Inequality and the Financial System - The Case of Germany

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Abstract:
This paper examines the relationship between changes in the financial sector and the increasing inequality in Germany. For this, first an overview about the development of the main inequality indicators for Germany is given, which show inequality has been rising since the 1980s. Thereafter, the main features of the German financial system and its main changes in the last decades are reviewed. It is also looked at employment and incomes in the financial sector to determine, whether exorbitant growth of the financial sector, as observed in other countries, could be responsible for the increasing inequality. Thereafter, the relation of the financial sector with the non-financial sector is examined. Here, it is studied how changed behaviour in the financial sector may have led to increased inequality. It is argued that a multitude of factors including the retreat of the big banks from the German Inc., the changes in securities market regulation, the occurrence of new types of financial investors have all changed the corporate governance system in a way that made it more conducive to inequality. The last section of the paper summarises the main results and gives some general conclusions.

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Key words: Banking, Finance, Financial Systems, Inequality, Germany

1. Introduction*

Income inequality is rising in Germany. This is true for both functional as well as personal income distribution. After reunification in 1990, a general increase in inequality can be observed. This trend becomes particularly pronounced in the 2000s. In the literature on financialisation a link between the developments in the financial sector, the financing behaviour of firms, and income distribution is established. Also, in the varieties of capitalism literature a connection between the prevailing institutions, among them the financial institutions, and the tendency of an economy towards higher or lower inequality is made. This study attempts to investigate if changes in the financial sphere may have caused the higher inequality in Germany. There are different ways in which the financial sector could have contributed to the increased inequality. Growth of the financial sector or large increases in incomes paid in this sector could lead to higher inequality directly. Alternatively, different behaviour of financial institutions and new financial actors could affect distribution in the non-financial sector so that the financial sector indirectly affects inequality.

In this study, both channels will be examined. For the reader not accustomed to the German case, first, an overview about the general trends in inequality is given and, then, main features of the structure and the relevant developments of the German financial system are outlined. Following this, employment and incomes in the financial sector are examined to verify whether it directly has contributed to the observed increases in inequality. Thereafter, it is looked at the links between the financial sector and non-financial corporations. Here the influence of the financial system on the corporate governance system in Germany and the distributional consequences of these changes are examined. In the last section, the main results are summarised and some general conclusions are drawn.

2. Trends in income distribution in Germany

Looking at the adjusted wage share[1] in Figure 1, one can observe a downward trend starting in 1980. The wage share fell from 71 per cent in 1980 to 65 per cent in 1990. It recovered in the early 1990s with reunification, due to a higher wage share in East Germany. A slow decline resumed in 1994. This decline became more pronounced after 2000 and the wage share fell to 61 per cent in 2007. It recovered with the outbreak of the financial crisis and stood at 65 per cent in 2012. Krämer (2011) looked at the labour share

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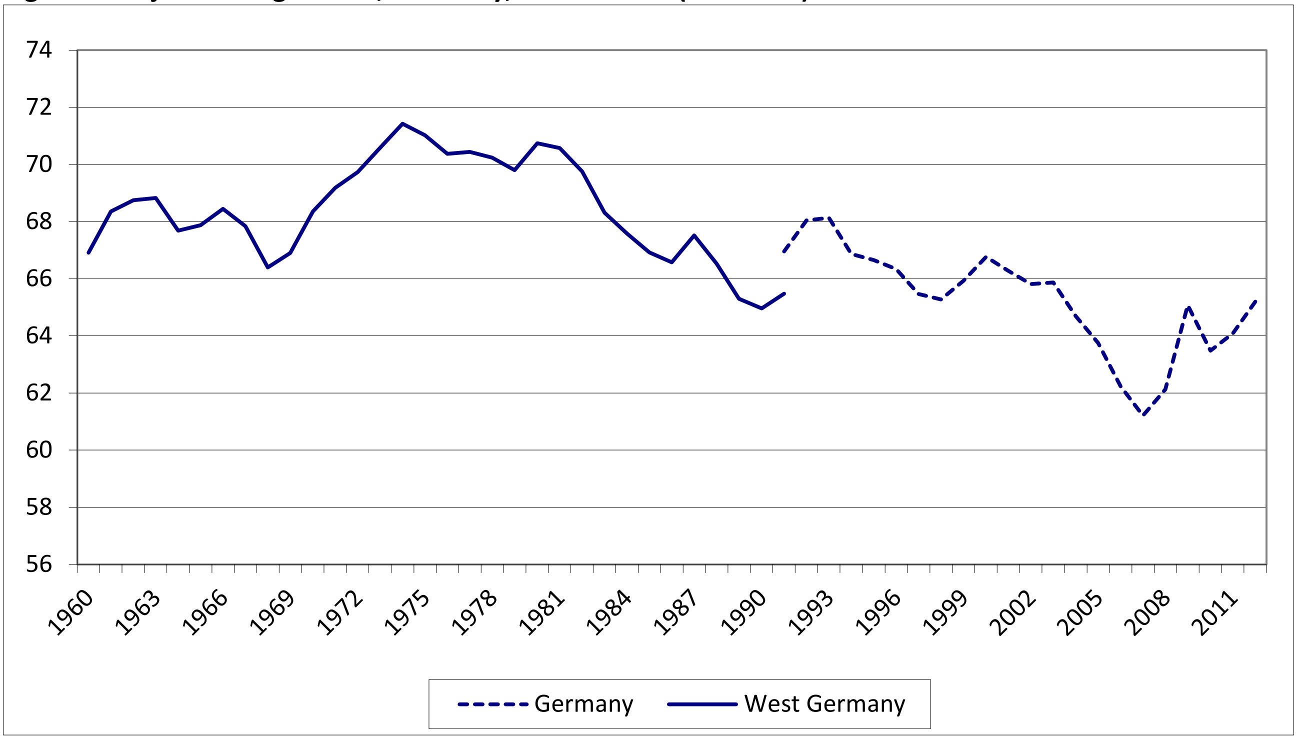
* A more extensive version of this paper is available GLU Working Paper No. 23 (http://www.global-labour-university.org/). It was written as part of the GLU project "Combating Inequality" which is financed by the Hans-Böckler-Foundation in Germany.

For helpful comments I would like to thank Trevor Evans and Hansjörg Herr. Remaining errors are, of course, my own.

[1] The wage share is the ratio of compensation of employees and GDP. Here it is adjusted, so that it does not reflect the changes in composition of employment (employees and self-employed), but only the changes in relative income.

of income[2] and found similar developments. The labour income share fluctuated around 80 per cent in the 1990s and then collapsed after 2000 to only 72.3 per cent in 2007. When he looked more closely at the components that caused the change between 1999 and 2010 he found that the relatively low distribution margin[3] of on average 0.73 per cent in this period was only, to a very minor degree, used for the increase of the real wages (0.13 per cent on average).

Figure 1: Adjusted wage share, Germany, 1960 – 2012 (% of GDP)



Source: European Commission (2013)

Also, personal income distribution has become more unequal. The Gini Coefficient for market incomes in Germany increased from 0.429 in 1990 to 0.471 in 2000. From 2000 to 2004 it increased further to 0.499. By 2010 it had decreased a little to 0.492. Further, if one looks at the distribution of disposable income (after redistribution through taxes and transfers), one can see a remarkable increase of inequality, which largely occurred during the 2000s. In the period from 1990 to 2000, the Gini Coefficient increased from 0.256 to 0.264. From 2000 to 2010, it increased to 0.286 (OECD, 2013).

Overall, income inequality in Germany has increased. Functional income distribution has changed in favour of profits at the expense of wages. At the same time, personal income distribution has become more unequal. The general trend could be observed already during the 1990s but the strongest increase of inequality was observed after 2000. In the following I will look at the changes in the financial system that

[2] The labor share of income adds to the wage share an estimated wage for self-employed persons.

[3] Relates to the change in productivity per worker. If it is fully used for real wage increase functional income distribution would not change.

occurred since the 1980s and investigate of whether the changes in income inequality can be related to changes in the financial system.

3. The German financial system – an overview

The German financial system has been classified as a prime example of a bank-based financial system. Despite attempts in the 1990s to promote security markets and certain regulatory changes conducive to their development, banks are still the main actors in Germany's financial system. Detzer et al. (2013) showed that the main quantitative indicators still point to a bank-based financial system. Ratios of balance sheet size, bank deposits or bank loans to GDP are still much higher in Germany than, for example, in the USA, which is classified as a typical market-based financial system. At the same time financial markets are less developed in Germany. Stock-market capitalisation and trading activity are low compared to countries with market-based financial systems; domestic markets for private debt securities are also less developed.

3.1. The German banking sector

In contrast to most other developed capitalist countries a large part of the German banking system consists of publicly-owned and cooperative banks. The German banking act puts no restriction on the conduct of investment and commercial banking. Therefore, most German banks are principally universal banks.

