period.

Legislation in favor of share buybacks in Germany only came into force in 1998 through the Act on Control and Transparency in Business (KonTraG), while in the U.S., SEC Rule 10b-18 was introduced in 1982, enabling share buybacks without charges of market manipulation. Through the addition of No. 8 to Section 71(1) of the German Stock Corporation Act (AktG), share buybacks were now allowed on the basis of an approval by the annual general meeting for a period of 18 months.

Figure 5. Structure of payouts, 2000-2020.



Authorization of share buyback programs is common practice in Germany, and in most companies the board of directors obtains approval annually, although it is now legally valid for 5 years. It stands to reason that management would like to reassure themselves with shareholders while remaining flexible with regard to a reduction of capital. However, actual realizations of repurchases are far less observed. As shown by Immenkötter (2018), while 83 percent of DAX and MDAX companies have had an authorization in 2018, only 9 percent eventually realized share buyback programs. 59 companies did not make use of the authorization.

Although in principle, dividends and share repurchases are regarded as similar methods of distributing cash to shareholders (Bagwell & Shoven, 1988), a variety of factors influence payout policy, among them capital gains taxation. Before the introduction of the unitary final withholding tax of 25 percent in 2009, share buybacks were taxed preferably over dividends in Germany (Podlech, 2012). This is observable in the relative importance of share buybacks. While buybacks account for an average of 19.67 percent of net payouts from 2000 to 2008, their share in total net payouts falls to an average of 10.81 percent from 2009 to 2020. Compared to the U.S., where share buybacks have made up more than 50 percent of total payouts since 1997, except for a few years that were characterized by the dotcom bubble and the financial crisis (Kahle & Stulz, 2021), dividends are still far more relevant in Germany.

One explanation for the German preference for dividends are the underlying motives for share buybacks. While the standard model of dividend policy assumes that company value is independent of dividend and share buyback policy (Miller & Modigliani, 1961), a variety of survey studies on the determinants of share buyback volumes in Germany shows that the most important motive for management is to correct for undervaluation (Bösch & Ude, 2014; Seifert, 2007). The assessment of undervaluation is based on management's subjective perception and potentially driven by positive expectations on financial markets during boom phases, which at least partially explains procyclicality of share buyback programs. The motives of distribution of excess liquidity and the use of treasury shares as acquisition currency are also determinants of the volume of share buybacks in Germany, but to a far lower degree (Bösch & Ude, 2014). Both are indicators of SVO, but seem to play a less important role in Germany than in the U.S. context. It appears that German corporations operate more strongly along the motive of dividend continuity, as described by (Lintner, 1956). Since shareholders traditionally prefer a steady and continuous flow of capital income, it is of priority to maintain a constant level or growth of dividends and to avoid the disappointment by shareholders due to dividend cuts.

Overall, while share buybacks are a common practice in the U.S. to distribute cash to shareholders, indicating SVO, the financialization of funds and the regime of downsize-and-distribute, German corporations only make restrained use of this SVO practice.

