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# 7. Financialisation and the crises in the export-led mercantilist German economy\*

# **Daniel Detzer and Eckhard Hein**

# 7.1 INTRODUCTION

This chapter examines the long-run changes in the relationships between the financial and the non-financial sectors of the German economy, and in particular the effects of these changes on the macroeconomic developments, which led or contributed to the financial crisis and the Great Recession in 2008/09. The second section provides an overview of the long-run developments in the era of financialisation. It gives a first impression of the drivers of aggregate demand and growth, which in the case of Germany were mainly net exports, starting in the early/mid 1990s. The macroeconomic development in Germany since then can be classified as 'export-led mercantilist'. The third section will then deal with the long-run effects of financialisation, or the increasing dominance of finance, on the German economy, in more detail, and it will examine to what extent the channels through which financialisation is expected to affect economic development can be found. Here we will examine in detail how financialisation has affected income distribution, investment in capital stock, household consumption, and net exports and the current account. The fourth section will then trace the mechanism through which the financial and economic crises were transmitted into the German economy in a more detailed way. The fifth section will summarise and conclude.

\* For a more extensive version of this chapter see Detzer and Hein (2014). Parts of the study were presented at the 16th Annual INFER conference, May 29–31, 2014, in Pescara, Italy, at the 11th International Conference Developments in Economic Theory and Policy, June 26–27, 2014, in Bilbao, Spain, at the FESSUD Conference Understanding and Responding to the Financial Crisis, October 16–17, 2014, in Warsaw, Poland, and at the 18th Conference of the Research Network Macroeconomics and Macroeconomic Policies (FMM), October 30–November 1, 2014, in Berlin, Germany. For helpful comments we are grateful to the participants and to Andrea Boltho, Nina Dodig, Dirk Ehnts and Achim Truger in particular. We are also indebted to Petra Dünhaupt for useful comments and for helping us with data. Remaining errors are, of course, ours.

# 7.2 LONG-RUN DEVELOPMENTS IN THE ERA OF FINANCIALISATION SINCE THE EARLY 1980s AND THE ECONOMIC AND FINANCIAL CRISES

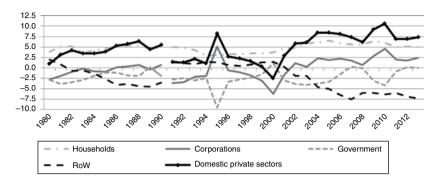
As analysed in detail in Detzer et al. (2013), the most important changes in the German financial sector which contributed to an increasing dominance of finance took place in the course of the 1990s: the abolition of the stock exchange tax in 1991, the legalisation of share buybacks in 1998, the abolition of capital gains taxes for corporations in 2002, and the legalisation of hedge funds in 2004, among others. While financialisation is often associated with an increase of the share of the financial sector in value added, employment, and profits in the economy, this phenomenon could not be observed in the German economy. The increased dominance of finance, however, was observed in other quantitative and qualitative indicators. Stock market capitalisation and trading activity grew strongly, even though they are still moderate compared with Anglo-Saxon, and other European countries. At the same time, the importance of institutional investors in Germany increased strongly. Rising financial activity of non-financial firms, another feature associated with financialisation, could also be observed in Germany. While real investment of non-financial firms was low, their investment in financial assets and, therefore, the share of financial profits in total profits in those firms, increased rapidly in the course of the 2000s.

This development was accompanied by considerable redistribution of income at the expense of the wage share and of low income households, in particular, as we will show in detail in Section 7.3 of this chapter. Against this background, severe changes in real GDP growth and its composition, as well as in the trends of the financial balances of the main macroeconomic sectors could be observed. Comparing the development of the two trade cycles from the early 1990s until the Great Recession with the previous trade cycles, we find that average real GDP growth over the cycle slowed down considerably with the increasing dominance of finance and the associated redistribution of income (Table 7.1). Furthermore, the relevance of the growth contributions of the main demand aggregates changed significantly. Real GDP growth in the cycles of the 1960s, 1970s and even the 1980s, was mainly driven by domestic demand, and the balance of goods and services only contributed up to 0.25 percentage points to real GDP growth. In the trade cycles of the 1990s and early 2000s, however, the growth contributions of net exports went up to 0.47 and 0.64 percentage points, respectively. In the course of this process the degree of openness of the German economy exploded: the share of exports in GDP increased from 24 per cent in 1995 to 51 per cent in 2013, and the share

Table 7.1 Real GDP growth in Germany (in per cent) and growth contributions of the main demand aggregates (in percentage points), 1961–2013, cyclical averages