In 2012, private banks held 38 per cent of the banking sector's assets, publicly-owned banks held 29.4 per cent and the cooperative banks 11.8 per cent. Additionally, there are some special purpose banks that are largely related to the financing of real estate, which account for 20.4 per cent of total assets (Table 1).

The largest four banks among the private banks already account for 25.3 per cent of total banks' assets. Those are Deutsche Bank, Commerzbank and Unicredit. The fourth private big bank is Postbank. However, Deutsche Bank holds 93.7 per cent of its shares, so that it cannot really be regarded as a separate institution. These big banks have traditionally acted as house banks to the German large industrial firms. Banks and industrial firms were connected through cross-shareholdings and supervisory board seats. However, the need for external finance from these firms has declined since the 1970s. After attempts to enter the business with small and medium sized enterprises remained unsuccessful because savings and cooperative banks dominated this market, the big banks focused on investment banking activities instead. To increase business in this area, they were also the main proponents of the development of securities markets in Germany. At the same time their strong links with industrial firms made their neutrality in investment banking activities questionable and, therefore, they started to reduce their shareholdings as well as their supervisory seats in non-financial firms (Deeg, 2002).

The savings bank sector consists of primary savings banks, the regional Landesbanken and the Deka Bank. The savings banks are usually owned by the local city or county governments. Each savings bank is independent and managed locally. Its business activities are restricted to customers within its locality and actively trying to expand business to customers in other areas is prohibited. The main distinct feature of savings banks is that their main purpose is not profit making. Instead, they are required to serve the public interest of their local community. The usage of occurring profits is regulated differently and depends on their statute. Savings banks put most of their profits into reserves, distribute them to the respective public owner or use them directly to finance charitable and public projects. According to Deeg (2002) they focused on the provision of low-cost, long-term financing and use this to compete with other banking groups. This would pressure other banking groups to also provide long-term financing. Additionally, the institutional structure provides incentives to the savings banks (the same is true for the cooperative banks) to provide long-term funding to the local non-financial sector. Due to their limitation on their respective local markets, they have to be interested in the long-term viability of their local clients. Also, they have strong incentives not to harm their reputation as long-term reliable partners with their clients. Despite their not-profit maximising behaviour, their engagement to support the local economy and community and possible influences due to their state ownership, they seem not less competitive than their private counterparts. Their ability to maintain their market share in commercial lending appears to confirm this. Also, regarding profitability or efficiency savings banks do not seem to be inferior to private banks.[4]

On a second level in the savings bank sector there are the regional *Landesbanken*. Their original purpose was to function as a banker to regional state governments and as a central bank to the savings banks in their region. Additionally, they developed a wide range of commercial and investment banking activities, through which they compete directly with the big private banks. During the financial crisis in 2008, the *Landesbanken* were criticised because they registered large losses due to their trading activities in complex financial instruments.

A third level of the savings bank sector is made up by the Deka Bank, which serves as the central asset manager of the savings bank group.

Within the group many functions have been centralised so that the local savings banks can profit from the economies of scale of a big bank, without giving up their local focus.

The cooperative banking sector consists of the primary cooperative banks that act on a local level and two regional institutions. The primary cooperative banks are also limited to local markets and focus mainly on traditional bank lending instead of investment banking activities. They are owned by their members and are, like the savings banks, not strictly profit maximising. Instead they are required to serve the interests of their members. The two regional institutions act as central banks for the primary cooperative banks. They also compete with the big private banks and the *Landesbanken* for commercial and investment banking business (Detzer et al., 2013).

[4] For an overview regarding research on profitability and efficiency see **Detzer et al. (2013),** chapters 8 and 9.

Table 1: Banks by banking group, Germany, 1980 – 2012

	1980		2000		2007		2012	
	Number	% assets	Number	% assets	Number	% assets	Number	% assets
Total	3,359	100.0	2,987	100.0	2,038	100.0	1,988	100.0
Private banks	162	23.5	290	27.1	254	29.4	284	38.3
Big banks	6	9.8	4	15.4	5	18.6	4	25.3
Regional banks	100	10.5	199	9.8	157	8.9	168	9.4
Branches of foreign banks	56	1.7	87	2.0	92	2.0	110	3.6
Savings bank sector	611	38.6	580	35.3	461	33.9	436	29.4
Landesbanken	12	16.5	13	19.8	12	20.2	10	16.7
Primary savings banks	599	22.1	567	15.5	449	13.7	426	12.7
Cooperative sector	2,304	14.8	2,039	12.5	1,259	11.7	1,123	11.8
Regional institutions	10	4.0	4	3.6	2	3.4	2	3.4
Primary cooperative banks	2,294	10.7	2,035	8.8	1,257	8.3	1,121	8.4
Special banks								
Mortgage banks	39	13.6	32	14.6	22	11.5	18	6.9
Building and loan associations		0.0	32	2.5	26	2.6	23	2.3
Special purpose banks	17	6.4	14	7.9	16	10.9	17	11.2
Memo item								
Foreign banks			148	4.1	138	11.4	150	12.1
of which majority owned foreign banks			61	2.1	46	9.4	40	8.5

Source: Detzer et al. (2013), p. 75

3.2. Securities markets

As mentioned above, securities markets in Germany are relatively undeveloped. Bank loans are the main source of external finance for non-financial firms, while shares and bonds play only a negligible role. German domestic bond markets have mainly been used by banks to raise additional finance but recently other financial institutions take part as well. The stock markets are also relatively undeveloped. Trading value, stock market capitalisation and turnover ratios did increase with the stock market boom at the end of the 1990s. However, figures are still low compared to the US or the UK.

German private investors mostly hold their financial savings in the form of bank deposits and insurance policies. The proportion of savings held directly in the form of shares and bonds is relatively low and confined to few individuals (Detzer et al., 2013). At the same time foreign investors were not particularly present in the German market partly due to the regulatory framework, which was opaque for outsiders. Stock markets were largely self-regulated and rules regarding insider trading were lax. The lack of attractive product innovations and relatively high trading fees were two additional reasons that explain the reservations of foreign investors towards the German financial markets. According to Lütz (2002) this system was beneficial for the big German banks but at the same time depended also on their support. Simultaneously, the Bundesbank played a moderating role regarding the spread of new financial instruments and actors in Germany, mainly because of concerns about the effectiveness of monetary policy.

The modernisation and regulative reconstruction of the German system of financial markets occurred mainly during the 1990s and therefore much later than in the US or the UK. As mentioned above, banks lost their interest in maintaining the existing system due to their strategic reorientation. They started to establish their investment banking activities mainly through acquisitions of existing international investment banks. At the same time, they pushed their idea of establishing Germany as an international financial centre. In 2003, one of their main platforms for this purpose was founded - the initiative "Finanzstandort Deutschland" (Germany as a financial centre). It was closely linked to political actors, since the German Ministry of Finance and the *Deutsche Bundesbank* were also members of this platform. The initiative was closed in 2011 during the financial crisis.[5]

Starting in 1984, first the *Bundesbank* and later the government passed a variety of deregulatory measures, which abolished hurdles for foreign engagements (e.g. certain tax laws) and allowed more financial innovations (Domanski, 2003).

The First Financial Market Promotion Act (*Erstes Finanzmarktförderungsgesetz*) in 1990, introduced a range of legislative steps to modernise the financial market structure to become more similar to the US and UK markets. The core part established with this act was the Prospectus Act (*Verkaufsprospektgesetz*), which

[5] "Banken dampfen Lobbyarbeit ein", Handelsblatt Online, 28.06.2011

governed the requirements for the prospectus for securities offered for the first time to the public. It was the first legislative act whose primary goal was to protect investors in German capital markets.

The Second Financial Market Promotion Act (*Zweites Finanzmarktförderungsgesetz*), which came into effect in 1995, had far reaching securities trading provisions. One of its main issues was the regulation of insider trading and ad-hoc news announcements. But it also established a federal agency (*Bundesaufsichtsamt für den Wertpapierhandel*) responsible for the regulation of securities markets, which was similar to the US Securities and Exchange Commission.

The Third Financial Market Promotion Act (*Drittes Finanzmarktförderungsgesetz*), including the Control and Transparency in Business Law (*Gesetz zur Kontrolle und Transparenz im Unternehmensbereich*) was passed in 1998. The law affected the activities of corporations and stock exchanges and influenced accounting practices. It is interesting to note that the Ministry of Finance in its press release explicitly related the law towards the promotion of shareholder value policies. Some of the most important changes in the law regarded the use of proxy voting by banks, the enabling of stock option programs and of share buybacks, the disclosure of inter-corporate share ownership, limitations on serving on multiple boards and the use of voting caps.