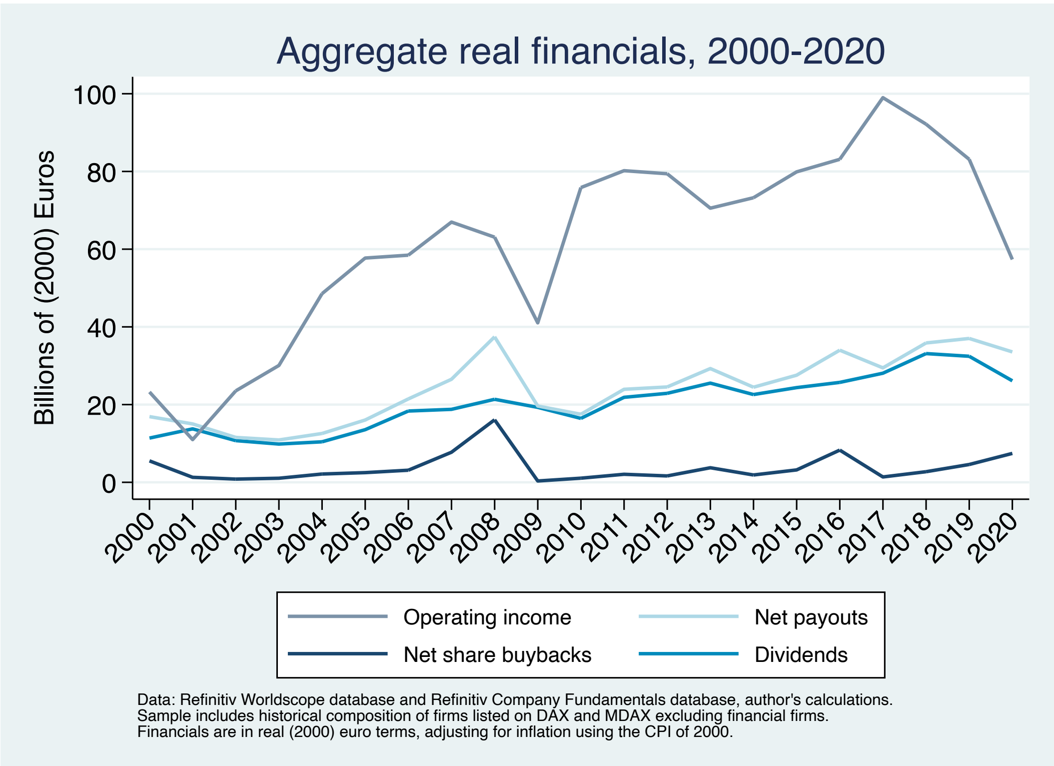
3.4.2 "Downsize-and-distribute" versus "save-and-sit-on-it"

Whereas the accounting and finance literature primarily draws on firm characteristics such as size, age and free cash flow as determinants of payouts, the financialization literature puts special emphasis on shareholders and the pressures they exert on management. On the one hand, activist and short-term oriented investors are important in this context, such as hedge funds. A well-known case is that of fund manager Carl Icahn from Carl Icahn Enterprise and Apple, who had acquired Apple shares worth 3.6 billions of U.S. dollars in 2013 (Lazonick & Shin, 2019; McCarthy, 2014). Icahn then forced Apple into a buyback program using public letters, tweets and voicing concerns to management, allegedly because Apple was undervalued. Eventually, Icahn sold his shares 32 months later at 5.6 billions of U.S. dollars.

On the other hand, financialization scholars find that particularly institutional investors force management into SVO practices and hence, push for higher payouts (Crotty, 2005; Lazonick & Shin, 2019). For the U.S., Gutiérrez and Philippon (2017) find that quasi-indexers intend to restrict managers' empire building either by improving corporate governance and control or by increasing short-termism. Both leads to an increase in payouts. Empirically, companies with a high degree of quasi-indexer ownership in industries with high concentration distribute a disproportionately high share of free cash flow to shareholders mainly through share buybacks.

At first sight, this is consistent with a preliminary analysis of proxy voting behavior of the Big Three on share buybacks in five countries, which between 2012 and 2017 have followed management's proposal and have voted for share buyback programs in "the vast majority of countries and years" (Fichtner & Heemskerk, 2020). However, as shown in the section above, German executives often get a buyback program approved but do not actually implement it, and share buybacks are still far less relevant in Germany than in the U.S. compared to dividends.

Figure 6. Aggregate real financials in 2000 euros, 2000-2020.



As of total payouts, the soaring U.S. payout trend described above is less apparent throughout the last twenty years in Germany, although a straightforward comparison is difficult due to differences in sample choices. *Figure 6* shows aggregate real financials using the CPI of 2000 for our sample.

While amounting to 10,98 billions of euros in 2001, aggregate operating income increases strongly over time to almost 98,99 billions of euros in 2017. Net payouts, consisting of net share buybacks and dividends, peak in 2008 with around 37,44 billions of euros, before they decrease again to 17,51 billions of euros in 2010. Unlike in the U.S., where increases in the payout growth rate are due to share buybacks, the increase in net payouts in Germany through 2019 is driven by dividends. The corresponding aggregate net payout rate is striking for the year 2001, in which net payouts amount to 136.82 percent in terms of operating income. As observable in *Figure 6*, this peak can be attributed to the burst of the dotcom bubble in 2000, after which aggregate operating income fell below aggregate net payouts. While respective aggregate net payout rate decreases thereafter, it again rises to 59.36 percent in 2008, to sink again to 23.09 percent after the 2008 financial crisis. From 2010 to 2019, the aggregate net payout rate averages 43.43 percent of aggregate operating income. However, the growth in the aggregate payout rate after 2017 is mainly driven by a harsh decrease in aggregate real operating income totaling 41,65 billions of euros between 2017 and the first year of the Covid-19 pandemic, 2020. Kahle and Stulz (2021) find a lower aggregate net payout rate of 33.68 percent from 2010 to 2019. Yet, their sample includes all nonfinancial firms listed at stock exchanges, whereas we consider the spearhead of the German corporate sector most exposed to financial markets.

