

# Welche Bedeutung haben die Bedarfe der Realwirtschaft für die Entwicklung von Bankensystemen?

## From secret of success to victim of success? German banks and the export-led growth model

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### Introduction

In the comparative political economy literature, Germany has long been viewed as a paradigm of coordinated capitalism thriving on the export of advanced manufactured goods. Central to this model was the close relationship between banks and the export-oriented sectors of the economy in which banks lent extensively while simultaneously holding shares and controlling votes in many large enterprises. This close relationship was understood to facilitate the long-term investment by firms in workforce skills and product innovation that is the foundation of export success. The dominant characterization of the German model stems from the varieties-of-capitalism (VoC) approach which focuses on the complementarities between different types of financial systems and other economic institutions. It has been a key weakness of this approach, however, that it could not account for dynamic, out-of-equilibrium developments (Streeck 2009): There is no law by which the business activities and interactions of economic actors automatically create complementarity between sectors and institutions, especially not in the short run. In the case of Germany, we will argue, the long-heralded centrality of banks in supporting the corporate sector, export sectors in particular, no longer prevails as it once did. While this transformation has received notable empirical attention, the VoC literature has failed to fully capture and theorize this development.

At the same time as the role of banks in financing German corporations has declined, German export growth doubled from just under 20% of GDP in the early 1990s to more than 40% of GDP by 2007 (Baccaro and Pontusson 2016, 14). This observation raises puzzling questions about the connection between export growth and the financial system. The new literature on growth models, which brings macroeconomics and aggregate demand back into comparative political economy, explains this explosion of exports as the result of wage restraint and the suppression of domestic consumption. The combination of low real wages and low consumer debt reduces pressure on domestic prices, thus boosting firms' price competitiveness (Stockhammer 2016; Baccaro and Pontusson 2016; Stockhammer, Durand, and List 2016; Regan 2017; Johnston and Regan 2016). Like VoC, this literature still emphasizes complementarity over conflict, and the financial sector enters the analysis only in the case of a debt-financed, consumption-led growth model, illustrated by the UK. As for the export-oriented growth model, the interaction between the financial and the non-financial sector has not featured in the analysis.

This paper seeks to fill this gap by analyzing the relationship between the financial sector and non-financial corporations in Germany since the early 1990s. Our analysis covers both of the main sources of external capital, banks and shareholders. Regarding the banking sector, we argue that both VoC and growth model literatures have failed to recognize the negative feedback effects that the dramatic expansion of German exports has had on the banking system. The case is one of unintended "collateral damage:" the export-oriented growth model of the past two decades has undercut banks' erstwhile hegemonic position in the German economy by enabling non-financial corporations to increasingly finance investment from retained profits, and even to accumulate substantial savings, thus turning the non-financial sector into a net lender to the rest of the economy.

In principle, this lowers firms' dependence on external finance of any kind – not only loans, but also equity. Accordingly, the stock market has not been a significant source of net financing to German non-financial corporations, mirroring a more general trend across OECD countries. Yet shareholders enjoy statutory rights, giving them power regardless of corporations' financial dependence, and thus the ability to extract profits rather than reinvest. Despite the trends toward foreign and dispersed share ownership – and the oft-noted dissolution of the 'Deutschland AG' – the ability of large German corporations to self-finance their export-oriented strategies has not changed substantially. We argue this is the case because much of foreign share ownership is by long-term investors, such as sovereign wealth funds, or by large, fully diversified institutional shareholders investing long term through index funds. This, together with the continued prevalence of domestic blockholdings, has preserved the ability of German non-financial corporations to retain profits rather than paying them out to short term-oriented shareholders through dividends or buybacks.

The paper proceeds as follows. The first section will briefly review the literatures on corporate finance and on growth models. The second section will present comparative data on non-financial corporations (NFCs) in order to establish that German NFCs have been highly profitable, have had uniquely low levels of debt, and have become net lenders to the economy that have amassed considerable net-financial wealth. The third section will delve deeper into data on the liabilities of NFCs and on the assets of the banking sector, showing that bank lending to German businesses has actually declined as a share of GDP and, in the case of the manufacturing sector, even in absolute terms. The fourth section will focus on the other major source of the external finance, the stock market. Focusing on investment strategies rather than broad categories of investors, we will argue that, on balance, shareholders in Germany have remained fairly 'patient' – something long considered essential to the German model. The final section concludes.

## **1. Corporate finance in comparative political economy: Supply of and demand for capital**

Firms depend on finance to carry out their activities. For larger companies, the three main external financing instruments are loans, bonds, and shares.<sup>1</sup> The counterparties associated with these instruments vary over time. Loans are still mostly made by banks (but non-bank lenders are on the rise) while bonds and shares are held by a diverse and evolving set of domestic and international investors. The power of these financiers over NFCs resides in their ability (a) to (threaten to) discontinue financing relationships<sup>2</sup> or (b) to leverage their investment to engage directly with NFC management. In principle, these two basic options of exit and voice, in Hirschman's terms, are open to bank lenders, bondholders, and shareholders alike. As holds true more generally, the distribution of power influences prices, and thus the distribution of value added between financiers and producers.

In general, political economists assume that financial liberalization and globalization have increased the power – and thus profitability – of finance vis-à-vis the non-financial sector (Grittersova, 2014: 363). A more systematic approach, however, needs to take into account changes in the *supply and demand* for capital and credit. On the supply side, greater concentration among providers should increase investor/creditor power. In Germany, banks used to serve as one-stop-shops for the financing needs of German NFCs, acting both as anchor investors (further leveraged through widespread proxy voting) and as lenders. Enabling banks to overcome the information asymmetries that 'outside' investors and creditors have to grapple with, this configuration gave banks considerable power in the German political economy. The demand side, however, is equally important. Investor/creditor power varies with the degree to which NFCs depend on any of the three funding sources. High dependence on bank loans should increase the power of banks. High substitutability between bank borrowing and bond issuance, by contrast, should decrease bank power. More generally, high profitability makes

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<sup>1</sup> In addition to bank loans, smaller enterprises also rely extensively on credit lines and leasing contracts

<sup>2</sup> The decisive lever is the threat to withhold financing in the future. If a financing relationship already exists, power is exerted via the threat of 'exit', in Hirschman's terminology.