In 2001, this was followed by the Tax Reduction Act (*Steuersenkungsgesetz*), which eliminated corporate capital gains taxes. This removed an important barrier to the reduction of inter-corporate cross-shareholdings.

The last most relevant change was the Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*) in 2002, which formally regulated merger and acquisitions and severely limited the defence measures a firm, targeted by a hostile takeover attempt, could take (Bradley and Sundaram, 2003).

Following legislative steps, including the Fourth Financial Market Promotion Act (*Viertes Finanzmarktförderungsgesetz*), did enlarge the investment opportunities for institutional investors and allowed new financial investors, like hedge funds and others, to become active in Germany in 2004.

Those legal changes made the German market more transparent and more accessible for foreign investors, as it allowed for more outsider control. At the same time they unravelled the German corporate network and facilitated the establishment of a market for corporate control.

A range of privatisations of former state owned corporations gave an important impetus to the growth of stock markets in Germany during the 1990s. In the course of the new technology boom at the end of the 1990s, Germany’s stock markets boomed and many German households started to invest in shares for the first time. The establishment of a shareholder culture in Germany seemed successful. However, with the collapse of stock prices and the closure of some market segments established during the boom, German households retreated again from the stock-market and the new equity culture seemed to have been a rather short-lived fancy (Detzer et al., 2003).

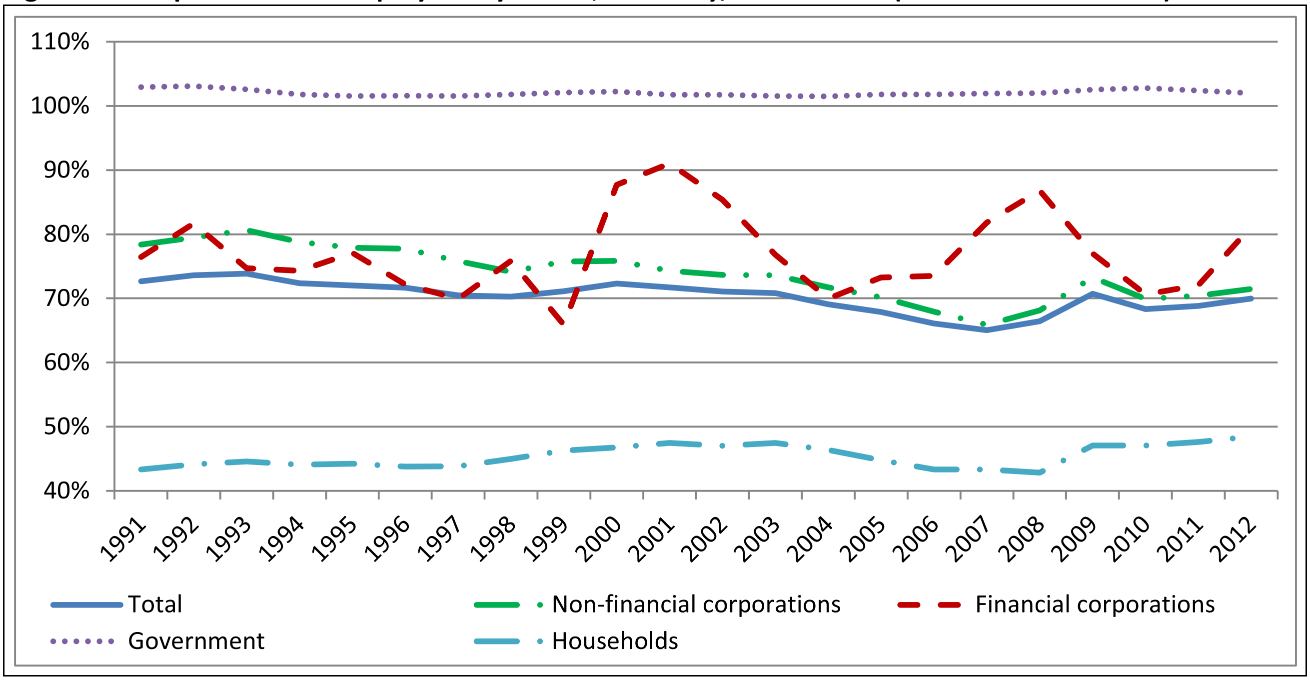
3.3. Employment and incomes in the financial sector and their contribution to inequality

In some countries, such as the UK or the US, the size of the financial sector in the economy has grown significantly. This is true in terms of value added as well as for the number of people employed. The OECD (2012) remarks that a higher share of the financial intermediation sector in total employment contributes to higher labour income inequality, since the gains from working in this sector are greater for high income workers. Additionally, some studies found that the strong rise in incomes in the financial sector had contributed much to increase inequality in many countries. Here, the rising incomes of the very top earners in this sector were the driving factor.

Incomes in the financial sector

Figure 2 shows the compensation of employees in per cent of net value added in different sectors of the German economy. It clearly shows that since around 2000 there was an upward shift in the compensation of employees in the financial corporate sector. At the same time, the share exhibits much larger fluctuations than in the period before. The upward shift of the wage share in the financial sector should have positively affected the overall wage share in Germany. Thus, the reasons for its downward trend should be found in the non-financial corporate sector, where the share going to labour decreased between 1993 and 2007. The downward trend in the non-financial corporate sector was partly balanced by an increasing share going to employees in the household sector in the period between 1997 and 2003, although, after this also in the household sector the share going to employees decreased until 2008.

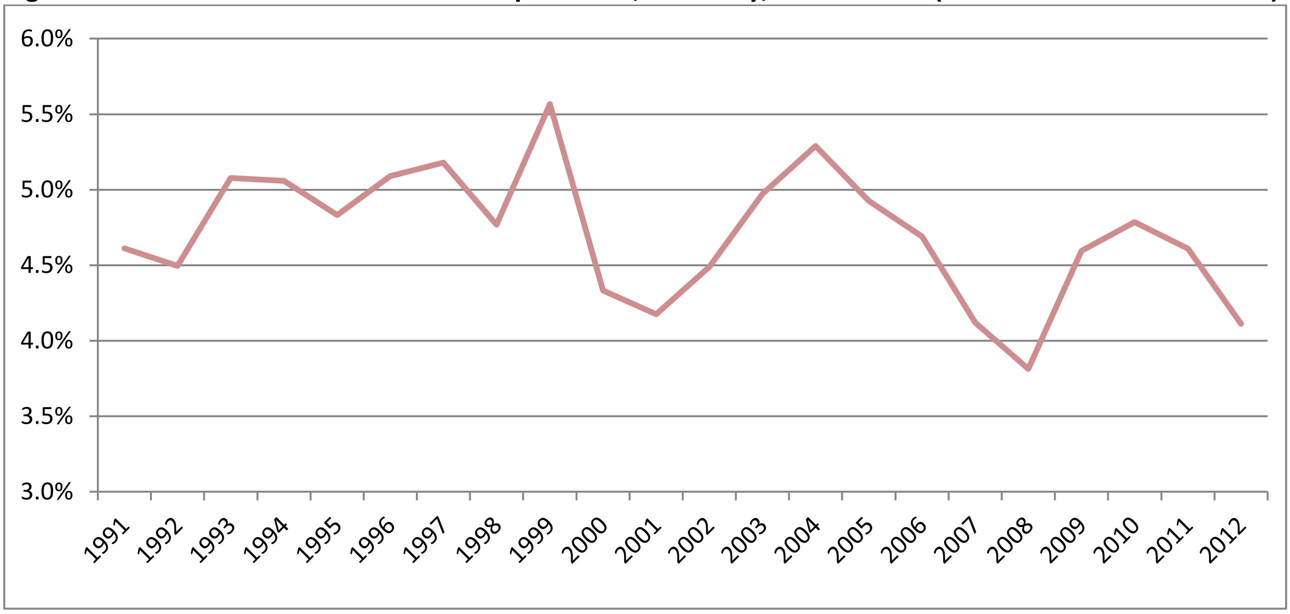
Figure 2: Compensation of employees by sector, Germany, 1991 – 2012 (% of net value added)



Source: Statistisches Bundesamt (2013)

Looking at the net value added of financial corporations in total value added in Figure 3 shows that the share was relatively stable until 1999. After, it exhibits much larger fluctuations and shows a slight downward trend. Therefore, Germany does not follow the international trend of an increasing importance of the financial sector in the economy. Given the slightly higher wage share in the financial sector compared to the rest of the economy, its relative loss in net value added in Germany could contribute to the explanation of the declining total wage share. However, given the financial sectors' relatively small overall share in total net value added and the relatively small difference between the wage share in the financial sector and in Germany as a whole, the explanatory power is rather low.