Figure 7. Net payout and retained earnings rates, 2000-2020.

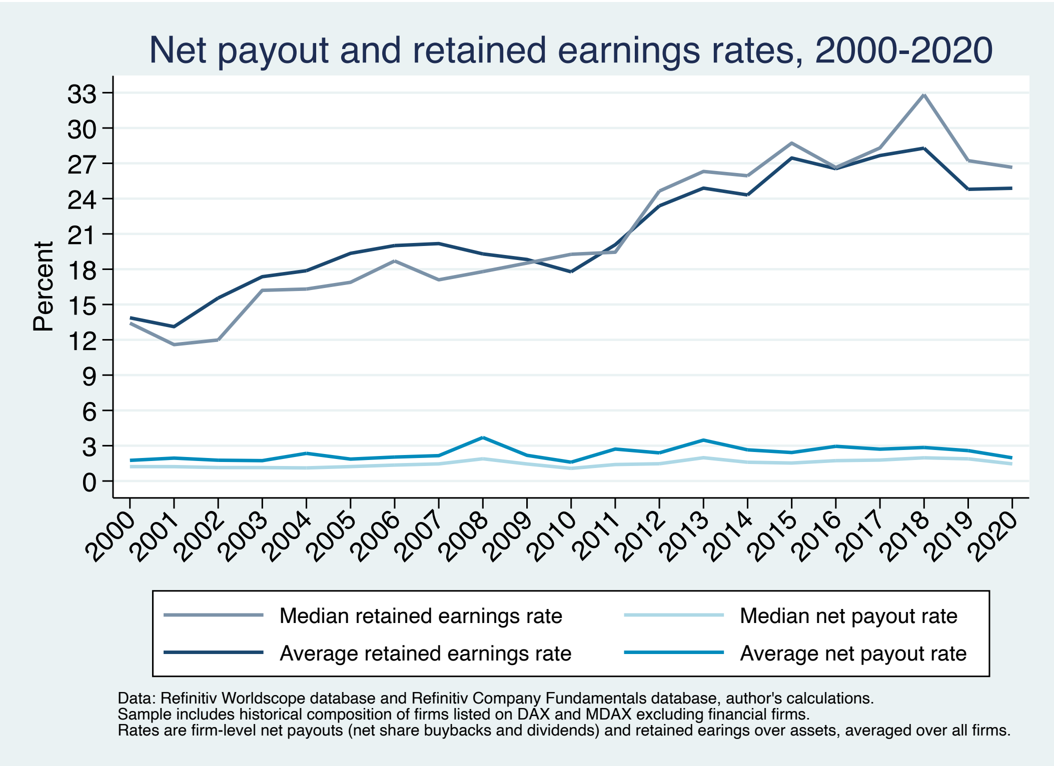


Figure 7 shows median and average net payout rates, both in terms of total assets, averaged over all firms from 2000 to 2020. With only minor peaks observable in 2008 and 2013, in which the mean net payout rate amounts to 3.67 percent and 3.48 percent respectively, net payouts account for on average of 2.4 percent of total assets over the observed period. A similarly stagnant net payout rate is observable when we measure net payouts in terms of total equity. For the U.S. and all nonfinancial firms listed at U.S. stock exchanges, Kahle and Stulz (2021) find aggregate net payouts as a percentage of aggregate assets to average 4.4 percent from 2000 to 2019. For our sample, aggregate net payouts only amount to 1.54 percent of aggregate assets for the respective period, indicative of overall lower payouts to shareholders.

While financialization of the use of funds, the regime of retain-and-reinvest and increasing SVO practices would manifest in an increasing share of funds channeled into payouts, the German case shows a different tendency: that of increasing rates of retained earnings. Globally, Chen et al. (2017) find that corporate saving as a share of GDP increased from below 10 percent in 1980 to 15 percent in the 2010s. As investment spending has remained relatively constant during this period, the corporate sector has in many countries, including Germany, become a net saver. From aggregate data and the macroeconomic literature, we know that Germany's corporate sector has had a positive and increasing balance since the early 2000s (Behringer & van Treeck, 2019; Kläffling, 2022; Redeker, 2019).