	1961–1966	1967–1974	1975–1981	1961–1966 1967–1974 1975–1981 1982–1992 1993–2002	1993–2002	2003-2008	2009–2013
Real GDP growth, per cent	4.49	3.82	2.40	2.77	1.40	1.59	99.0
Growth contribution of (percentage	itage points)						
domestic demand including stocks	4.49	3.59	2.36	2.52	0.93	0.94	0.58
private consumption	2.47	2.25	1.55	1.42	0.72	0.28	09.0
public consumption	1.03	0.84	0.70	0.21	0.28	0.17	0.26
gross fixed capital formation	1.28	0.47	0.38	69.0	0.04	0.40	-0.10
change in inventories and net	-0.29	0.03	-0.28	0.20	-0.11	0.10	-0.19
acquisition of valuables							
the balance of goods and services	-0.01	0.23	0.04	0.25	0.47	0.64	0.08

Notes: The beginning of a trade cycle is given by a local minimum of annual real GDP growth, 1961–1966 and 2009–2013 are incomplete cycles. Source: European Commission (2014a), our calculations.



*Notes:* West Germany until 1990. In 1995 the deficit of the 'Treuhandanstalt' was shifted from the corporate sector to the government sector. In 2000 the payments for UMTS licences from the corporate sector to the government sector are included. RoW is 'Rest of the World'.

Source: European Commission (2014a), our calculations.

Figure 7.1 Financial balances, Germany, 1980–2013 (per cent of nominal GDP)

of imports rose from 23 per cent in 1995 to 44 per cent in 2013 (European Commission 2014a). Growth was thus increasingly driven by net exports and the relevance of domestic demand declined dramatically. This was equally true for private consumption and for investment.

The increasing reliance on net exports as the driver of growth since the early/mid 1990s finds its expression in the development of the financial balances of the main macroeconomic sectors (Figure 7.1). The financial balance of the external sector (RoW), which had turned positive in the 1990s after German re-unification, when Germany ran trade and current account deficits, became negative in the early 2000s, and decreased to 7.5 per cent of nominal GDP in 2007. German growth was thus relying on current account surpluses – the counterpart of the deficits of the external sector – at a level which had never been observed in German history before. The financial balances of the German private households have had a long tradition of being in surplus. But these surpluses even increased in the early 2000s, indicating weak consumption demand, and were accompanied by positive and rising financial balances of the corporate sector in this period, too, which indicates weak investment in capital stock. These large and increasing financial surpluses of the private sector were only temporarily and partly compensated by government sector deficits: the public sector was balanced in 2007, just before the Great Recession. Based on this short description, the German type of development from the early/mid 1990s, and from the early 2000s, in particular, until the Great Recession, can be classified as 'export-led mercantilist'.

# 7.3 LONG-RUN EFFECTS OF FINANCIALISATION

#### **Financialisation and Income Distribution**

The period of finance-dominated capitalism has been associated with a massive redistribution of income.<sup>2</sup> First, functional income distribution changed at the expense of labour and in favour of broad capital income in several countries (Table 7.2). The labour income share showed a falling trend in the developed capitalist economies considered here, from the early 1980s until the Great Recession. As can be seen, the fall in the labour

Table 7.2 Labour income share as percentage of GDP at current factor costs, average values over the trade cycle, early 1980s–2008

	1. Early 1980s – early 1990s	2. Early 1990s – early 2000s	3. Early 2000s - 2008	Change (3. – 1.), percentage points
Austria	75.66	70.74	65.20	-10.46
Belgium	70.63	70.74	69.16	-1.47
France	71.44	66.88	65.91	-5.53
Germany <sup>(a)</sup>	67.11	66.04	63.34	-3.77
Greece(b)	67.26	62.00	60.60	-6.66
Ireland	70.34	60.90	55.72	-14.61
Italy	68.31	63.25	62.37	-5.95
Netherlands	68.74	67.21	65.57	-3.17
Portugal	65.73	70.60	71.10	5.37
Spain	68.32	66.13	62.41	-5.91
Sweden	71.65	67.04	69.16	-2.48
UK	72.79	71.99	70.67	-2.12
USA	68.20	67.12	65.79	-2.41
Japan <sup>(b)</sup>	72.38	70.47	65.75	-6.64

Notes: The labour income share is given by the compensation per employee divided by GDP at factor costs per person employed. The beginning of a trade cycle is given by a local minimum of annual real GDP growth in the respective country.

(a) West Germany until 1990.

Data: European Commission (2010a).

Source: Hein (2012, p. 13).

<sup>(</sup>b) Adjusted to fit in three cycle pattern.

income share was considerable in Germany, in particular from the cycle of the 1990s to the cycle of the early 2000s.