NFCs less dependent on external financing. Thus, German banks were at their most dominant at the very beginning of the 20th century and for the four postwar decades, before increased access to capital markets and profitability contributed to a relative ‘decline of the market power of the banks over industry’ (Zysman 1983, 263; Deeg 1999).

As the primary nexus between the financial and the non-financial sector, corporate finance has long occupied a central place in comparative political economy. Most importantly, the varieties-of-capitalism (VoC) approach has emphasised the complementarities between different corporate finance institutions and other parts of the economy (Hall and Soskice 2001; Amable 2003). In liberal market economies (LMEs), market-based finance dominates and power is concentrated in shareholders (and, to a lesser extent, bondholders). In coordinated market economies (CMEs), bankbased finance used to prevail, and banks accumulated additional power via strategic blockholdings in highly concentrated ownership networks. Based on this typology, the VoC approach emphasized the complementarity between Germany’s bank-based financial system and its manufacturing-focused growth model. Most importantly, the former provided the patient capital that allowed German firms to pursue long-term strategies and engage in incremental innovation (in conjunction with labour market and vocational training institutions, among others) (Deeg 1999; Vitols 2001).

Since the VoC was first established, however, both the financial and the non-financial sectors have changed dramatically – to the point where ‘coordinated market economy’ may no longer capture the essence of former CMEs such as Germany. In the *financial sector*, both the capital investment chain and business lending have been transformed. Regarding the former, a large literature has documented the dissolution of ownership networks, the entry of US and UK institutional investors into the stock markets of countries such as France, Germany, and Italy, and thus the internationalization and marketization of domestic stock markets (Deeg 2009; Culpepper 2005; Beyer and Höpner 2003; Deeg 2005). Regarding business lending, the notion that European ‘bank-based’ financial systems were dominated by traditional, relationship-based banking has been challenged by the work of Hardie et al. (2013b, 2013a). In the years running up to the 2008 financial crisis, the activities of commercial banks partly shifted from traditional, relationship-based banking to ‘market-based banking’, defined as securitized lending and wholesale money-market borrowing.

The *non-financial sector*, too, has changed in formerly coordinated market economies. In Germany, several institutional developments created what has recently been analysed as a textbook-case of an export-led growth model (Stockhammer 2016; Baccaro and Pontusson 2016; Stockhammer, Durand, and List 2016; Regan 2017; Johnston and Regan 2016). This export orientation was not fully reflected in the microeconomic, supply side-centric varieties-of-capitalism framework. The growth model framework, which centres on macroeconomics and aggregate demand, suggests that Germany has pivoted over the past two decades from balanced growth – with both consumption and exports contributing to demand growth – to a pure export-led growth model, i.e., exports are the primary source of demand growth. Research on the institutional underpinnings of Germany’s export-oriented growth model has focused mainly on Germany’s capacity for wage coordination and wage-growth suppression, which, in the context of the fixed-exchange rate regime of the euro area, has delivered a significant competitive advantage to Germany (Hall 2017; Höpner and Lutter 2017; Johnston, Hancké, and Pant 2014; Baccaro and Benassi 2017; Hassel 2014; Scharpf 2018; Palier and Thelen 2010). Other factors, notably fiscal federalism and the financing structure of social security, have further contributed to German export competitiveness (Hassel 2017). In addition to these institutional factors, corporate services, such as food and cleaning, have been outsourced by German firms on a very large scale, especially since the 1990s. Outsourcing has been found to reduce the wages of service workers by around 10 per cent (Goldschmidt and Schmieder 2017).

In sum, both developments in the financial sector and developments in the real economy have received significant attention in political economy literature on Germany. The same cannot be said, however, for the *interaction* between those developments. What, if anything, did the financial sector have to do with the intensification of the export-led growth model? And what, if any, have been the feedback

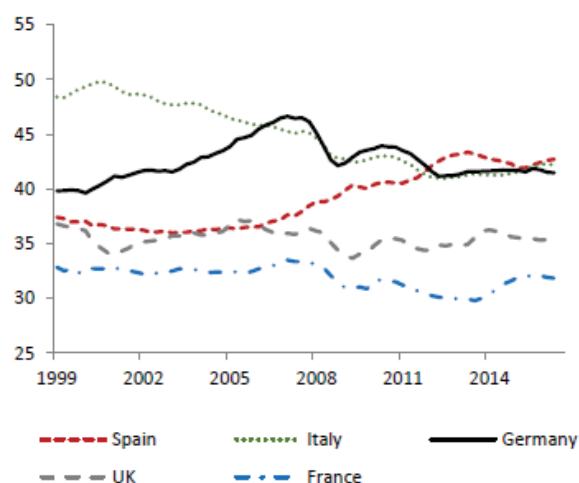
effects from export-led growth on the financial sector? While the literature emphasizes that the credit-financed consumption-led growth model, exemplified by the UK, ‘presupposes the existence of a large financial sector’ (Baccaro and Pontusson 2016, 186), the financial side of the export-led model, exemplified by Germany, has largely been neglected.<sup>3</sup> The remainder of this paper seeks to fill this gap, focusing on banks (lenders) and on shareholders (investors), respectively.

## 2. External finance in an export-led growth model: Weak domestic demand

How much power banks wield vis-à-vis NFCs depends in part on how much the latter depend on the credit provided by the former. Other things being equal, higher demand from borrowers pushes up the price of credit, improves the profitability of lending, and thereby increases the power of banks. Conversely, a higher ratio of self-financing should reduce the price of credit and the power of lenders. It is here, we argue, that Germany’s export-oriented growth model has had a material impact on the distribution of power between the financial and the non-financial sectors. This section presents comparative data to establish four closely connected empirical observations: the high profit share of German non-financial corporations, their low debt level, their high rate of internal financing, and their firmly established position as net lenders to the economy.