Our firm-level data confirms this finding. *Figure 7* shows that the average retained earnings rate, measured in terms of total assets, is at 13.87 percent in 2000 and increases to 28.28 percent in 2018. On average, the median rate of retained earnings is 21.46 percent from 2000 to 2020, while it amounts to 17.54 percent between 2000 and 2010 and is much larger in the second half of the observed period, averaging 24.63 percent from 2010 to 2020. Aggregate retained earnings over aggregate assets amount on average to 15.62 percent throughout the observed period, with a rate of 12.99 percent from 2000 to 2010 and 17.98 percent from 2010 to 2020. While the mean and median retained earnings rates move in the same direction, the latter surpasses the former in 2009, indicating that larger firms saved less before the financial crisis and more after 2008 when compared to smaller firms.

Overall, it is evident that German companies direct an increasing share of available funds into retained earnings, whereas net payout rates are comparably low. While in the U.S., the regime of downsize-and-distribute characterizes the financialized firm, we coin that German corporations resemble piggy banks that *save-and-sit-on-it*. Unlike in the U.S., we do not observe a financialization of the use of funds in Germany in the sense of higher distributions to shareholders and, in particular, share buybacks, but rather an increasing hoarding of funds within the firm.

4. Discussion

Taken together, our findings from chapter three represent a puzzle. On the one hand, we confirm U.S. trends in ownership, finding that international asset managers with passive investment strategies increasingly dominate ownership structures in German corporations. On the other hand, we cannot confirm the finding that these shareholders force management into ever soaring payout rates, particularly share buybacks. Rather, German corporations resemble piggy banks that increasingly keep funds within the firm in form of retained earnings. While it is reasonable to speak of ownership financialization, we do not observe a financialization of the use of funds. In the following, we discuss three hypotheses, namely asset managers as patient capital, shareholder structure, as well as a stalemate situation in corporate governance to explain these trends.

4.1 Asset managers as patient capital

While findings for the U.S. suggest that institutional investors with low turnover and high diversification push for higher payouts, this tendency cannot be observed in the German context. It is worthwhile to investigate the role of asset managers in more detail, and particularly, whether they can be assumed the new providers of patient capital.

An indicator of Braun's (2021) asset manager capitalism as a corporate governance regime is that asset managers have no direct economic, but a legal interest in their invested companies. This is on the one hand due to their universal ownership position: Being invested in competitive companies of the same sector across the entire economy, asset managers are not interested in the profitability or growth perspectives of a single firm, but rather in the financial performance of the entire economy. On the other hand, asset managers employ a fee-based model by charging their clients a certain percentage of their assets under management, meaning they strongly focus on the passive side of their balance sheet. Profits do have to be made to satisfy customers, and middle management is incentivized by quarterly financial performance. However, the business model is based primarily on increasing assets under management by reducing fees to gain market share, while effective returns are passed on to the asset managers' clients, the ultimate owners of the assets (Braun 2021, p. 16-17). Hence, it can be argued that the growing investor class of international asset managers differs fundamentally from short-term oriented institutional investors, such as hedge funds.

Accordingly, more important than short-term profits are increases in assets under management, suggesting that there is no direct incentive for asset managers to demand excessive payouts that might jeopardize the company's substance. This is even more relevant in view of the fact that funds of passive investors replicate indices. In terms of control rights and following the terminology of Hirschman (1970), shareholders can traditionally "voice" concerns in annual general meetings or via direct engagement with management, they can "exit", meaning punishment by underweighting respective shares in their portfolios or selling them altogether, and they can be "loyal", implying a buy-and-hold strategy. Yet, asset managers with passive funds under management cannot use the exit option. Their holding periods and volumes are tied to the performance of companies in respective indices, and shares can only be sold if the company performs worse in respective invested index. Due to this constraint, asset managers are meant to stay, which is why Fichtner and Heemskerk (2020) refer to them as "new permanent universal owners".