Second, personal income distribution became more unequal in most of the countries from the mid-1980s until the mid-2000s. Taking the Gini coefficient as an indicator, this was true for the distribution of market income, with Germany amongst those countries showing a considerable increase in inequality. In Germany, redistribution via taxes and social transfers was considerable and was not decreasing over time. However, this did not prevent the Gini coefficient for disposable income from increasing as well (OECD 2014). In fact, according to the OECD (2008) applying further indicators for inequality, Germany was one of the countries where the inequality of disposable income increased the most in the early 2000s. And this redistribution was mainly at the expense of those with very low incomes (OECD 2014).

Third, as data based on tax reports provided by Alvaredo et al. (2014) has shown, there has been an explosion of the shares of the very top incomes since the early 1980s in the USA and the UK, which, prior to the financial crisis and the Great Recession, again reached the levels of the mid-1920s in the USA and the mid-1930s in the UK. Although Germany has not yet seen such an increase for the top 1 per cent, top 0.1 per cent or top 0.01 per cent income shares, it should be noted that the share of the top 0.1 per cent, for example, was substantially higher in Germany than in the USA or the UK for longer periods of time and that it was only surpassed by the USA and the UK in the mid-1980s and the mid-1990s, respectively (Hein 2015). Furthermore, if we take a look at the top 10 per cent income share, including capital gains, a rising trend from the early 1980s until 2007 can be observed for Germany, too.

To what extent can these tendencies towards redistribution in Germany be related to the increasing dominance of finance? Integrating some stylised facts of financialisation and neo-liberalism into the Kaleckian theory of income distribution and reviewing the respective empirical and econometric literature for different sets of developed capitalist economies, Hein (2015) has argued that there is some convincing empirical evidence that financialisation and neo-liberalism have contributed to the rising gross profit share, and hence to the falling labour income share since the early 1980s, through three main channels.

First, the shift in the sectoral composition of the economy, from the public sector and the non-financial corporate sector with higher labour income shares towards the financial corporate sector with a lower labour income share, has contributed to the fall in the labour income share for the economy as a whole in some countries.

Second, the increase in management salaries as a part of overhead

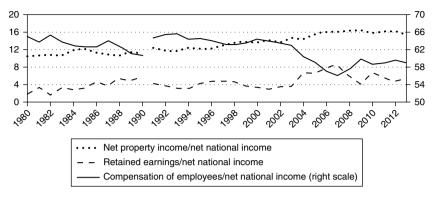
costs, together with rising profit claims of rentiers, i.e. rising interest and dividend payments of the corporate sector, have in sum been associated with a falling labour income share. Since management salaries are part of the compensations of employees in the national accounts and thus of the labour income share, the wage share excluding (top) management salaries has fallen even more pronounced than the wage share taken from the national accounts.

Third, financialisation and neo-liberalism have weakened trade union bargaining power through several channels: increasing shareholder value and short-term profitability orientation of management, sectoral shifts in many countries away from the public and the non-financial business sector with stronger trade unions to the financial sector with weaker unions, abandonment of government demand management and full employment policies, deregulation of the labour market, and liberalisation and globalisation of international trade and finance.

These channels should not only have triggered falling labour income shares, but should also have contributed to the observed increases in inequality of personal/household incomes. The major reason for this is the (even more) unequal distribution of wealth, generating capital income, which then feeds back on the household distribution of income when it comes to re-distribution between labour and capital incomes.

Checking the relevance of these channels for the German case, with respect to the first channel we find that neither the profit share of the financial corporate sector was higher than the profit share in the non-financial corporate sector in the period of the increasing dominance of finance starting in the early/mid 1990s (Hein and Detzer 2015), nor was there a shift of the sectoral shares in gross value added towards the financial sector. However, the share of the government sector in value added saw a tendency to decline, from 12 per cent in the mid-1990s to below 10 per cent in 2007. Ceteris paribus, this means a fall in the aggregate wage share and a rise in the aggregate profit share, because the government sector is a non-profit sector in the national accounts.

Regarding the second channel, the increase in top management salaries and higher profit claims of financial wealth holders, there are several indicators supporting the validity of this channel for Germany. Dünhaupt (2011) has corrected the wage share from the national accounts for the labour income of the top 1 per cent by assuming that the latter represent top management salaries. The resulting wage share for direct labour shows an even steeper downward trend than the wage share from the national accounts: An increase in the share of top management salaries was thus associated with a decline of the share of wages for direct labour in national income.



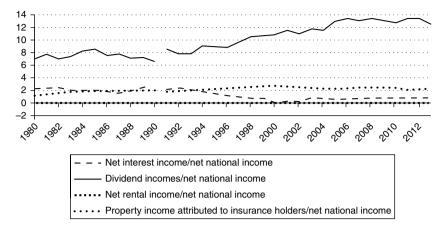
Note: West Germany until 1990.