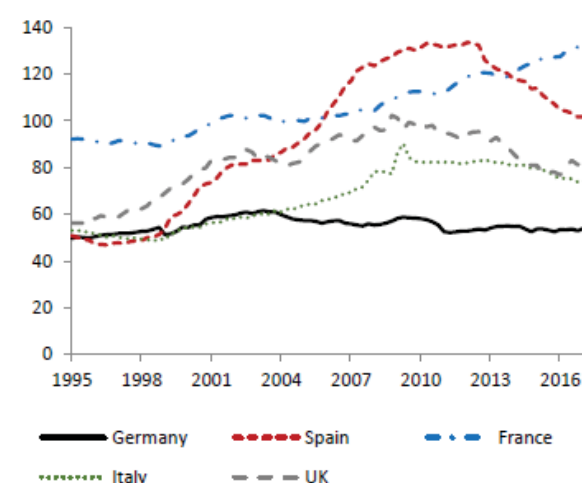
The suppression of wage growth, relative to productivity growth, is a key element of Germany’s export-led growth model. Wages have kept up with productivity relatively well for high-value added jobs in the manufacturing sector, but have failed to keep up even with inflation in the service sector and in the public sector (Baccaro and Benassi 2017; Baccaro and Pontusson 2016). To the extent that wage suppression does not translate into lower prices, it raises corporate profits. Figure 1 shows that German corporate profits were on a steep upward trajectory prior to the financial crisis, and, after a post-crisis dip, have since been flat. Over the past two decades, the gross profit share of German NFCs has been about ten percentage points higher in Germany than in France, and seven percentage points higher than in the UK. Unlike Spain, where the recent rise in the corporate profit share has coincided with mass unemployment and falling wages (Bundesbank 2018, 62), Germany has sustained high corporate profits in a macroeconomic environment of stable economic growth and steadily falling unemployment rates.

**Figure 1:** NFC gross profit share, % of GDP, 1999–2016



Note: Four-quarter moving average.  
Source: Eurostat.

**Figure 2:** Total borrowing by NFCs, % of GDP, 1995–2017

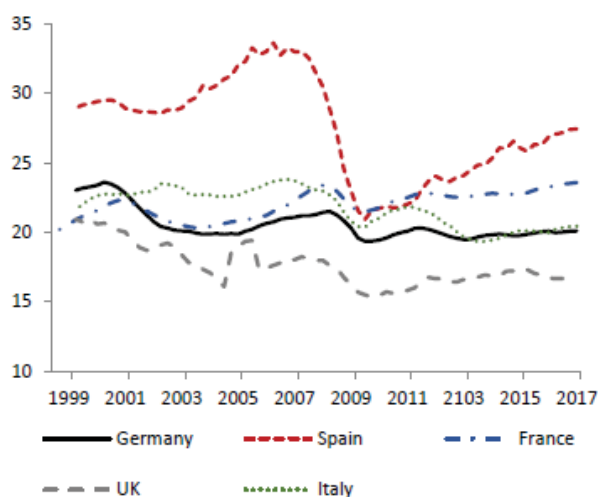


Note: Total borrowing includes loans and debt securities.  
Source: BIS total credit statistics.

<sup>3</sup> For a discussion of the financial conditions that enable the asymmetric distribution of growth models between European countries, see Fuller (2018).

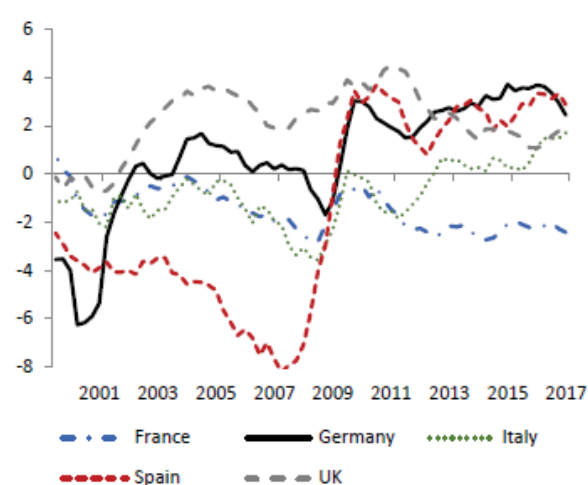
The second observation concerns the volume of borrowing by non-financial corporations, depicted in *Figure 2*. As can be expected, the image is reversed – high historical profit shares in Germany are associated with low levels of NFC debt, while relatively lower profits shares in France are associated with steadily rising debt levels. What is most remarkable, however, is that Germany, Italy, Spain, and the UK started off in the same place, with NFC borrowing at around 55 per cent of GDP in 1995. However, corporate debt levels rose significantly during the 2000s in Italy, Spain, France and the UK, while remaining virtually flat in Germany, which clearly is the outlier on this measure.

**Figure 3: Gross fixed capital formation by NFCs, % of NFC gross value added, 1999-2017**



Source: ECB.

**Figure 4: NFC net lending (pos.) / net borrowing (neg.), % of GDP, 1999-2017**



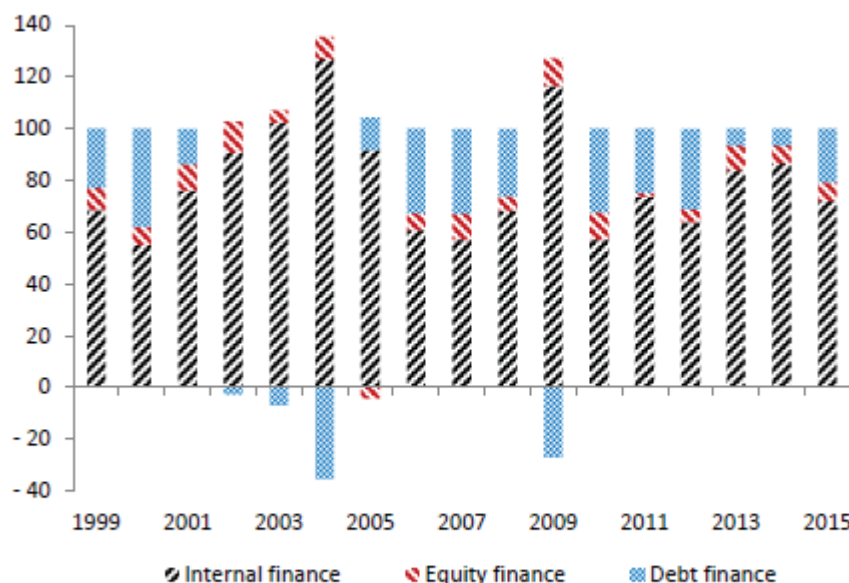
Note: Four-quarter moving average.  
Source: ECB, authors' calculations.