Figure 3: Net value added of financial corporations, Germany, 1991 – 2012 (% of total net value added)



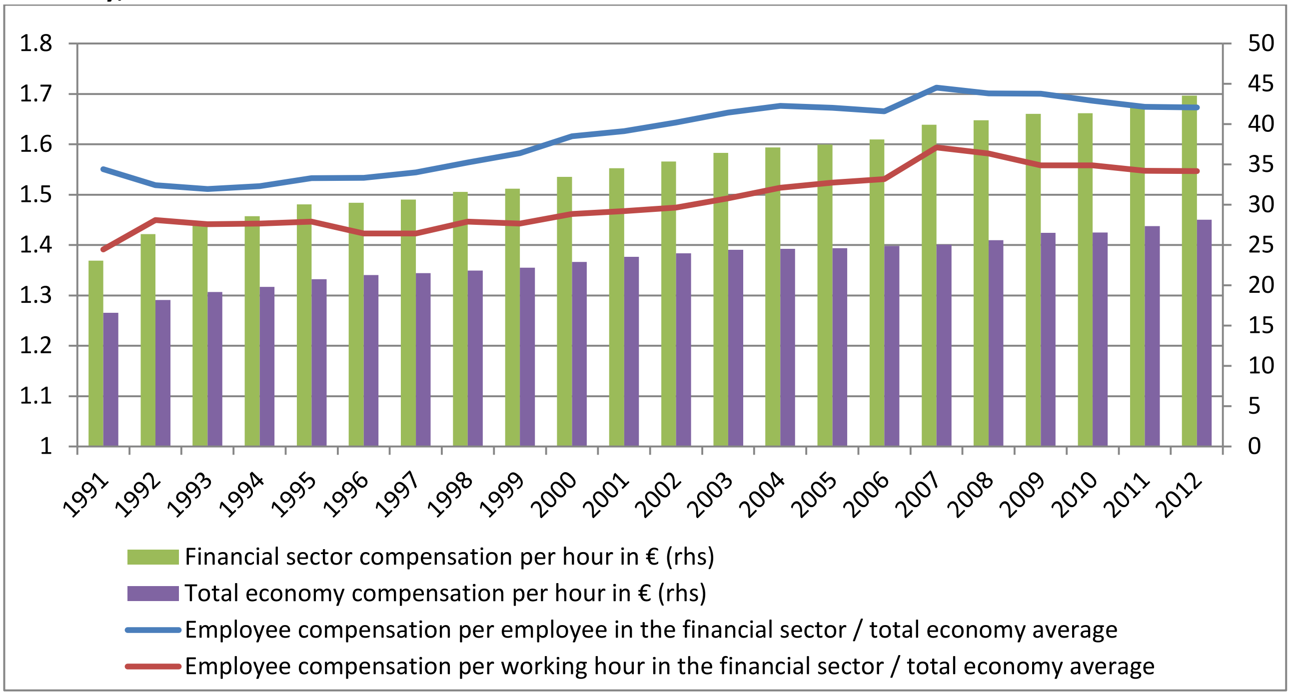
Source: Statistisches Bundesamt (2013)

Incomes and employment in the financial sector

In many countries increases in personal income inequality and in particular wage inequality were partially related to the large wage increases in the financial sector compared to the rest of the economy (e.g. Rosnick and Baker, 2012 for a cross sample of OECD countries; Bell and Van Reenen, 2010 for the UK; Godechot, 2011 for France). In the US, for example, the share of total compensation going to employees in the financial sector increased from 4.5 per cent in 1980 to 7.7 per cent in 2006, while the financial sectors contribution to total employment fluctuated around 5 per cent during the same period (Orhangazi, 2008).

In Germany, hourly compensation and compensation per employee are higher in the financial sector (Figure 4). In 1992, the average hourly wage in the financial sector was about 1.45 times that in the economy as a whole. In 2000, the ratio had not changed much and was at 1.46. From then on, the hourly wages in the financial sector increased faster than in the rest of the economy, so that in 2007 an employee in the financial sector earned on average almost 1.6 times the average hourly wage. On a per employee basis the general trend is similar, but at a higher level. As a result, financial sector employees improved their position relative to other employees. With the financial sector wages already at a higher level, this has contributed to higher wage inequality as well as to higher inequality in personal income distribution.

Figure 4: Compensation of employees in the financial sector compared to the rest of the economy, Germany, 1991 - 2012



Source: Statistisches Bundesamt (2013)

Table 2: Average annual growth rates of nominal hourly wages in different sectors, Germany, 1991 - 2012

	1991-2012	1991 - 2000	2000 - 2012	2000 - 2007	2007 - 2012
Agriculture, forestry and fishing	1,6%	3,0%	0,5%	-0,7%	2,1%
Industry, excluding construction	3,2%	4,5%	2,1%	1,9%	2,4%
Manufacturing	3,2%	4,6%	2,2%	2,0%	2,4%
Construction	2,2%	3,0%	1,6%	1,1%	2,3%
Trade, transport, accommodation and food services	2,3%	3,4%	1,5%	1,3%	1,9%
Information and communication	3,3%	4,9%	2,1%	1,8%	2,5%
Financial and insurance sevices	3,1%	4,2%	2,2%	2,6%	1,7%
Real estate activities	2,4%	3,8%	1,3%	0,4%	2,6%
Business services	2,4%	3,3%	1,7%	0,7%	3,1%
Public services, education, health	2,4%	3,3%	1,8%	1,1%	2,8%
Other services	2,3%	3,5%	1,5%	0,3%	3,1%
Total	2,6%	3,6%	1,7%	1,3%	2,4%
Nominal GDP growth	2,6%	3,3%	2,2%	2,5%	1,7%

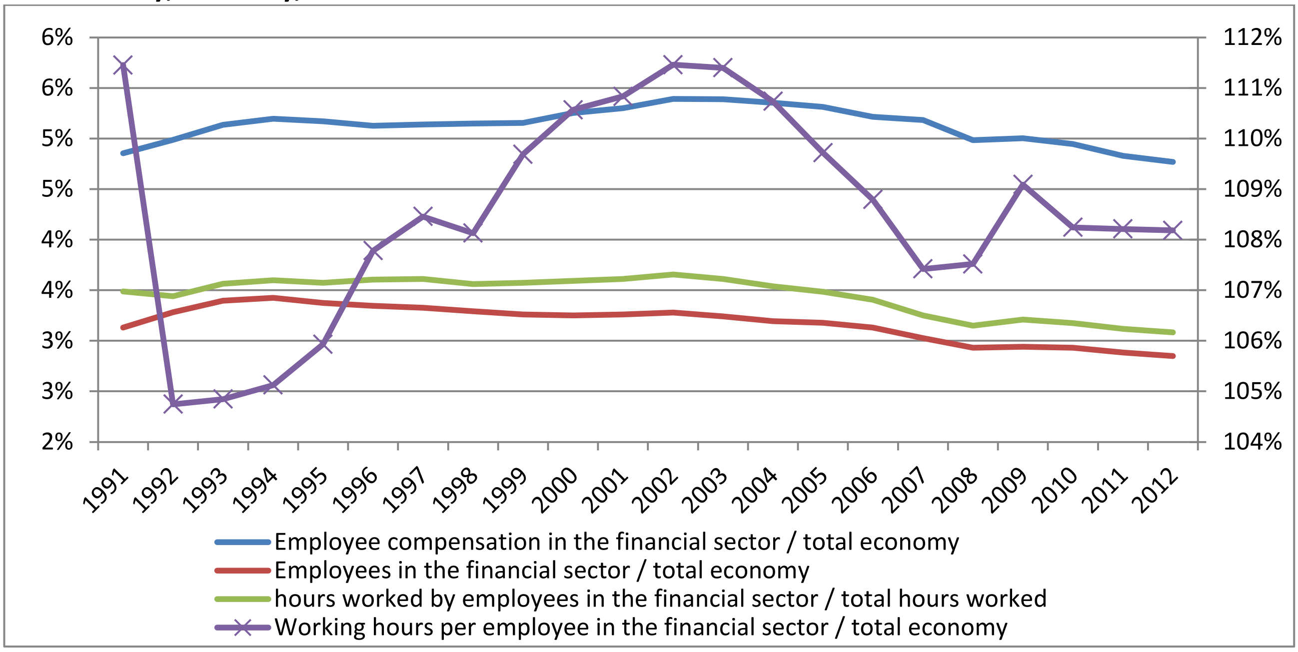
Source: Statistisches Bundesamt (2013)

However, the increases in the average financial sector pay were not extraordinary large. Hourly wages in the financial sector grew at an average annual rate of 4.2 per cent in the period 1991 to 1999 (Table 2). Excluding the exceptionally strong year 1991 hourly wages grew in line with the average wage and GDP growth in this period. Between 2000 and 2007 the average growth of wages in the financial sector was 2.6

per cent. This was above average but still in line with GDP growth and conformed to target inflation plus the distribution margin (productivity growth) of 0.73 per cent calculated by Krämer (2011) for this period. However, the average wage growth in Germany fell to 1.3 per cent during the same period. The increasing income dispersion therefore, does rather seem to be related to the sluggish wage growth in the rest of the economy. The opposite was true after the crisis. Financial sector compensation grew slower, while in all other sectors wage growth picked up.