With respect to the notion of patient capital, Deeg and Hardie (2016, p. 629) define patient capital as "equity or debt whose providers aim to capture benefits (both financial and otherwise) specific to long-term investments and who do not exit their investment or loan if NFC managers do not to respond to short-term market pressures." Their framework builds on three questions: First, is the investment intended long-term; second, does the investor engage with management in order to pursue short-term goals and third, how is the likelihood of exit, motivated by dissatisfaction with short-term performance? With respect to these questions, passive funds can be considered patient capital. Being tied to an index, passive funds are in principle intended as long-term financial investments that are meant to stay. With respect to engagement, different images of ownership are relevant (McNulty & Nordberg, 2016). While we assume ownership as rights in SVO and draw on shareholder primacy, universal owners are considered to have a longer time horizon and to be interested in the wellbeing of the economy as a whole (Monks & Minow, 1995). Steward ownership assumes that owners guide executives as stewards, keeping pro-social, long-term goals in mind while appealing to the common interest of a firm's wellbeing (Davis et al., 1997). However, stewardship is resource-intensive and stands against the low-cost, fee-based model of asset managers. Hence, engagement is potentially too costly, wherefore asset managers are inclined to forgo the role of active stewardship and to be deferential to managers (Bebchuk & Hist, 2019). As Fichtner and Heemskerk (2020, p. 509) recognize:

> "Exerting forceful stewardship would normally imply having a large corporate governance team that has the knowledge and the capacity to engage with thousands of companies in many different countries each year. Such a large corporate governance team consisting of at least several hundreds of highly trained staff would be a substantial cost factor even for large passive asset managers."

Still, Fichtner et al. (2017) show that the Big Three massively pursue private engagements with executives of invested companies and side with management in 90 percent of the votes at annual general meetings. Lastly and most importantly, however, the option to exit represents an impossibility to passive asset managers.

The assessment of asset managers as new providers of patient capital is consistent with the self-image of the globally largest asset manager, Blackrock. With respect to payout policies and particularly share buybacks, Blackrock CEO Larry Fink stated in his letter to CEOs in 2014:

> "Too many companies have cut capital expenditure and even increased debt to boost dividends and increase share buybacks. We certainly believe that returning cash to shareholders should be part of a balanced capital strategy; however, when done for the wrong reasons and at the expense of capital investment, it can jeopardize a company's ability to generate sustainable long-term returns." (Fink, 2014)

An explicit reference to the benefits of stakeholder-oriented corporate strategy followed in his letter to CEOs in 2022:

> "In today's globally interconnected world, a company must create value for and be valued by its full range of stakeholders in order to deliver long-term value for its shareholders. It is through effective stakeholder capitalism that capital is efficiently allocated, companies achieve durable profitability, and value is created and sustained over the long-term." (Fink, 2022)

While these arguments are overall convincing, two factors remain in question. For once, although the criteria of patient capital by Deeg and Hardie (2016) apply to passive asset managers, the very definition of patient capital does less so. As passive funds are set up according to indices, funds buy and sell quasi-automatically according to the indices' performance and that of therein listed companies. Hence, rather than picking companies that are assessed to provide benefits specific to long-term investments, passive investment decisions follow the provision of indices. Whereas traditional patient capital in Germany was provided by Hausbanken and corporate cross-holdings entailing close ties and supervision of management of invested companies, passive asset managers rely on index providers to channel funds to already successful firms, while interacting less with them. Second and more importantly, it remains unclear why the pressure to increase payouts is far more pronounced in the U.S. when asset managers represent themselves as generally in favor of long-term investments and stakeholder-oriented capitalism. After all, Blackrock's CEO Fink's statements are directed at all CEOs in which Blackrock is invested. We therefore continue with an examination of overall shareholder structure in German corporations.

4.2 Shareholder structure: Large blockholders and absence of short-term investors

Our second hypothesis draws on the presence, power and relationship of different types of investors in ownership structure. First, with respect to activist investors that push for higher payouts, their presence has been anecdotal in the past (Fichtner, 2015) and is still relatively scarce in the German corporate landscape, as found in chapter three. Hence, as initiators of excessive payout demands activist investors play a negligible role. Nonetheless, they could convince other institutional investors to support their claims, a strategy called "wolf pack" by Briggs (2006) and commonly observed in the U.S. (Lazonick & Shin, 2019). However, asset managers in Germany may not be inclined to follow activist proposals due to their low-cost strategy and universal ownership position, as explained in the section above. Hence, it is likely that asset managers forgo engagement in general and demands for higher payouts specifically, as long as there is no substantial misconduct in German corporations.