Third, and most importantly, high profitability and low debt levels imply a high rate of self-financing of German NFCs. That rate grew from the early 1970s (Deeg 1999, 86) and, as shown in Figure 5, has remained high since 1999. Note that the mild ups and downs of the black line in Figure 2, which indicate total borrowing by German NFCs, reflect the fluctuations of debt financing in NFCs' financing mix, depicted in Figure 5. The episodes of deleveraging among German corporations in 2004 and 2009 show up in Figure 2 as periods of declining total borrowing. It is also evident from Figure 5 that stock markets are not a major source of financing for German corporations (see section 4 below). Where does that leave corporate investment? Gross fixed capital formation – measured as a share gross value added, for comparability – has trended down in Germany since the late 1990s, coinciding with a significant rise in exports. Thus, high profits are not being turned to increased capital investment by NFCs.

To sum up, corporate profits and rates of internal financing have been consistently high in Germany, while corporate debt levels have remained uniquely subdued. Together, these factors accentuate the fourth observation, depicted in Figure 4: the shift of the corporate sector from being a net-borrower from the rest of the economy to acting as a source of net-lending. This shift has occurred in many economies in the past decade (Chen, Karabarbounis, and Neiman 2017; Glötzl and Rezai 2018). The jury remains out, however, on the precise nature of that net wealth. The most detailed empirical work, conducted for the US case, points towards FDI, goodwill and equity in subsidiaries rather than purely financial investments as the main components of the statistical aggregate of corporate-sector saving (Rabinovich 2018). This question notwithstanding, however, the shift from net-borrowing to net-lending should be expected to have a visible effect on the banking sector.



**Figure 5: Sources of new financing of German NFCs, % of the inflow of funds, 1999-2015**



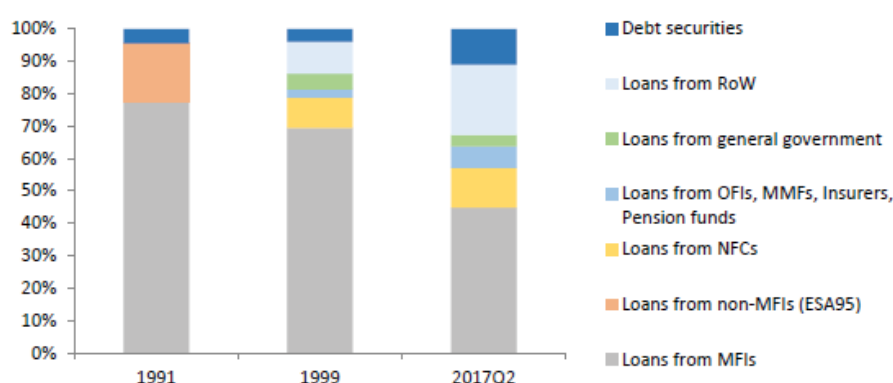
Source: Bundesbank.

### 3. Bank lending to non-financial corporations: Shrinking slice of a shrinking pie

Newly compiled long-term, cross-country datasets on bank balance sheets have shown a dramatic shift from business lending to lending to households, primarily in the form of mortgage lending (Jordà, Schularick, and Taylor 2016; Bezemer, Samarina, and Zhang 2017). Nevertheless, business lending has, of course, remained an important component of banks' activity. This raises an important question: What are the effects on bank profitability of a macroeconomic context in which non-financial corporations act as net lenders to the rest of the economy? While the literature on market-based banking has rightly pointed to an increase in fee-based activities, it has not renewed engagement with the role of banks in corporate finance. Meanwhile, the nascent growth-model literature has mostly focused on wage dynamics and on the sources of aggregate demand. This section zooms in on the data on bank lending in Germany, documenting its falling share in *total* domestic lending to non-financial corporations, as well as the changing *composition* of bank lending to NFCs.

As shown in Figure 2, the GDP share of borrowing by German NFCs has been flat for the past two decades. On top of that lack of growth in business lending, German banks have faced increasing competition. Figure 6 shows the structure of NFCs' outstanding debt liabilities since 1991, including borrowing from monetary financial institutions (MFIs), but also borrowing from non-monetary financial institutions (non-MFIs) as well as debt securities. The share of bank lending in total NFC debt has declined from 75 per cent to 50 per cent. (The full structure of all liabilities, including equity, is shown in the table beneath Figure 6: Bank lending as a share of *total* NFC liabilities has declined from 28 per cent to 15 per cent.) In other words, of every euro German non-financial corporations borrow, only 50 cents are borrowed from German banks. The remaining 50 per cent come from debt securities, the rest of the world (a category that includes foreign banks) and from loans extended by domestic non-banks: other non-financial corporations, institutional investors and asset managers, and the government.

**Figure 6: Structure of outstanding debt liabilities of non-financial corporations, 1991-2017, % of total**



Note: Only debt liabilities are shown. The following table shows the share of *all* outstanding liabilities.