In Germany, the share of total compensation paid to employees in the financial sector slightly increased from just under 4.9 per cent in 1991 to 5.4 per cent in 2002 (Figure 5). After, a downward trend can be observed and by 2012 the share was at 4.8 per cent. Looking at the financial sector's contribution to employment the graph clearly shows a downward trend starting in 1994, while the share of total hours worked in the financial sector stayed roughly stable. This means relatively fewer employees worked relatively more hours, so that total compensation was split among fewer workers. Only from 2002 on, the share of hours worked in the financial sector also declined. In general the working hours per employee in the financial sector are between 4 and 12 per cent higher than average working hours per employee in the rest of the economy.

Figure 5: Working volume and employee compensation in the financial sector compared to the rest of the economy, Germany, 1991 - 2012

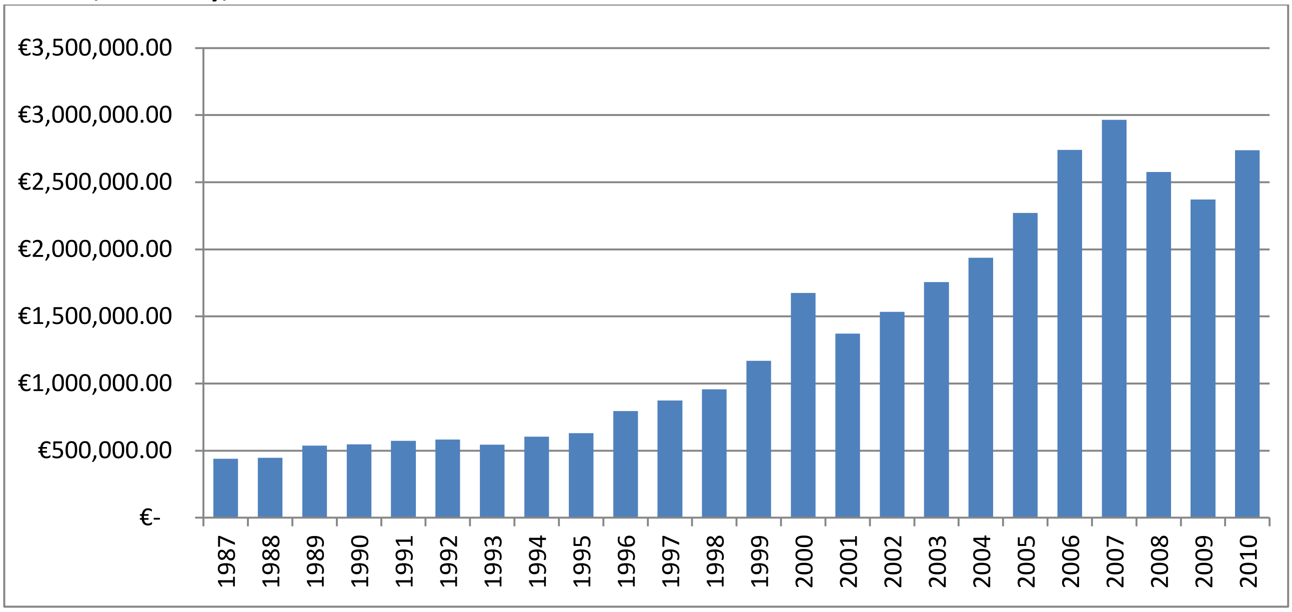


Source: Statistisches Bundesamt (2013)

Two conclusions can be drawn: Overall, employment in the financial sector and compensation of employees in this sector is relatively low compared to the US. Also, an extraordinary growth of the financial sector or the compensations in that sector could not be observed. The higher average compensation on a per employee basis may have contributed to inequality in Germany; however, regarding the overall importance of the sector and the magnitude of the changes, it can only explain a small part of the observed increases in inequality.

Looking at the average figures alone shows only part of the picture. If wage dispersion has increased in the financial sector, so that top earners increased their incomes while lower level workers' wages decreased or stagnated, this would have contributed to inequality. Especially for the US, the OECD reports that the amount of top earners that come from the financial profession has increased rapidly (OECD, 2011). One extreme example are the incomes of the top 25 hedge fund managers. In 2001, they earned a cumulative 5 billion USD and this grew to well over 25 billion USD in 2009 (Fichtner, 2013). If a similar trend is apparent in Germany, it would contribute to inequality.

Figure 6: Average management board member compensation per head for corporations listed on the DAX 30, Germany, 1987 - 2010



Source: Schwalbach (2012)

The payments to management boards in the top-listed German companies provide a first idea of the prevailing trends. The compensation for members of the management boards of big German companies listed in the DAX30 (the German index for blue chip companies) grew moderately until 1995 (5 per cent per year), but then compensation started to increase strongly until 2007 with an average annual growth rate of 15 per cent (Figure 6). Thereafter, average compensation fell until 2009. Therefore, top management compensation followed the international trends and increased strongly, even though it has not reached levels comparable to the US, where the average annual pay in 2010 was close to 10 million Euros (DSW, 2011). The financial sector data for Germany in Table 3 shows that Deutsche Bank in particular paid very high compensation[6]; Allianz also paid above average compensation, while Commerzbank and Munich Re

[6] Chairman of the Deutsche Bank Josef Ackermann was the highest paid Dax chairman with almost 14 million Euro in 2007.

paid compensations below average. Despite the fact that the picture might be affected by the crisis, it does not seem that the financial sector has generally higher management compensation than the non-financial sector, but that it rather followed the overall trend.

Table 3: Average management board pay per member for financial institutions listed in the DAX30, Germany, 2007 – 2010, in 1,000 €

	2007	2008	2009	2010
DAX30 average	2,964	2,576	2,371	2,738
Munich Re	1,704	2,310	1,974	1,295
Deutsche Bank	6,636	895	4,872	4,153
Commerzbank	1,956	1,109	534	527
Allianz	3,529	2,388	2,572	3,783

Source: Schwalbach (2012)

To conclude, while the strong increase in payments to top management surely has increased inequality, this trend does not seem to be confined uniquely to the financial sector. Instead, it seems to be an overall trend in large German corporations. The tendencies in top management compensation however, are in line with a turn towards shareholder value in German companies, which we will discuss below.

4. Relation between the financial and the non-financial sector

While the concept of stakeholder value prevailed in German management boards for a long time, a trend to give higher priority to profitability and to shareholder value was apparent in the past decades. This should not only lead to changes in the functional income distribution in favour of profits, but with very unequally distributed wealth in Germany (the richest 10 per cent households own 59 per cent of total net-wealth (47 per cent for the Euro Area w/o Germany)), also to increases in personal income inequality.

There are different hypothesis about, why German non-financial corporations have adopted shareholder value strategies. Höpner (2003) identified four main arguments. For Germany the most relevant ones that are related to the financial sector are the following ones. Firstly, owners of German firms have become more profit oriented so that those investors pressure management for shareholder friendly policies. Secondly, the institutional framework in Germany has changed allowing a market for corporate control to emerge, which forces managers to adopt shareholder-value policies. The following section will examine those hypotheses for the case of Germany.

4.1. Shareholder value orientation due to the pressure by institutional investors

Höpner (2003) argued that the capital market orientation of firms depends on their ownership structure and that the share of institutional investors in the ownership structure is positively correlated with shareholder value orientation. He found that private households have delegated their direct shareholdings to institutional investors during the 1990. Additionally, during the 1990s more foreign institutional investors, in particular US investment funds, have also invested in German companies. Those institutional investors became influential shareholders of firms and passed their performance pressure on to the management of the non-financial firms so that those were pressured to follow a strategy of shareholder value und profit maximisation.

Data on shareholdings of different groups of investors for the period 1991 to 2012 confirms those tendencies in ownership structure (Table 4). The share of domestic investment firms and financial institutions increased in particular until 2000. The data also confirms the increasing importance of owners from the rest of the world. Unfortunately, the flow of funds accounts do not distinguish where the foreign holders of German stocks come from. However, Beckmann (2007) noted that a large part of foreign shareholders in 2002 were institutional investors from Britain and the US. Additional evidence for large shareholdings of US investors was delivered by a report from Dresdner Kleinwort (2007), which claimed that the share of US-investors increased from 3 per cent to 18 per cent of total shares between 1998 and 2006. Hence, it can be confirm that institutional investors as owners of German joint stock corporations have become more important.