What seems more relevant in the German context is the prevalence and dominance of controlling shareholders, against which institutional investors cannot enforce their claims even if they wanted to push for higher payouts. *Table 1* gives an overview of blockholdings throughout our sample. For each year, we identify firms which have at least one shareholder in possession of more than 25 percent of shares outstanding, and we show if this shareholder is an insider, a corporation or an institutional investor. We opt for the 25 percent threshold because in Germany, ownership of above 25 percent suffices to hold a blocking minority in most relevant strategic questions, among them capital increases and decreases as well as mergers and acquisitions.

Table 1. Overview of blockholdings by shareholder type, 2000-2020.

Year	No. of firms	No. >25 %	%	I	%	C	%	G	%	AM	%	ST& HR	%
2020	83	38	45,78	18	21,69	19	22,89		0			1	1,2
2019	81	39	48,15	17	20,99	20	24,69		0			2	2,47
2018	81	38	46,91	13	16,05	23	28,4	1	1,23			1	1,23
2017	70	28	40	10	14,29	16	22,86	1	1,43			1	1,43
2016	70	30	42,86	11	15,71	16	22,86	1	1,43	1	1,43	1	1,43
2015	70	30	42,86	11	15,71	16	22,86	1	1,43	1	1,43	1	1,43
2014	70	29	41,43	11	15,71	16	22,86	1	1,43	1	1,43		
2013	70	32	45,71	14	20	17	24,29	1	1,43				
2012	70	34	48,57	15	21,43	17	24,29	2	2,86				
2011	69	32	46,38	13	18,84	17	24,64	2	2,9				
2010	65	32	49,23	12	18,46	18	27,69	2	3,08				
2009	62	28	45,16	10	16,13	16	25,81	2	3,23				
2008	60	25	41,67	6	10	16	26,67	2	3,33	1	1,67		
2007	58	23	39,66	6	10,34	15	25,86	2	3,45				
2006	55	22	40	6	10,91	13	23,64			1	1,82		
2005	54	21	38,89	6	11,11	11	20,37	2	3,7	1	1,85	1	1,85
2004	54	20	37,04	5	9,26	12	22,22	2	3,7	1	1,85		
2003	55	25	45,45	5	9,09	16	29,09	2	3,64	2	3,64		
2002	63	29	46,03	9	14,29	14	22,22	3	4,76	3	4,76		
2001	60	29	48,33	7	11,67	15	25	3	5	4	6,67		
2000	55	23	41,82	9	16,36	11	20			3	5,45		

Note: No. of firms refers to number of observations in the sample for respective year, No.>25% refers to the number of firms that have at least one shareholder in possession of more than 25 percent. I = Insiders, C = Corporations, G = Government, AM = Asset managers, ST & HR = Short-term and high-risk investors. Further information on groupings can be found in Table A1, Annex.

Remarkably, while the share of firms in our sample that have at least one blockholder ranges between 37.04 percent and 49.23 percent from 2000 to 2020, there is no trend of decreasing blockholdings observable over time, but rather the opposite. From 2000 to 2008, an average of 42.1 percent of firms of our sample has at least one controlling shareholder, while from 2009 to 2020, this number increases to 45.25 percent. This finding is particularly interesting since the average growth in asset manager ownership and passive investment strategies is especially pronounced from 2009 onwards. Apparently, in face of increasing holdings of international asset managers, there is the tendency of controlling minorities to consolidate or even increase holdings. Particularly individual investors, such as families, are relevant in this context: Whereas insiders controlled on average 11.45 percent of firms from 2000 to 2008, they hold a blocking minority in on average 17.92 percent of firms from 2009 to 2020. For corporations and holding companies, there is only a slight increase from on average 23.9 percent to 24.51 percent observable for respective periods. The growth in controlling shareholders of insiders and corporate holdings comes at the cost of holdings by government and asset managers, who loose controlling positions after 2008.