	Shares & other equity	Pension & insurance reserves	Derivatives & stock options	Other accounts payable	Debt securities	Loans from MFIs	Loans from non-MFIs
1991	0,29	0,06	0,00	0,26	0,02	0,28	0,07
2017	0,49	0,04	0,01	0,17	0,03	0,15	0,15

Source: Bundesbank; BIS Long series on total credit

While the shrinking of bank lending relative to other sources of NFC credit would be bad enough for the banking sector, only the next level of granularity – the *sectoral distribution* and the *composition* of bank lending – reveals the full extent of bank retrenchment. The sectoral distribution of nominal bank lending is indicated by the red squares in Figure 7. They show that while the total value of bank lending to the service sector increased by more than 50 per cent between 1993 and 2017, bank lending to the manufacturing sector *decreased* by 11 percent. Thus, the share of manufacturing loans in total NFC lending by banks declined from 24 to 15.5 percent during the same period, even as the manufacturing share of GDP remained largely stable. In sum, while total business lending has shrunk as a share of GDP, lending to the manufacturing sector has even shrunk in absolute terms.

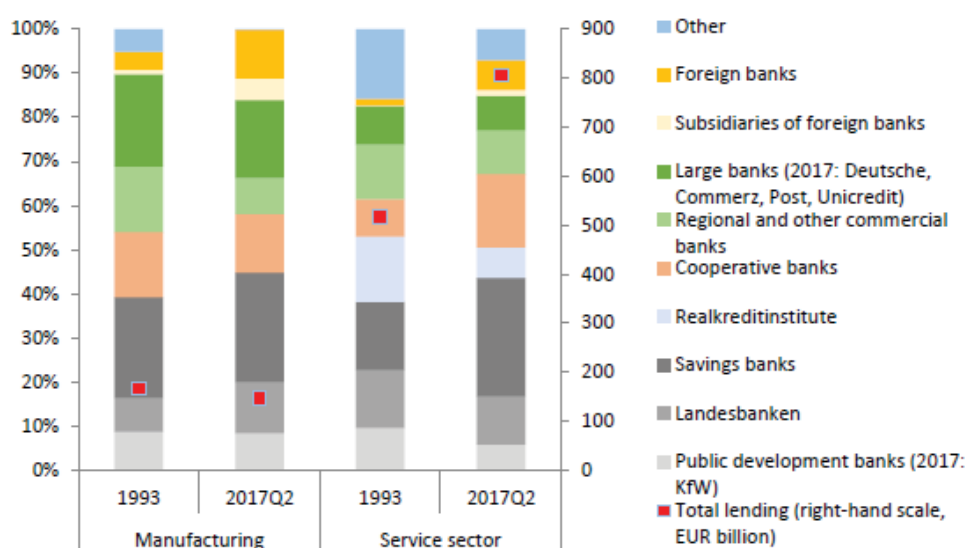
Beside the absolute amount, the composition of bank lending has also changed since 1993. Cooperative banks have held their ground in the manufacturing sector and have expanded significantly in the service sector. The commercial banks (green bars in Figure 7), by contrast, have seen their share in lending to manufacturing firms fall from a combined 36 per cent in 1993 to 26 per cent in 2017.<sup>4</sup> This represents a shrinking slice of a shrinking pie. The grey-shaded areas in Figure 7 represent public, government-owned banks: *Sparkassen*, *Landesbanken* and the *Kreditanstalt für Wiederaufbau*, or *KfW* (owned by municipalities, state governments, and the federal government, respectively). In contrast to commercial banks, public banks have significantly increased their share in total lending – in the manufacturing sector mostly due to the *Landesbanken*, in the service sector mostly due to the savings banks.

The KfW, which has long focused on promoting German exports, has also expanded its role in NFC finance along with the intensification of the German export model (Naqvi, Henow, and Chang 2018). Until the 1980s, the KfW's assets and total lending commitments ranged between 0.5% and 1% of GDP. The KfW financed itself largely with funds drawn directly from the Ministry of Finance and focused on export finance for German industry and lending in strategic sectors. Beginning in the 1980s, and especially thereafter, as a result of increased restrictions from the EU, the KfW shifted its

<sup>4</sup> Consistent with the more international orientation of manufacturing firms, which account for the bulk of German exports, these firms have increased their borrowing from foreign banks and subsidiaries of foreign banks. Cross-border banking has been greatly facilitated by European financial integration since the early 1990s.

funding sources to the domestic and international markets. Given its state guarantees, the KfW has top credit ratings and can borrow at the lowest rates. The shift to market-based funding enabled the KfW to expand its lending and balance sheet by around 2% of GDP – thus moving to a range of 2.5% to 3% of GDP by 2005 (KfW). The success of Airbus and the dramatic expansion of renewable energy industry in Germany (which has become an important export sector), for example, are practically unimaginable without the large-scale funding from the KfW.

**Figure 7: Bank lending to domestic non-financial corporations, by type of bank, 1993 & 2017, % of total (LHS); total lending in EUR billion (RHS)**



Source: Bundesbank

In sum, the data presented in this section shows that decreased demand from non-financial corporations for external financing has strongly impacted the German banking sector, which in addition has faced increasing competition from non-banks and from foreign banks. The developments described continue long-standing trends: in the 1980s, tax changes encouraged firms to rely more on internal financing, while in the 1990s regulatory changes, especially at the European level, facilitated capital market financing as well as international borrowing (Deeg 1999). These trends gained further momentum after the introduction of the euro and the associated consolidation of the export-led growth model. Like their peers in other advanced economies, German non-financial corporations have become net-lenders to the economy, quadrupling their net-financial wealth as a share of value added since 2002. Chronically low interest rates and stricter requirements for regulatory capital under Basel III may have further diminished the profitability of business lending for banks. The squeeze has been felt particularly by commercial banks, which today account for only one fourth of bank lending to manufacturing firms.

Together, these developments cast strong doubt on the assumption of the complementarity between German banking and export manufacturing sectors as essential, or even central, to the German model. Firms' need for bank borrowing is diminished and banks need to find borrowers abroad (Mertens 2017). To the extent that it rested on NFCs' dependence on bank lending and bank equity in NFCs, the power of banks in the German political economy would appear to have diminished. But if banks are no longer important drivers of the manufacturing sector, and if German NFCs rely increasingly on internal finance, then other insiders – management and large shareholders – have arguably gained greater autonomy and power over NFCs and their strategic direction. The following section therefore turns to recent developments in the shareholder landscape and examines their compatibility with the export-led growth model.