Source: Statistisches Bundesamt (2014), our presentation.

Figure 7.2 Income shares in net national income, Germany, 1980–2013 (per cent)

Extending another analysis provided by Dünhaupt (2012), we also find that, in the long-run perspective, there is substantial evidence that the increase in the profit claims of rentiers came at the expense of the workers' share in national income (Figure 7.2). In the 1980s, the fall in the wage share was accompanied by an increase of both the share of rentiers' income (net property income consisting of interest, dividends and rents) and the share of retained earnings of corporations. However, from the 1990s, after German re-unification, until the Great Recession, the fall in the wage share benefitted mainly the rentiers' income share. Only during the short upswing before the Great Recession did the share of retained earnings also increase at the expense of the wage share. Decomposing the rentiers' income share (Figure 7.3), it becomes clear that the increase was almost exclusively driven by a rise in the share of dividends, starting in the mid-1990s, when we observe an increasing relevance of finance and shareholder value policies in the German economy.

Regarding the third channel, the weakening of trade union bargaining power, we find that several indicators for this apply to the development in Germany from the mid-1990s until the Great Recession. First, starting in the early/mid 1990s, downsizing the government sector, as shown above, and the switch towards restrictive macroeconomic policies focusing exclusively on achieving low inflation and (close to) balanced public budgets meant low growth and rising unemployment, in particular in the



Note: West Germany until 1990.

Source: Statistisches Bundesamt (2014), our presentation.

Figure 7.3 Components of rentiers' income as a share in net national income, Germany, 1980–2013 (per cent)

stagnation period of the early 2000s, as analysed extensively by Bibow (2005), Herr and Kazandziska (2011) and Hein and Truger (2005, 2007a), for example.

Second, policies of deregulation and liberalisation of the labour market (Hartz-laws, Agenda 2010) explicitly and successfully aimed at weakening trade union bargaining power by lowering unemployment benefits (replacement ratio and duration), establishing a large low-paid sector, as well as reducing trade union membership, collective wage bargaining coverage and coordination of wage bargaining across sectors and regions (Hein and Truger 2005, 2007a).

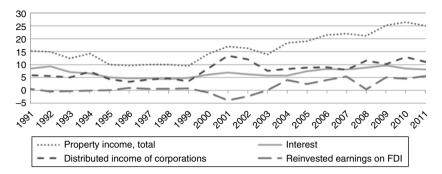
Third, trade and financial openness of the German economy increased significantly and put pressure on trade unions through international competition in the goods and services markets and through the threat effect of delocalisation. The foreign trade ratio (exports plus imports as a share of GDP) an indicator for trade openness, increased from 39.1 per cent in the mid-1990s to 71.4 per cent in 2007, just before the Great Recession (Statistisches Bundesamt 2011a). The foreign assets/foreign liabilities-GDP ratios, as indicators of financial openness, increased from 56 per cent/40 per cent in 1991 to 200 per cent/174 per cent in 2007 (Deutsche Bundesbank 2012–14).

Fourth, shareholder value orientation and short-termism of management rose considerably, thus increasing the pressure on workers and trade unions. According to Detzer (2015), two institutional changes were important in this respect. First, ownership of non-financial corporations changed. The share of stock directly held by private investors halved between 1991 and 2007, while the share held by institutional investors increased significantly. Similarly, strategic investors reduced their ownership share and investors who were more likely to have purely financial interests increased it. Furthermore, fewer strategic block holders, which might shield managers from market pressure, were present on corporate boards. Additionally, activist hedge funds and private equity firms, which directly pressure management to favour shareholder value, became more active in Germany. Second, the development of a market for corporate control in Germany since the mid-1990s has put pressure on managers to pursue shareholder value friendly strategies in order to protect themselves against hostile takeovers.

# Financialisation and Investment in Capital Stock

In the financialisation literature, the effects of an increasing dominance of finance on investment in capital stock has been discussed extensively and has been reviewed in Hein (2012, Chapter 3) and Hein and van Treeck (2010), among others. Financialisation has been characterised by increasing shareholder power vis-à-vis management and workers, an increasing rate of return on equity and bonds held by rentiers, and an alignment of management with shareholder interests through short-run performance related pay schemes, such as bonuses, stock option programmes, and so on. On the one hand, this has imposed short-termism on management and has caused decreasing management animal spirits with respect to real investment in capital stock and long-run growth of the firm. On the other hand, it has drained internal means of finance for real investment purposes from corporations, through increasing dividend payments and share buybacks in order to boost stock prices and thus shareholder value. These 'preference' and 'internal means of finance' channels should have each had partially negative effects on firms' real investment in capital stock, and hence also on long-run growth of the economy to the extent that productivity growth is capital embodied.