Summing up, it appears that ownership structure, and particularly blockholdings of insiders and corporations limit the influence of institutional investors that demand higher payouts. While in principle, it is likely that asset managers are the new providers of patient capital, it is even more likely that due to their low-cost business model and confronted with controlling shareholders, they refrain from engagement to push for higher payouts but accept management's payout policy as long as companies perform well overall. From the perspective of controlling shareholders, it appears that they aim to consolidate their holdings and remain in controlling positions in face of asset managers that increase their ownership stakes in German firms by buying outstanding shares from minority shareholders. While the increasing importance of global capital manifests in ownership financialization, control financialization does not follow suit in coordinated market economies like Germany. In addition, it appears that particularly those controlling blockholders prevent the financialization of the use of funds by limiting excessive payouts to shareholders.

4.3 Stalemate situation: Corporate Governance

How then, can increasing rates of retained earnings in German corporations be explained? Our last hypothesis draws on the power balance of different groups in corporate governance in Germany. Retained earnings form part of a firm's equity; they are a stock resulting from saving parts of a firm's fiscal year-end net income. Internal funds can be used equally for investment projects as for debt repayment, they can be used as acquisition currency or provide protection against hostile takeovers, be distributed to shareholders in the next period or put into salary increases for executives and workers alike.

A growing level of retained earnings postpones the decision on the use of funds to the future, but initially ensures that profits are not distributed in form of dividends or share buybacks. The decision on the use of retained earnings can therefore be *a priori* beneficial to employees, management and shareholders alike: While employee representatives in supervisory boards oppose excessive distributions to shareholders, they traditionally have an interest in securing employment or increasing wage payments, the former being linked to capital expenditures and corporate growth. In that sense, employees could benefit from a future use of funds in terms of investment spending, or by a direct wage increase. As of investments, they share this interest with executives, who primarily pursue the motive of empire building and corporate expansion. At the same time, executives share the initial interest of payouts with shareholders, provided their compensation schemes comprise equity grants. However, for companies that generate market share through capital or R&D expenditures, corresponding value growth is likely to be reflected on financial markets in rising share prices. If equity-based pay is subject to vesting periods, capital gains during holding periods and not payouts are the decisive parameter for managers. Therefore, it is likely that managers would in principle use retained earnings to enhance investments and assure that share prices rise. Lastly, shareholders do have an interest in payouts, but also in rising share prices. Hence, from their perspective, retained earnings could be put to a variety of uses at a later stage that increase company value. As mentioned in the previous section, asset managers must pass on returns to the actual owners and prefer stable, long-term economic performance of invested companies due to their low-cost and universal ownership business model. Rather than pushing for excessive payouts, it is likely that asset managers accept increasing retained earnings, also given that engagement is costly. This allows for improved corporate performance in the future, while in the meantime maintaining solid financial resources signals stability to financial markets.

Thus, a high level of retained earnings allows degrees of freedom and flexibility for future corporate behavior and strategy, while maintaining company value. From an income perspective, the decision to delay the actual use of the funds postpones the distributional conflict between labor, management and shareholders to the future. It can be understood as a stalemate situation, in which none of the parties alone is eager to arouse distributional desires in others. The argument becomes even more convincing if we formulate it against the backdrop of the 2008 financial crisis: After the largest economic downturn since the Great Depression, companies have increasingly felt the need to build up liquidity buffers as safety cushions in order to be able to respond to future economic shocks or new crises. Excessive payouts, overinvestment in non-profitable investment projects as well as pay raises have thus been whipped of the table.

Concluding, we understand the increasing retained earnings rates of large corporations in Germany as a temporary solution that represent the lowest common denominator among the parties involved. The ultimate use, on the other hand, is subject to the relative influence and power of labor, shareholders and managers and can only be assessed *ex post*.

5. Conclusion

Financialization comes in many shapes and sizes, and the rise of international capital has influenced liberal and coordinated market economies on multiple levels. Yet, for Germany, we find that while ownership financialization is observable, other forms of financialization are not. While an increasing share of German corporations by now belongs to international asset managers with passive investment strategies, we do not identify a financialization of the use of funds. Eventually, payout rates have been rather stagnant throughout the last twenty years, while SVO practices like share buybacks have been far more relevant in the U.S. than in Germany. Instead, large firms in Germany have accumulated ever higher rates of retained earnings and therewith, they postpone the decision on the use of funds to the future. Hence, although ownership has changed fundamentally even after the turn of the millennium, the prevalence of asset managers has not led to massive changes in corporate behavior, which is puzzling given the corresponding evidence from the U.S.