It can be argued that some investors have strategic and not only financial interests in their stock holdings. This leaves managers room for other strategies than profit maximisation. If the share of purely financially interest shareholders increases, this room should be tightened. Assuming that the groups of the rest of the world, investment firms and other financial institutions, and private households largely hold their shares to gain financial returns, while all other groups also have strategic interests, one can see that between 1991 and 2007 investors with a financial interest have become more dominant (Table 4). Additionally, if one distinguishes the group of financial investors into institutional and private investors, one can see that the share of private direct shareholdings has decreased. This is important, because the investment behaviours and strategies of private investors normally leave the management more room for manoeuvre than that of professional investors (Höpner, 2003).

Fichtner (2009) looked at similar figures and also confirmed that the amount of strategic investors has declined. Additionally, he looked at the amount of blockholders, which can shield company managers from market demands (and from hostile takeovers), in large German companies and found that those have declined. In 1991, 85 per cent of the firms had a shareholder with a block above 25 per cent. This number had fallen to 56 per cent by 2008.

The remaining question in this regards is how institutional investors are able to influence the management to pursue a shareholder oriented strategy. In the US, meetings of larger investors and management are not unusual and investors try to directly influence management boards. Studies on investor behaviour from 1998 and 2000 show, however, that direct influence on managements was rather rare in Germany. Therefore, the main channel seemed to have been the threat of selling shares which would correspond to a decline in share prices.

Table 4: Ownership of domestic joint stock corporations, Germany, 1991 – 2012 (% of total shares at market value outstanding)

	1991	1995	2000	2005	2007	2012
Non-financial corporations	42.7%	43.7%	32.2%	35.5%	30.5%	36.4%
Banks	11.2%	11.3%	12.2%	9.0%	4.9%	4.2%
Investment firms and other financial Institutions	3.8%	5.9%	12.2%	12.3%	12.5%	10.3%
Insurance firms	4.8%	5.7%	4.4%	4.6%	5.0%	7.3%
Government	5.2%	5.7%	3.1%	2.8%	1.8%	2.1%
Private households	19.5%	18.6%	15.8%	13.9%	11.6%	10.3%
Rest of the world	12.8%	9.1%	20.1%	21.9%	33.7%	29.3%
Strategic Investors	64.0%	66.4%	51.9%	51.9%	42.2%	50.1%
Financial Investors	36.0%	33.6%	48.1%	48.1%	57.8%	49.9%
Institutional	16.6%	14.9%	32.3%	34.2%	46.2%	39.6%
Private	19.5%	18.6%	15.8%	13.9%	11.6%	10.3%

Source: Deutsche Bundesbank (2013), own calculation

Notes: For the calculation of the figures it had to be assumed that all domestic sectors hold an equal share of stocks in foreign companies in their portfolios. It is assumed that non-financial corporations, banks, insurance firms and the government have strategic interests in their holdings, while private households, investment firms and other financial institutions and investors from the rest of the world are only pursuing financial interests. In particular the banks and insurance companies seem to have become more of financial than strategic investors over the period (Höpner and Krempel, 2006), so that they could be counted also towards financial investors.

However, this seemed to have changed in the course of the 2000s. More recent surveys show that managers of big German companies conform to the demands of US-investors for more meetings, transparency and regular communication. Additionally, German managers predicted in 2007 that the most important investors over the next five years will be located in the US or the UK and not in Germany or Europe (Dresdner Kleinwort, 2007). That can be a reason for them to pursue management strategies that are more common in those countries. The general hypothesis that the composition of owners is relevant for the corporate strategy is confirmed by a survey conducted by Achtleiter and Bassen (2000), which investigated the reasons for the increased shareholder-value orientation in Germany. The main reason given was the increased focus on returns by shareholders. Therefore, there is evidence for the fact that increased financial interests of shareholders have influenced management to follow strategies more in line with the shareholder value concept.

The pressure from institutional investors seemed to have reached a new qualitative stage due to the intensified activities of so-called activist hedge funds. They buy substantial stakes in companies and then publicly pressure them to follow certain demands to increase (short term) shareholder value.[7] The usual demands are: share buy-back programs, special dividends, either from surplus cash or even by taking on additional debt, and the sale of divisions that are not part of the core business area of the company. They substantially influence long-term management decisions and very often profit from an asset transfer from other stakeholders, such as workers, suppliers or creditors, to shareholders. Empirical studies, mainly for the US, show that the involvement of an activist hedge fund in a firm led to higher stock returns, but also that the average targetted firm of an activist hedge fund has significantly increased its long term debt load, while doubling dividends and decreasing its short term investment and its cash position (Fichtner, 2009). For Germany, Bessler et al. (2008) showed that short and long term shareholder value increased by firms targeted by activist hedge funds. Fichtner (2009) used a qualitative approach to look at the impact of activist hedge funds in Germany. He examined the ten most prominent cases of hedge fund involvement in Germany. He found that companies in which strategic blockholders owned the largest holdings of shares the demands from hedge funds could very often be averted. If however, the hedge funds had a larger share, their demands were usually fulfilled. Therefore, the observed decline of large strategic investors increased the threat of being targeted by activist hedge funds. Fichtner (2009) pointed out, that the activism of hedge funds in Germany, the ability to act in concert (wolf-pack tactics) and the reputation they built up in high-publicity cases (e.g. Deutsche Börse in 2005) has enabled them to establish "a tightly knit grid of material coercion" for German listed companies that are not protected by a large strategic stakeholder. This "disciplinary power" forces unprotected corporations, even though they are not currently targeted by an activist hedge fund to pursue shareholder value enhancing strategies, such as share buy-backs and increased dividends.[8]

While activist hedge funds mostly invest in listed stock corporations, similar pressure is exerted by private equity funds[9] on non-listed companies. Private equity funds normally invest in a company's equity, reorganise the company and sell it in the medium term to another investor for a higher price. Supporters of private equity (PE in the following) see its activity as a driver for a more efficient allocation of capital and

[7] One prominent example was the investment of the hedge fund manager David Einhorn (Greenlight Capital) in Apple. In TV and press he publicly criticized Apple for holding too much cash and that they should pay out part of it to investors. The high involvement in the firm's policies can also be seen by the fact that they filled a suit against some changes in Apple's bylaw (Handelsblatt, 11.02.2013). Eventually, Apple gave in and issued debt to start a stock-repurchase program and to increase its dividend in April 2013 (Bloomberg. 07.05.2013. Apple is currently again confronted with similar claims by the activist investor Carl Icahn, which, despite having a share of below once per cent actively tries to influence the firms policies (Frankfurter Allgemeine Zeitung, 14.08.2013).

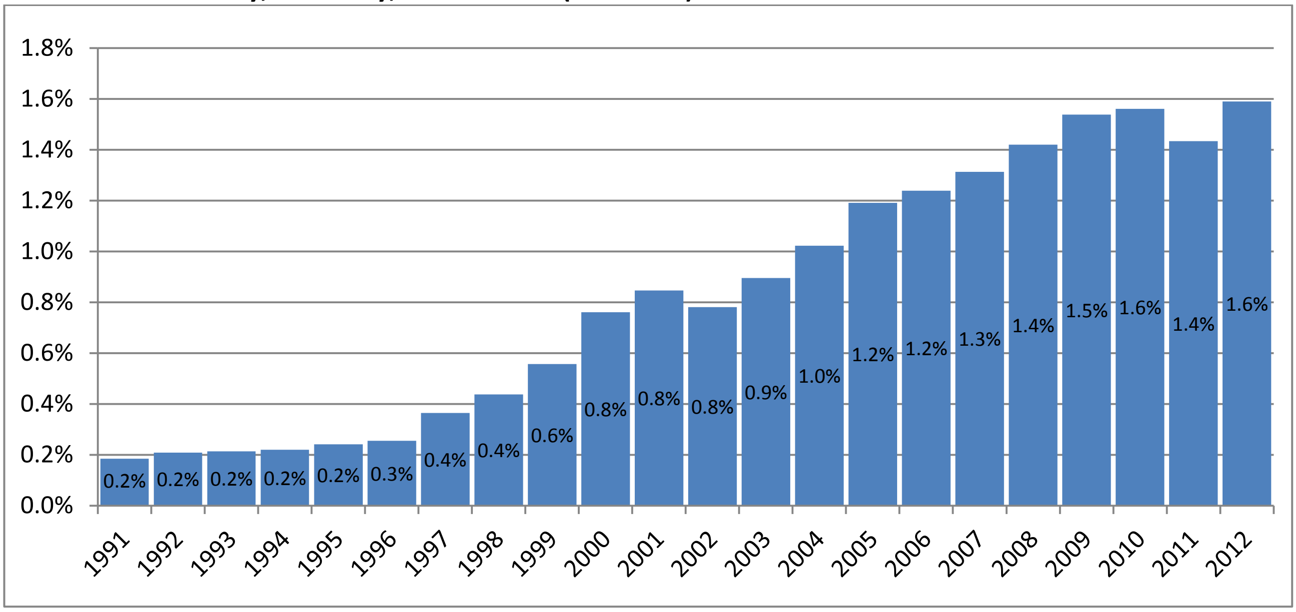
[8] Alternatively, other firms have started looking for a stable anchor investor that could protect them from activist hedge funds.