Empirical analyses of the effects of financialisation on investment in capital stock of non-financial corporations have taken the financial profits of non-financial corporations as an indicator for the 'preference channel' of financialisation and increasing shareholder value orientation of managements. Rising financial profits indicate an increased preference



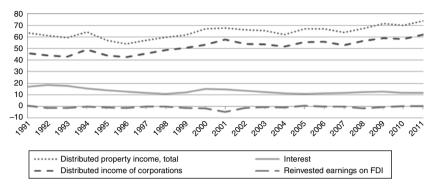
*Note:* Total property income includes additionally property income attributed to insurance policy and rents.

Source: Statistisches Bundesamt (2012), our calculations.

Figure 7.4 Sources of operating surplus of non-financial corporations, Germany, 1991–2011 (per cent of sector gross operating surplus)

of management for short-term profits obtained from financial investment, as compared to profits from real investment. As Figure 7.4 shows, this is exactly what can be found for German non-financial corporations starting in the late 1990s/early 2000s. Property income, consisting of interest, distributed income of corporations (i.e. dividends, property income attributed to insurance policy holder and rents) and reinvested profits from FDI, increased significantly as a share of gross operating surplus. This increase was driven considerably by an increase in interest payments received in a period of low interest rates and by an increase in dividend payments obtained. The increase in the relevance of both types of financial profits indicates an increasing relevance of financial investment, as compared with investment in real capital stock.

Another indicator for the effects of an increasing shareholder value orientation of management on investment in capital stock is the share of profits distributed to shareholders. Retained profits are an important determinant of investment in capital stock, because they lift the finance constraints firms are facing in incompletely competitive financial markets. Therefore, an increasing share of profits distributed to shareholders may hamper real investment through the 'internal means of finance channel'. Figure 7.5 shows that such a phenomenon can be observed for German non-financial corporations, too. The share of distributed property income in the gross operating surplus displays a tendency to rise starting in the mid-1990s. This increase was driven almost exclusively by an increase in



Note: Total property income includes additionally rents.

Source: Statistisches Bundesamt (2012), our calculations.

Figure 7.5 Uses of operating surplus of non-financial corporations, Germany, 1991–2011 (per cent of sector gross operating surplus)

the share of distributed income of corporations, i.e. dividends, whereas the share of interest payments in the gross operating surplus stagnated or even declined.

The decomposition of the sources and the uses of the gross operating surplus of non-financial corporations suggest, therefore, that both the 'preference channel' and the 'internal means for finance' channel have contributed to weak private investment in Germany from the mid-1990s until the Great Recession.

### **Financialisation and Consumption**

Finance-dominated capitalism is said to have generated increasing potentials for wealth-based and debt-financed consumption. In several countries stock market and housing price booms have each increased notional wealth against which households were willing to borrow. Changing financial norms, new financial products, and deterioration of creditworthiness standards triggered by securitisation, as well as 'originate and distribute' strategies of commercial banks, made increasing amounts of credit available, in particular to low income, low wealth households. This allowed households at the bottom to maintain consumption in the face of falling real incomes, and for middle-income households it allowed consumption norms to rise faster than median income, driven by habit persistence, social visibility of consumption, etc. (Barba and Pivetti 2009; Cynamon

and Fazzari 2008). But all this does not seem to apply to the development in Germany: As we have already noted in Section 7.2, in Germany private households were running considerable and increasing surpluses in their financial balances. Against the background of redistribution at the expense of the wage share and low income households, growth contributions of private consumption remained modest from the early/mid 1990s onwards and were particularly weak in the trade cycle of the early 2000s.

It is true, after re-unification, the saving rate for united Germany saw a tendency to decline. However, when the 'new economy' crisis hit in the early 2000s, this tendency was reversed and the saving rate increased to well above 11 per cent (European Commission 2014a). Klär and Slacalek (2006) relate this increase to three main causes:

- redistribution of income at the expense of the labour income share and low income households:
- increasing precautionary saving since the early 2000s in the face of weak growth, high unemployment, and 'reform policies' aiming at the deregulation of the labour market and a reduction of social benefits (Hartz-Laws, Agenda 2010); and
- 3. the absence of any wealth effects on consumption.