We discussed three hypotheses to explain this evolution, of which the first indicates that the nature of the new owners is different than that of institutional investors associated with increasing pressure on management for higher payouts. The notion of passive asset managers as new patient capital is convincing, but it leaves to debate why in the U.S. context payouts are much more relevant. We have therefore addressed overall ownership structure, which showed that activist shareholders demanding excessive payouts are rare in Germany. More importantly, a large part of German firms is still dominated by controlling blockholders, mostly families. In face of ownership financialization, it appears that those blockholders strengthen their position by consolidating and expanding their holdings. Therewith, control financialization is prevented. In addition, those strategic blockholders appear to have an interest in stakeholder-oriented practices: Their presence limits the financialization of the use of funds in terms of excessive payouts and particularly, share buybacks. Lastly, we figured that a stalemate situation in corporate governance resulting in higher retained earnings rates is a viable description for the newly arising constellation of owners, management and workers.

While the rise of global capital affects all market economies, the very constitution of these economies potentially enables configurations of capitalist systems that enhance their prior characteristics. Given the rise in international, passive asset managers as a global phenomenon, a coordinated market economy like Germany responds differently than a liberal market economy like the U.S., which is observable through different forms of financialization, namely that of ownership, control and the use of funds. We therefore agree with the notion that there is a need for diversity within Varieties of Capitalism, while we dismiss the idea of full convergence towards the liberal market economy in face of financialization.

We also identify the need to investigate the mentioned forms of adaption of coordinated market economies in more detail. For once, our analysis would benefit from a more thorough analysis of blockholders, their very nature and investment behavior. An interesting path for further research would also entail an embedding of our findings into macroeconomic growth regimes, which for Germany is pronounced by its export-led growth strategy.

Overall, it appears that the German corporate sector remains resilient to certain forms of financialization. In any case, the power of international capital in the guise of international asset managers does not unravel the basis of Germany's coordinated market economy.

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Annex

Table A1. Groupings of shareholder types.

Group	Groups Refinitiv (variable sh_type)
Corporations	corporation + holding company
Government	government agency + government agency/investment advisor + sovereign wealth fund + research firm + independent research firm
Insiders	individual investor + other insider investor
High-risk and short-term	hedge fund + private equity + venture capital
Asset managers	investment advisors + investment management company + miscellaneous investment manager + financial company + investment advisor/hedge fund
Patient capital	bank and trust + insurance company + pension fund + endowment fund + foundation

Table A2. Groupings of investment styles and definitions.

Group	Groups Refinitiv (investment style)	Definition
index	index	Portfolio according to pre-determined index (e.g. DAX30). Passive investment strategy that aims at copying the returns of a benchmark index, offering diversification and low costs/fees, based on theory according to which the market beats the stock picker over the long term, purchasing/selling index's components at their given portfolio weight.
value	core value + income value	Value investors invest in companies that trade at low valuation levels (e.g. Price/Book), in relation to peers and in relation to own historic valuation levels. Portfolios include companies strong in fundamentals and steady growth. Investors hold long term with low turnover rates.
growth	core growth + income growth +	Growth investors are not yield-sensitive, they invest in companies with multiples and growth rates higher than the market, but do not pay extremely high multiples.
GARP	growth at a reasonable price (GARP)	GARP investors are not yield-sensitive, they invest in companies valued at a discount to the market but are expected to grow faster than the overall market. Tendency to hold for longer periods. Portfolios include holdings temporarily out of market favor. Combination of value and growth investing, focus on firms with earnings growth above broad market levels, yet no extremely high valuations, often

		growth-oriented stocks with relatively low price/earnings multiples (price/earnings growth < 1).
short-term and high-risk	yield + momentum + hedge fund + venture capital + global macro + specialty	Yield investment: Orientation towards yield maximization (net realized return / principal amount, including payouts and capital gains in case of selling), investors are sensitive to high dividend yield and invest in companies with yield levels very high compared to market yield, history of paying and increasing dividends over time. Private equity/ venture capital investors have invested in private firms/start-ups and hold shares due to pre-IPO holdings. Likely that they sell (mission done). Momentum investing is going with the tide, that is buying when prices soar and selling once prices seem to have peaked. Global macro investors base investment decisions on overall economic and political views of various countries or their macroeconomic principles, speculative strategy, often used by hedge funds. Specialty investors invest in specific industry or alike, cannot be further specified.