#### 4. Shareholders: Internationalized, empowered and supportive of export-led growth

The power of lenders over NFCs is diminished in an economy in which large corporations are essentially self-financing. Since in such an economy NFCs are also likely to depend less on the issuance of equity into the (primary) stock market, the same logic might also apply to the power of shareholders. However, the power of the existing shareholders is sustained through their ability (to threaten) to sell their shares in the secondary market and through the statutory rights shares afford their owners. These mechanisms – ‘exit’ and ‘voice’, in Hirschman’s terms – allow shareholders to exercise power over their portfolio companies regardless of their financing situation. Thus, the power of shareholders should be expected to be more resilient than the power of banks in Germany’s export-led economy not because large corporations need the stock market for financing, but because in the absence of financial dependence, shareholder rights become the ‘only game in town’ for financial influence over NFCs.

That said, comparative political economy is concerned not with shareholder power as such, but with the use to which shareholders put their power, i.e., which kinds of market strategies and management models they will support. Two decades ago, the comparative political economy literature had clear views on this question, distinguishing between two radically different types of shareholders and corporate governance systems: short-term oriented, dispersed institutional investors in shareholder value-oriented LMEs; and patient, concentrated blockholders in CMEs. Canonized by Hall and Soskice, these categories became outdated almost immediately, as ownership networks in CMEs weakened or dissolved and international institutional investors moved in (Deeg 2009; Culpepper 2005; Beyer and Höpner 2003; Deeg 2005). In addition, the customary classification of institutional investors as ‘impatient’ has been called into question by the rapid rise of index-based investment strategies which own shares so long as a firm is included in the tracked index, as well as the rise of long-term equity investors such as sovereign wealth funds (Braun 2016a; Deeg and Hardie 2016; Fichtner, Heemskerk, and Garcia-Bernardo 2017).

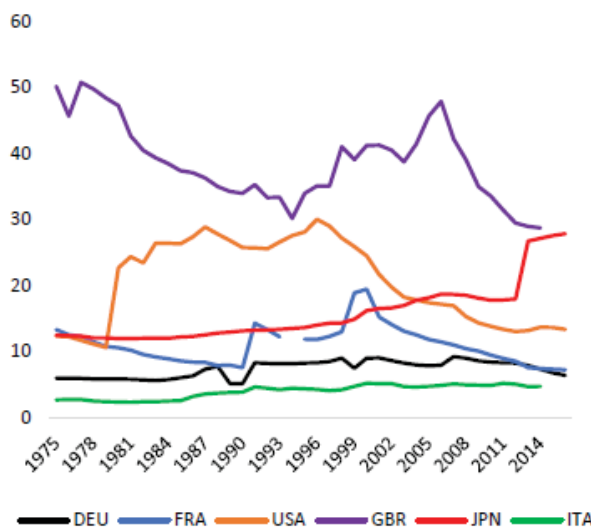
Beyond these changes, comparative political economy has not recognized the rapid pace with which the investment chain has evolved in recent years. The increasing length of investment chains complicates efforts to categorize investors as short or long-term, patient or impatient. This section therefore addresses three basic but crucial questions, ranging from the macro-level to the level of investor preferences: (1) What is the importance of the stock market in Germany today, relative to other countries? (2) Who are the dominant shareholders? (3) What are their preferences regarding the NFC business strategies and payout policies? Based on our answers to those questions, we conclude that the ownership structure and the preferences of the dominant investors are fundamentally compatible with sustaining the export-led growth model, which depends on a combination of wage-growth suppression and domestic-demand suppression.

(1) The German stock market has traditionally been small compared to other advanced economies. The two time series displayed in Figures 8 and 9 show that this has not changed in recent years. Germany has always had few listed companies, relative to its population (Figure 8). After reaching a peak in 2007, the number of listed companies per million inhabitants has since declined to 6.4, the same level as in 1975. It should be noted, however, that the fall has been even steeper in other countries, falling by more than half in the US and in France over the past two decades. These numbers are reflected in the data on market capitalization. At 50 per cent of GDP, market capitalization in Germany is lower than in most advanced economies, with the exception of Italy (Figure 9). As noted above, the stock market has effectively been irrelevant as a source of net financing for German non-financial corporations. Net share issuance, which collapsed after the bursting of the dotcom bubble in 2000, has not shown any signs of recovering under the intensified export-led growth model.

(2) The expansion of the export-led growth model has also coincided with important changes in the ownership structure of many German firms (Culpepper 2005; Beyer and Höpner 2003; Deeg 2005; Ringe 2015). At the start of the 1990s, the majority of shares in listed public companies was owned by

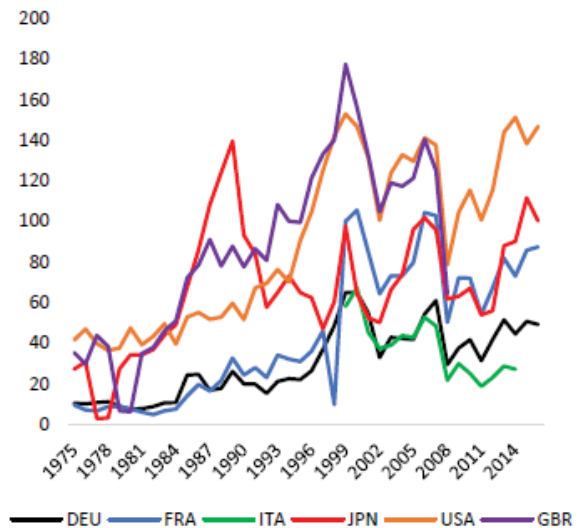
German residents, notably by NFCs (just above two-fifths) and by households (just below one-fifth) (Detzer et al. 2017, 48). By 2014, these ownership shares had dropped by half, to 18 percent for NFCs and to 12 percent for households (Bundesbank 2014, 24). Domestic shareholders sold their shares to foreigners, whose holdings of German listed equity swelled from 13 percent in 1991 to 57 percent in 2014. This dramatic internationalization of corporate ownership has been most pronounced for the largest corporations: The foreign ownership share for the 30 DAX companies was 64 percent in 2014 (Bundesbank 2014, 27). This dramatic shift in ownership of listed firms reflects the rise of both ‘traditional’ institutional investors, such as pension funds and Sovereign Wealth Funds (SWFs), and the fast-growing group of asset managers, which includes private equity, hedge funds, and the wide variety of active mutual funds, index funds and exchange-traded funds (Braun 2016a; Fichtner, Heemskerk, and Garcia-Bernardo 2017; Fichtner 2015; Goyer 2011).