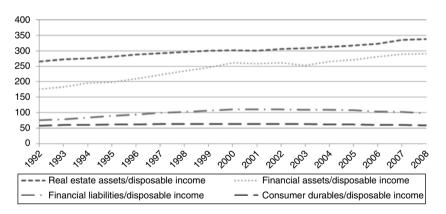
Saving rates out of profit income are generally higher than out of wages, and the propensity to save out of household income increases with the level of household income. Estimates of propensities to save (or to consume) out of wages and out of profits usually find differentials between 0.32 (Hein and Vogel 2008) and 0.5 (Onaran and Galanis 2012) for Germany. The decrease in the wage share has, therefore, contributed to the increase in the overall propensity to save. There is also considerable evidence that a higher propensity to save is associated with a higher level of household income, irrespective of the source of income. Brenke (2011), drawing on data from the German Socio Economic Panel (GSOEP), reports that households in the bottom half of the distribution have slightly reduced their saving rates after 2000, whereas households in the upper half of the distribution, particularly in the top decile, have slightly increased their saving rates, which has overcompensated for the falling saving rates in the lower parts of the distribution. Van Treeck and Sturn (2012) conclude from this evidence that the relative income model, according to which consumption expenditure is affected by relative income ('keeping up with the Joneses'), has little explanatory power for Germany. Rising inequality rather led to a widespread feeling of insecurity even within the upper part of the middle class.

Wealth effects on consumption have been examined extensively in the

econometric literature. Studies have shown that (financial and housing) wealth is a statistically significant determinant of consumption in many countries (Boone and Girouard 2002; Onaran et al. 2011). However, Dreger and Slacalek (2007) argued that the marginal propensity to consume out of financial and housing wealth in capital-market based countries has been significantly higher than in bank-based countries. Therefore, they conclude that these effects are of minor importance in the case of Germany, a typical bank-based country. Furthermore, German households' wealth increases were fairly moderate from the mid-1990s until the crisis, German house prices did not see any significant tendency to rise, and wealth distribution was highly unequal.

Considering both financial and real wealth in Figure 7.6, in the years after the 'new economy' crisis, financial wealth in relation to disposable income of German households stagnated because of positive saving but declining stock market prices, and it started to rise again from 2004 until the Great Recession. The most important assets held by private households were real estate assets. The relation to disposable income continuously increased from the early 1990s until the Great Recession. This development was exclusively driven by new acquisition of real estate, because residential property prices did not increase at all in Germany (BIS 2012).

Finally, real and financial net wealth is extremely unequally distributed among households and individuals in Germany, and the degree of inequality had actually increased prior to the Great Recession. The Gini



Source: Deutsche Bundesbank and Statistisches Bundesamt (2010), Deutsche Bundesbank (2012–14), our calculations.

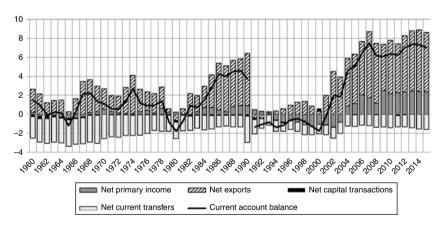
Figure 7.6 Assets and liabilities of households, Germany, 1992–2008 (per cent of disposable income)

coefficient for net wealth distribution among adults rose from 0.777 in 2002 to 0.799 in 2007 and decreased again to 0.78 in 2012. Despite the decrease, Germany has the most unequal wealth distribution in the Euro area (Grabka and Westermeier 2014).

#### Financialisation and the Current Account

As we have seen in the second section of this chapter, Germany can be categorised as an 'export-led mercantilist' country, having generated huge current account surpluses since the early 2000s, in particular. From 2001 onwards net exports increased rapidly until 2007, when it peaked at 7 per cent of GDP, and the current account surplus reached 7.5 per cent of GDP (Figure 7.7). The net international investment position increased rapidly as well and reached 26 per cent of GDP in 2007 (Deutsche Bundesbank 2012–14). This pushed the primary income balance into positive territory from 2004 onwards, contributing to the high current account surpluses. During the crisis net exports decreased but recovered relatively quickly after 2009. Net-primary income also stabilised, after a short decline in 2008, and the current account balance reached pre-crisis levels again in 2012.

Considering the regional dispersion of German trade surpluses (Statistisches Bundesamt 2007–2012, 2013), we find that the largest part of the surplus was with EU countries, particularly with other Euro area countries. Smaller surpluses were achieved against the Americas, and here



Note: West Germany until 1990.

Source: European Commission (2014a).