[9] Very often the term private equity refers to funds exerting buyouts and providing venture capital. Here it is only referred to funds that perform buyouts.

higher production efficiency and therefore, as beneficial to shareholders, since the value of the firm increased. Additionally, their activity leads to less expensive or higher quality goods and also to more jobs benefitting society as a whole. Critics argue that PE makes its gains through financial engineering at the expense of other stakeholders such as debtors, other shareholders and future interests of employees. PE funds increase the debt/equity ratio or extract resources through special dividends and the like. Increased operational efficiency is achieved by choosing a low road approach, i.e. reducing wages, cutting employment, reducing R&D and capital investment. That allows them to increase short term profitability at the expense of long run growth and innovation. Last but not least, they use tax subsidies for debt relative to equity and therefore, part of the gains are achieved by transferring income from tax payers to PE investors. Vitols (2008) reviewed international empirical evidence on the impact of private equity. His overall assessment stated that there is no evidence of a clear gain for either private equity investors or for employment. In particular studies for Germany did not show any positive employment or profitability effect. However, case studies for German companies showed that there seemed to be a wide range of cases from overall positive effects to strong negative effects. Additionally, they showed that when a PE firm gets involved in a company, the degree to which employee rights for information and consultation are respected often deteriorates.

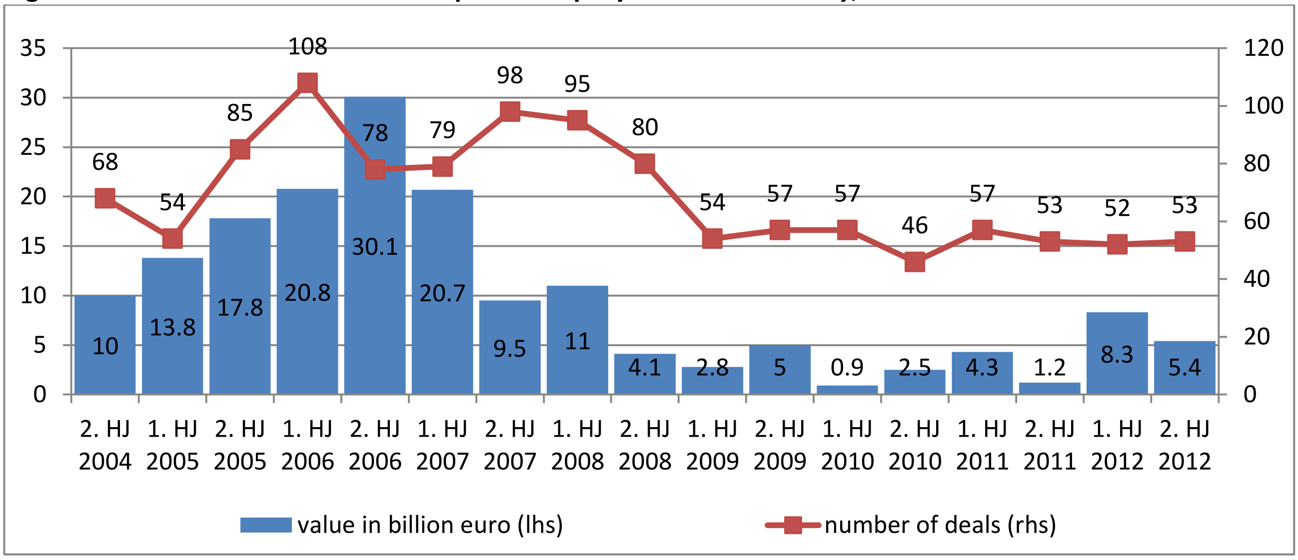
The empirical evidence for Germany suggests that the negative view prevails. Thus, the activities of private equity investors may lead to higher inequality. On the one hand, by squeezing labour, i.e. lower wages and employment and on the other hand, by reducing tax revenues and therefore, trimming down the ability of the state for transfers.

Figure 7: Funds under management by German private equity firms and funds of foreign companies invested in Germany, Germany, 1991 – 2012 (% of GDP)



Source: Bundesverband Deutsche Beteiligungsgesellschaften (2013)

Figure 8: Total value and number of private equity deals in Germany, 2004 - 2012



Source: Ernst and Young (2012)

While private equity funds played a modest role in Germany for a long time, they have grown tremendously in size and activity since 1996. Funds under management by German private equity firms have grown strongly from 0.25 per cent of GDP in 1996 to 1.6 per cent of GDP in 2012 (Figure 7). More importantly, the investment activity of those funds in Germany increased strongly as well. While in the first half of 2003 there were about 35 transactions with an overall value of about 6 billion Euro (Vitols, 2008), this has increased to 78 transactions with a total value of 30 billion Euro in the second half of 2006. Thereafter, PE investment decreased strongly with the onset of the financial crisis and only has been recovering slowly since 2012 (Figure 8).

Even though there is no direct empirical evidence for the effect of PE on inequality, it is notable that the rise of PE firms coincided with the increase in income inequality in Germany.

4.2. The occurrence of a market for corporate control

Another reason also related to ownership structures that lead to the increased shareholder value orientation by management is the new pressure occurring through the emergence of a German market for corporate control. The argument states that managers have an interest to keep share prices high, if a market for corporate control exists. The market for corporate control cannot be strictly separated from the stock markets in general. It describes the market were investors can acquire control over a firm by gaining a majority position in the firm. A company can be listed at the stock market, but does not necessarily need to be on the market for corporate control. For example, if a majority stake is held by one or more shareholders that are unwilling to sell, or if there are other legal or practical barriers that protect the firm against takeovers, corporate control cannot be reached. If a market for corporate control exists and if it is relatively active, there are two main reasons for managers to pursue a shareholder value strategy to keep the share prices high in the secondary markets. Firstly, a high share price protects against hostile takeovers.

If a company is taken over, there is a risk for the management board to get replaced. So the managers have a self interest in avoiding a takeover. Secondly, if the firm thinks about acquiring other firms themselves, a high share price gives them a better position to offer a stock swap. Therefore, the existence of a market for corporate control and a firm's exposure to it gives an incentive to managers to follow shareholder value strategies and therefore, has distributional consequences, as shown by a study of de Jong (1997). He showed that companies in Western Europe, where markets for corporate control are less active, retain or distribute in the form of wages to workers most of their net-value added, while the dividends paid out are below average. In companies in Anglo-Saxon countries, where markets for corporate control are more relevant, the relation is reversed – low retained earnings and low wages but high dividends. The management seems to solve the conflicting targets of long term growth and investors' interests differently depending on the existence of a market for corporate control.

For a long time merger and takeover activity in Germany was low compared to other European countries. This can be explained by a range of reasons. On the one hand, due to cross-shareholdings among industrial firms and the financial sector there were only few shares available for trade in the market (low free float), so that hostile takeovers were more difficult or even impossible for most companies. On the other hand, the legal framework and accounting rules were not conducive to takeovers. At the same time, politicians, elites and the general public frowned upon hostile takeovers (Höpner and Jackson, 2006). Nevertheless, merger activities picked up in Germany and the threat of takeovers has increased. During the 1970s on average 373 mergers were reported to the Federal Cartel Office annually. This already increased to 827 during the 1980s. From 1991 to 1997, partially due to a large wave of mergers with East German firms and the integration and liberalisation of European markets, there were 1,479 deals annually valued at about 1.4 per cent of GDP. This increased to 1,607 deals and 7.5 per cent of GDP annually for the period from 1998 to 2005. While this is still below the value and number of deals in the UK, the actual threat of being taken over seems similarly high. In Germany between 1998 and 2005, 11 per cent of listed companies were targeted in M&A transactions, compared to 9 per cent in the UK and 10 per cent in the US. This suggests that something has changed in Germany that facilitated the occurrence of a market for corporate control. Many reasons can be identified. Facilitated by capital market orientation of large companies and legal changes on the German national and the EU level, more and more firms use International Accounting Standards, which are more transparent and favoured by financial investors. This is in general more conducive for takeovers. Additionally, in 1995 a voluntary takeover code was established and later the Securities Acquisition and Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz, WpÜg*) was passed in 2002 (Höpner and Jackson, 2006). It established mandatory bid rules, required board neutrality and limited the defensive actions the board can take against hostile takeovers (Detzer et al., 2013). Höpner and Jackson (2006) conclude that the defensive actions are limited to share buy backs, engaging in alternative acquisitions or searching for a white knight. However, the introduction of the takeover act occurred when M&A activities had already picked up and therefore, it should be seen as an accommodating action of the legislator rather than as a cause of the increased activity.