**Figure 8: Number of listed domestic companies per million inhabitants, 1975-2016**



Source: World Bank World Development Indicators.

**Figure 9: Market capitalization of listed domestic companies, % of GDP, 1975-2016**



Source: World Bank World Development Indicators.

While Deutschland AG is gone, ownership remains fairly concentrated. Among the DAX 160 companies, 58 per cent still have blocking minority shareholders (Faust 2017, 13), with positive effects on these firms’ capacity to focus on long-term strategies (including R&D) that facilitate productivity gains and export competitiveness. As has long been the case, ownership structures vary along sectoral lines: Ownership is most dispersed and internationalized in the chemicals industry, with more than 60 percent of total market capitalization held by institutional investors (Höpner 2003, 309; Seldeslachts, Newham, and Banal-Estanol 2017). While that share is lowest in the domestic-oriented food, construction, and retail sectors, it is also low in the highly export-oriented car industry, where institutional investors own only 17 percent, and where two out of three carmakers continue to be controlled by domestic strategic shareholders (BMW by the Quandt family, Volkswagen by Porsche and by its home state, Lower Saxony).

(3) Despite the continuing power of large, domestic shareholders, the investor landscape in Germany has grown much more diverse. Moreover, the investment chain that connects beneficial owners and ultimate borrowers has become vastly more complicated (Kay 2012; Braun 2016b; Arjaliès et al. 2017). As a consequence, analyzing ownership structures no longer suffices – making comparative statements about corporate governance requires a much more detailed engagement with the business models and investment strategies pursued by equity owners and their asset managers (Deeg and Hardie, 2016).

Faust (2017) recently developed a useful typology for characterizing investment strategies that helps us understand how financial actors are impacting non-financial corporate strategy and governance – which connects importantly to whether these strategies entail short-term or long-term (patient) capital (the latter associated in the literature with German corporate success). Faust distinguishes three investment approaches – index or indicator-guided strategies, active or activist strategies, and control-seeking strategies.

The first category of investment strategies includes those based on movements in share or asset prices and that have no significant connection to the firm that issued the securities. This strategy includes ‘passive’ investment via index and exchange-traded funds (ETF), quantitative trading strategies, and high frequency trading. These strategies have grown significantly in Germany. By one estimate, about 20-25% of daily turnover on Deutsche Börse is attributable to high frequency trading (compared to 70% in the US); while index funds have assumed significant ownership in many of the largest German corporations such as Daimler, where 25% of shares are held by passive index funds (Faust 2017, 5-6). The investment activity and trading based on these strategies conveys little information to firm management about what its owners want them to do (in this case the reified notion of ‘the market’ as actor actually makes sense). Quantitative traders generally make no effort to affect management strategy or decisions. If they happen to hold shares at the time of the annual meeting, their votes are usually cast in line with the voting recommendation of the dominant proxy advisors (ISS and Glass Lewis).

Within this first category of investment strategy, the most consequential phenomenon has been the rise of index funds. The explosive growth of the assets under management by the ‘big three’ asset managers – in Europe, Vanguard and State Street are trailing BlackRock’s expansion – has the potential of altering the dynamics of corporate governance, and indeed of capitalism more generally (Braun 2016a; Fichtner, Heemskerk, and Garcia-Bernardo 2017). Two aspects stand out. First, index funds, which own shares so long as a firm is included in the tracked index, lack one of the two sources of shareholder power vis-à-vis company management – the ability to ‘exit’ any specific investment. Regarding the alternative, ‘voice’, index funds have long been considered passive, too. As a result of a mix of client and regulatory pressure, however, the largest index fund companies have recently assumed a more active stance vis-à-vis their US portfolio companies (Appel, Gormley, and Keim 2016). The second aspect is the combination of universal ownership and substantial minority stakes, often in the region of five per cent or more. A lively debate has arisen among economists around the potentially anti-competitive effects of such “common ownership” (Antón et al. 2018; Azar, Schmalz, and Tecu 2017; Elhauge 2016; Newham, Seldeslachts, and Banal-Estanol 2018). The intuition behind the hypothesis is that for shareholders invested in *all* major firms in any given sector – say airlines, or banks – have an interest in limited competition, in the form of oligopolistic price setting. Although the situation is arguably unprecedented in the history of capitalism – investors were simply not large enough to be fully diversified (owning all stocks in an index) while at the same time holding large individual stakes – it nevertheless shows important structural similarities with the former *Deutschland AG*. There, the dominant banks, seeking to minimize the risk of creditor default, used their central position in the corporate network to regulate and limit competition among German firms, thus creating a functional equivalent to the cartels of the pre-war period (Beyer 2003; Windolf and Beyer 1997). Whether common ownership by index fund companies can bring about similar anti-competitive effects remains to be seen. Recent evidence of large-scale collusion in the car industry, uncovered by US regulators in the context of Volkswagen’s ‘diesel scandal’, suggests that, at a minimum, the hypothesis should not be rejected out of hand.