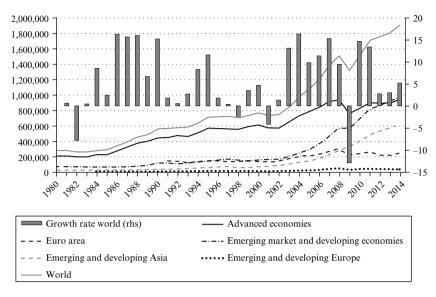
Figure 7.7 Current account, Germany, 1960–2015 (per cent of GDP)

in particular the USA. The decline of the overall trade surplus during the 2008/09 crisis was largely due to decreasing net exports to advanced economies, while the deficit with Asia was reduced. The fast recovery after the crisis seems largely to have been driven by increasing surpluses/decreasing deficits against non-EU countries – in particular Asia and the Americas. In contrast, the poor growth performance of many Euro area and EU countries has fed back on Germany through a shrinking surplus with these country groups.

Looking at the potential determinants of German exports we start with the long-run development of price competitiveness since the early 1970s (Deutsche Bundesbank 2012–14). Interestingly, the two periods with rapid increases in German net exports, the 1980s and the 2000s until the Great Recession (Figure 7.7), were not associated with improved price competitiveness against the main trading partners. In the 1980s price competitiveness rather deteriorated. And in the early 2000s it remained constant, because the improvement with respect to the other Euro area member countries was more or less compensated for by a deterioration of German price competitiveness with respect to the non-euro trading partners, mainly because of the appreciation of the euro.

Considering non-price competitiveness, it is remarkable that the German economy, unlike other developed economies, has maintained a relatively high share of manufacturing in net value added (24 per cent in 2007, France: 12 per cent; UK: 12 per cent; USA: 13 per cent) (OECD 2014). Besides large industrial firms, the German economy contains a vibrant sector of small- and medium-sized companies, both focused on the production of high quality, R&D intensive products. Additionally, in international comparison, production is heavily geared towards capital goods.<sup>3</sup> Storm and Naastepad (2015) relate the ability to produce in the high quality segment to the German corporatist model, which they claim still exists, despite policies aiming at 'structural reforms' in the course of the 1990s and the early 2000s. With this high non-price competitiveness German exports can be assumed to be highly sensitive to dynamic growth of export markets and trading partners. Due to the focus on capital goods, German exporters can in particular benefit from high growth in catching-up countries with high rates of investment in capital goods (Storm and Naastepad 2015).

From this perspective, Germany's export performance and its current account position depend heavily on the dynamic development of demand in the rest of the world, and in particular on the development of investment in capital goods. As can easily be seen, comparing Figures 7.8 and 7.7, the acceleration of German net exports in the 1980s and the 2000s indeed highly correlates with an acceleration of worldwide investment expenditures: After a relatively stagnant phase in the beginning of the



Source: International Monetary Fund (2014), own calculations.

Figure 7.8 Gross fixed capital formation for different country groups (Billion US-Dollar (rhs), growth in per cent (lhs))

1980s, worldwide investment picked up in 1984, which allowed Germany to strongly increase net exports. A similar pattern can be observed when worldwide gross capital formation picked up rapidly in 2002. The extraordinary investment demand growth in this period was dominated by dynamic demand from emerging and developing countries, which had only contributed a relatively small part to total investment demand until then.

To sum up, we would argue that the German economy, because of its institutional characteristics and its strong industrial sector, can draw on high non-price competitiveness, which seems to be more important than competitive gains in nominal unit labour costs and related price competitiveness when it comes to the explanation of export and net export dynamics. This conclusion is supported by several results in the recent econometric literature. Storm and Naastepad (2015) and Schröder (2011) only find very small effects of price competitiveness on the German trade balance in their estimations for the periods 1996–2008 and 1991–2010, respectively. The development of the German trade balance is almost completely explained by the dynamics of foreign demand relative to domestic demand in their estimations. Further evidence is provided by the European

Commission (2010b), which finds a comparatively small price elasticity for German exports using data for the period 1980–2008.

# 7.4 FINANCIALISATION AND THE ECONOMIC AND FINANCIAL CRISES AS THE CRISIS OF FINANCE-DOMINATED CAPITALISM

## The Transmission of the Crisis Starting in 2007 to Germany

The 2008/09 recession in Germany proved to be particularly strong by international comparison. Whereas real GDP in the USA – the country of origin of the financial crisis – dropped by 2.8 per cent, the fall in German real GDP was more than 5 per cent, and it was also clearly larger than in the Euro area as a whole (OECD 2014). This was mainly due to the fact that, as a neo-mercantilist economy driven by export demand, Germany was particularly hard hit by the global slowdown and the dramatically falling export demand. One striking feature of the German slowdown, however, must be stressed: Although the recession was stronger in Germany than in many other economies, the loss in employment and the corresponding increase in the unemployment rate were much smaller (Table 7.3). This can be partially explained by a dramatic rise in short-time work, heavily subsidised by the government, and the extensive use of the so-called working-time accounts, allowing firms to flexibly adjust their labour volume without firing workers (see OECD 2010; SVR 2009b; Will 2011). Another striking feature was the fast recovery in Germany. After the large drop of GDP in 2009, growth picked up strongly in 2010 and 2011 and the unemployment rate fell to levels recently experienced only during the re-unification boom. The main drivers of the recovery were initially (net) exports and then investment. Real exports had already completely recovered in 2010 from the collapse in 2009. Private consumption only accelerated considerably in 2011. Since 2012 this export-led recovery has made German current account-GDP ratios rise even above the pre-crisis ratios of 7.5 per cent of GDP (Table 7.3).