Hence, the rise of the market for corporate control has to be related to other factors. One factor inhibiting the emergence of a market for corporate control was the existence of the so called German Inc. (*Deutschland AG*). The German business sector was characterised by a dense network of cross-shareholdings among firms. The network was built around large German financial institutions (Allianz, Commerzbank, Deutsche Bank, Dresdner Bank, Hypo-Vereinsbank, Munich Re), which had board seats and large holdings in many industrial firms and also between each other. This network was seen as a substantial barrier for the market for corporate control. However, with the strategic reorientation of the banks towards investment banking during the 1990 they regarded their position in industrial firms as a handicap and reduced their engagement. Deutsche Bank, for example, publicly announced that it planned to reduce its board positions and share holdings in industrial firms. In the network of cross holdings one can see that most of the banks and in particular the Deutsche Bank moved from being in the core to the edges of the decisively less dense network between 1996 and 2004. In contrast, the Allianz still seems to hold a core position, although it reduced its position overall. Nevertheless, Allianz always had a more passive role than the banks. Byoutsourcing its investment portfolio to a separate investment fund Allianz indicated it had a mainly financial interest in their investments (Höpner and Krempel, 2006).[10] The abolition of the corporate capital gains tax in 2002 gave a strong impetus to the dissolution of the network. It allowed financial institutions to uncover their large hidden reserves without paying taxes on the proceeds (Rünger, 2012).

The dissolution of the cross-shareholding network removed an important barrier to the market for corporate control.

Apart from their position in the German company network, banks had further possibilities to influence the outcomes of takeover attempts. Due to their seats on supervisory boards and their ability to exert influence through their proxy voting power, they can either support or hamper management in fending off hostile takeover bids. In sum, until the early 1990s at least banks were willing to use their powers to undermine hostile takeover attempts. However, the orientation towards investment banking led them to be rather supportive of hostile takeovers. The dilemma banks faced was well illustrated by the takeovers of Krupp/Hoesch in 1991 and Krupp/Thyssen in 1997. In both cases the Deutsche Bank supported the takeover attempts by Krupp while it had strong relations to the respective takeover targets. This was widely criticised by the public and led the banks to reduce their monitoring role and to direct their focus on investment banking mainly (Höpner and Jackson, 2006). Deutsche Bank made its support of a takeover

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[10] Anecdotal evidence of the mostly financial interest of Allianz in at least some of its larger stock positions is given by Fichtner (2009), who discusses the case of Heidelberger Druck, which came under pressure of the activist hedge fund Centaurus to start a share buy-back program. Allianz remained rather passive and sold part of its shares later with a handsome profit.

friendly environment in Germany very clear through the following quote of its management board chair Klaus Breuer in 1997 during the Krupp/Thyssen takeover battle: “I very much hope that a first large case will set an example within our financial culture”[11]. Jackson and Höpner (2006) saw the decisive test case and proof that a market for corporate control had developed in the Mannesmann/Vodafone takeover in Germany. Banks did not play any defensive role for Mannesmann. Politicians did not actively intervene in the deal. In sum, the case showed that hostile takeovers are possible in Germany.

As explained above, this development inclines managers to pursue shareholder value friendly policies, which in turn leads to a distributional change in favour of shareholders and at the expense of workers. While the market for corporate control can mainly explain changes in listed stock companies also non-listed and non-stock corporations may be affected. As seen above, private equity funds target non-stock corporations and therefore, exert a similar pressure on those companies. Additionally, it can be argued that many of Germany’s smaller firms are suppliers of the big industrial listed companies. With those under pressure to maximise shareholder value they may use their market power to forward this pressure to their suppliers.

Altogether, we can see there are relevant mechanisms that originated in the financial sector and contribute to the spread of shareholder value. German financial institutions retreated from the German company network as strategic investors. This left room for more financially interested investors, which put pressure on the management to follow shareholder value oriented strategies. The increased activity of new forms of institutional investors like activist hedge funds and private equity firms took this pressure to a new qualitative level. Also, the dissolution of the German company network combined with some legal changes, more firms are exposed to the market for corporate control. This puts management under additional pressure to keep share prices high in order to prevent hostile takeovers. As shown by de Jong (1997) an increase in shareholder value has distributional consequences. Therefore, it can be argued that the described changes in the financial sector have led to an increased emphasis on promoting shareholder value, which in turn has led to increasing inequality. However, how much of the increase in inequality can be explained by shareholder value orientation is hard to quantify. Looking at the hourly wage developments of different sectors in the economy as presented in Table 2 above suggests concluding that it does not seem to be the most relevant factor. One can see that average nominal wage growth during the 2000s was decisively lower than in the 1990s. This is true for all sectors, and not only the ones that are most likely to be affected by the changes in the financial sectors as discussed above. One would assume that the tendencies towards shareholder value are strongest in big listed companies. Those should be overrepresented in the industrial sector, while companies in the service sector should be rather small and non-listed. Still the industrial and the financial sector had the highest wage increases in the 2000s.

[11] Spiegel 13/1997: 94

Additionally, Höpner (2003) showed the degree of shareholder value orientation for big German companies and found the following descending sectoral order: chemicals and pharmaceutics, utilities, automobile, plant and mechanical engineering, trading and construction. Also, here we can find that the sectors that are mostly following shareholder value are not the ones with the lowest wage increases. Hence, while shareholder value orientation surely has contributed towards the general trend, it does not seem to be the root cause. Looking at the regulatory reform and the changes in the behaviour and rhetoric in the reports of DAX 30 firms, Bradley and Sundaram (2003) dated the occurrence and the spread of shareholder value largely in the 1990s. For the period after 2000 there may still be substantial effects, also due to the occurrence of new institutional investors, but the overall trend does rather seem to be caused by other factors, e.g. the labour market reforms at the beginning of the 2000s.

5. Conclusion

The large non-profit oriented part of the banking sector is a unique and remarkable feature of the German financial system. The high reliance on banks instead of markets to finance the German system was traditionally described as a bank based system, where Bundesbank, government and the banks themselves were interested in the preservation of the existing order. Only when the big banks' business model as house banks of the large German industrial firms eroded those actors defected and pushed for a more market based system, to support their new focus on investment banking. This was supported by the Bundesbank and the German government, which introduced a range of change to the relevant laws and regulations in the 1990s and early 2000s. Most importantly, the environment was made more transparent and attractive to foreign investors. Additionally, the regulatory structure was adapted for the development of a market for corporate control. Likewise, tax laws were adapted allowing corporations to reduce their cross-shareholdings without paying taxes on the capital gains. This facilitated the already ongoing disintegration of the German company network, where the big financial institutions in particular – the former core of the network – retreated, due to their new investment banking focus.

Examining the direct influence of the financial sector on inequality, I could not find similar trends as in some of the Anglo-Saxon countries. The data that was examined did not suggest huge increases in bankers' wages, nor in the profit share of that sector. The financial sector followed the overall trend of enormous increases in CEO pay; however, that trend was not unique to the financial sector, even though, the Deutsche Bank, with the highest payments up to the crisis, could have served as a lead example for other large companies. Nevertheless, further research on the wage distribution in the sector and regarding non-CEO leading staff of the banks would be interesting to get a better idea of the general trends within the financial sector.

Next the relation between the financial and the non-financial sector was examined. Looking at the ownership structure of the non-financial corporate sector in Germany, it was found that the replacement of strategic, relatively stable investors by largely financially interested investors has given rise to an increased focus on financial goals and the application of shareholder value oriented strategies by the management boards. Additionally, the reduction of strategic investors has allowed new forms of institutional investors to become important shareholders. Having that position, they actively try to change management strategies towards the (short-term) benefit of shareholders partially at the expense of other stakeholders.

The change from largely strategic stable shareholders (together with the legal changes enacted in the 1990s and early 2000s) has given rise to a market for corporate control, which increases the pressure of management to follow shareholder value strategies to keep share prices high and not being targeted by hostile takeover attempts.

This focus of management on shareholder value has also distributional effects. Giving priority to profitability and shareholder value instead of pursuing growth and a compromise among stakeholders may have led to increases in the profit share. Given the unequal distribution of wealth in Germany, this also can help to explain the more unequal personal income distribution. However, at least for the big companies the turn towards shareholder value had already started in the 1990s. While it surely has contributed towards the increasing inequality in the 2000s, the uniform decline of wage growth in all sectors lead to the conclusion that the changes in the financial structure and the corresponding changes in corporate governance are not the main explanation of the increased inequality observed in the 2000s.

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