Faust’s second type of investment strategy seeks to outperform average market returns through active investment, that is, by buying and selling based on the analysis of individual firms’ performance potential (Faust 2017, 8-15). Actively managed mutual funds, whether looking for short-term, event-driven gains or holding for longer periods, fall into this category, as do activist hedge funds. The investment time horizon and efforts to engage or influence management vary widely within this category. Investors in this category regularly analyze corporate information where they are invested,

but are more inclined to choose the exit option, rather than voice, when the firm's development does not meet expectations or when the original investment goal is accomplished. The obvious exception here are the activist hedge funds who seek to affect the firm in significant ways (gaining board seats, forcing greater dividends, restructuring and sometimes engineering a takeover that pays shareholders a premium), generally in order to extract value within a relatively short period of time and then exiting. Despite the frequent attention they often garner, activist hedge funds have played a comparatively small role in the German investment landscape. Fichtner (2015) studied 170 listed German companies from 1999 to 2010 and found only 11 instances in which one of them became the target of an activist hedge fund. Other studies show similarly low levels (Goyer 2011). Investor activism in Germany is hampered by corporate governance rules that favor management and empower labor, as well as by the persistently high number of blocking minority shareholders who make it difficult for a hedge fund to build a coalition against management (Faust 2017, 13). Partly as a result, hostile takeovers have remained virtually absent in Germany – of 308 M&A deals completed between 1981 and 2010, only 5 were hostile (Mager and Meyer-Fackler 2017).

The third investment strategy encompasses investors who seek strategic control over a firm. These are typically anchor investors controlling 25% or more of the firm's shares which enables them to exercise control, or at least hold off other investors from exercising control and greater influence. They are long-term, patient investors seeking more than a financial gain from the investment. As noted above, 58% of listed DAX 160 firms in 2014 had an anchor investor with a blocking minority (25% or more) and 33% had an anchor investor with more than 50% of shares (Faust 2017, 18). Although this is a significant drop from the 1990s, when some 85% had an anchor investor, it is still quite high in comparative terms. A large portion of these investors are families (Lehrer and Celo 2016), followed by other German non-financial firms. In the last decade a number of Sovereign Wealth Funds have also become important anchor investors in Germany (Thatcher and Vlandas 2016). This category constitutes the most patient investors who focus more on firm growth and innovation (continued prosperity), rather than maximizing shareholder returns (Faust 2017, 17).<sup>5</sup>

In sum, changes in ownership of NFCs have been dramatic in some German firms and sectors, but concentrated ownership by families and horizontal shareholdings continues to be an important feature. At the same time, the largest new owners are index funds, managed by global asset managers such as BlackRock and Vanguard. Unlike active – let alone activist – investors, these funds are by definition long-term investors, while their sheer size, diversification, and business models limit their capacity to use their 'voice' aggressively. Under these conditions, managerial autonomy remains fairly high, permitting firms to continue the long-term strategies leading to export success. To the extent that common ownership has anti-competitive effects, their compatibility with the export-led growth model would be an empirical question. While reduced domestic competition may negatively impact international competitiveness, common ownership across borders – already a reality in many industries – could potentially realize anti-competitive effects on a global scale. Overall, pressure to pay out corporate profits at higher rates remains relatively low, thus reinforcing German NFCs' low dependence on external finance and the consolidation of their position as net lenders in the economy.

### **Conclusion: The end of bank hegemony in the German political economy**

We started out by noting a gap in the recent literature on growth models, which currently does not account for the role of the financial sector in Germany's export-led growth model. In the comparative political economy literature, the old assumption about the complementarities between German finance and German industry therefore lives on. In this paper, our approach has been to start out from non-financial corporations' demand for financing rather than on the supply of capital. What this shift of perspective reveals is the extent to which the non-financial corporate sector has become self-financing.

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<sup>5</sup> Private equity funds also fall into this category and they are more active in Germany than activist hedge funds. Though in comparative terms, private equity (and venture capital) remains small in Germany.



The growth model perspective is helpful in this context because it highlights the low-wage, high-profit nature of the German export-led growth model (Baccaro and Pontusson 2016). Indeed, German NFCs' debt levels and debt servicing costs are exceptionally low by international comparison. Their internal financial resources (retained profits) suffice to cover a large share of their investment expenses. As a result, banks' relative importance as providers of external finance has greatly diminished since the early 1990s. Both total lending and bank lending to NFCs as a share of GDP have been flat. At the same time, the share of bank lending as a share of total NFC liabilities has fallen by half, from 28 percent to 15 percent. To the extent that they borrow, NFCs have reduced their borrowing in particular from domestic private banks. Much of this relative decline in business lending has been driven by the manufacturing sector which dominates German exports and whose total bank borrowing has actually declined even in both absolute and real terms.

Thus, what was true at the inception of EMU is even more true today: financial dependence is not the main source of bank influence in firms (Deeg 1999, 86). However, whereas in 1999 banks still held significant equity stakes in German non-financial corporations and sat on many supervisory boards, this is no longer the case today. As a consequence, a good portion of financial sector power over NFCs has shifted from lenders to shareholders. The reason is not so much further inroads by shareholder-value ideology, but the structural shift towards essentially self-financing corporations. In a context in which financiers – whether they provide loans or invest in equity – no longer derive their power from firms' dependence on external capital, the statutory rights associated with shares ('exit' and 'voice') gain in importance.

On one hand, while the small club of powerful owners at the heart of Deutschland AG is a thing of the past, strategic blockholdings remain more common in Germany than in liberal market economies. On the other hand, the growing global dominance of large, highly diversified investors that lack the 'exit' option is felt also in Germany, where BlackRock or Norway's sovereign wealth fund are often among firms' largest shareholders. Despite concerns about the major increase in foreign ownership and short-term investors, much of the capital invested in German firms continues to be fairly 'patient', thus stabilizing the export-led growth model.

The trend towards a greater role for international institutional investors in the German economy is poised to continue. While the conditions for the dismantling of Deutschland AG were created by interest coalitions at the national level, the European Commission's 'Capital Markets Union' project has made the further development of market-based finance a policy priority at the European level. This agenda is supported by a broad coalition, and is driven as much by financial-industry interests as by macroeconomic governance considerations (Braun, Gabor, and Hübner 2018; Braun and Hübner 2018; Mertens and Thiemann 2018). More market-based financing in general, and more equity financing in particular, the argument goes, will improve 'risk sharing' across national borders. On that basis, Capital Markets Union is supported not only by the Commission and the European Central Bank, but also by the German government, which sees it as a means of achieving macroeconomic stabilization that does not require major fiscal commitments by Germany. This suggests that the presently diminished role of finance in the German model is likely to continue well into the foreseeable future.

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