The German Council of Economic Experts (SVR) has identified two important channels by which the crisis was transmitted into the German economy (SVR 2009a): the foreign trade channel and the financial market channel. Of course, the financial transmission channel of the crisis into Germany was closely related to the rapidly increasing German current account surpluses in the course of the early 2000s. Net foreign financial assets held by German wealth owners rapidly increased up to 700 billion euro in 2007 (SVR 2009a, p.91). Most of these foreign assets were held

Table 7.3 Key macroeconomic variables, Germany, 2007–2014 (percentage change if not indicated otherwise)

	2007	2008	2009	2010	2011	2012	2013	2014*
Real gross domestic product	3.4	0.8	-5.1	3.9	3.4	0.9	0.5	1.9
Real private final consumption expenditure	-0.2	0.7	0.3	1.0	2.3	0.7	1.0	1.4
Real government final consumption expenditure	1.4	3.2	3.0	1.3	1.0	1.0	0.7	1.6
Real gross fixed capital formation	5.0	0.6	-11.6	5.2	7.1	-1.3	-0.5	5.7
Real total domestic expenditure	1.9	1.0	-2.2	2.3	2.8	-0.2	0.5	1.6
Real exports of goods and services	8.3	2.3	-13.0	14.8	8.1	3.8	1.0	5.1
Real imports of goods and services	5.6	3.0	-7.8	12.3	7.5	1.8	1.0	4.8
Unemployment rate (per cent of labour force)	8.7	7.5	7.8	7.1	6.0	5.5	5.3	5.0
General government fin. balance (per cent of GDP)	0.2	-0.1	-3.1	-4.2	-0.8	0.1	0.0	-0.2
Short-term interest rate (per cent)	4.3	4.6	1.2	0.8	1.4	0.6	0.2	0.1
Nominal unit labour costs	-0.8	2.3	5.6	-0.9	0.9	3.0	2.2	0.9
Compensation per employee	0.8	2.1	0.1	2.4	3.0	2.6	2.0	2.4
Harmonised consumer price index	2.3	2.8	0.2	1.2	2.5	2.1	1.6	1.1
Current account balance (per cent of GDP)	7.5	6.2	5.9	6.3	6.8	7.5	7.6	7.9

*Note:* \* Forecast by the OECD, nominal unit labour costs and compensation per employee by European Commission (2014a).

Source: OECD (2014), European Commission (2014a).

by German banks such that the ratio of foreign assets to equity of the German banking sector increased tremendously. While the entire foreign exposure stood at about 2.7 times banks' equity in 1995, it had increased to 7.6 times at the end of 2007. Correspondingly, German banks had to bear heavy losses when problems occurred internationally. The write-offs of large German financial institutions (banks and insurance companies) directly related to the financial crisis amounted to 102 billion euros in the period from 2007 to August 2009 (SVR 2009a).

#### The Bailout of the Financial Sector

The immediate political responses towards the financial crisis were the Financial Market Stabilisation Act (Finanzmarktstabilisierungsgesetz, FMStG), as well as the establishment of the Federal Agency of Financial Market Stabilisation (Bundesanstalt für Finanzmarktstabilisierung, FMSA) and the Special Financial Market Stabilisation Fund (Sonderfonds Finanzmarktstabilisierung, SoFFin) as part of the FMSA in October 2008 (SVR 2009b, Chapter 4). The SoFFin was endowed with 480 billion euros in order to re-capitalise banks and to provide them with guarantees. Later on in 2009, the SoFFin was also empowered to establish wind-down agencies, which could be used to transfer assets from banks' balance sheets to those newly created special purpose vehicles (Detzer and Herr 2014, Chapter 12). The establishment of wind-down agencies was used by two banks, the West LB and the Hypo Real Estate Group. By the end of 2010, the total volume of all these measures peaked at 323 billion euros (FMSA 2014). Guarantees and risk assumptions had been reduced to zero at the end of 2013 (Table 7.4) and according to an interim report, none of the guarantees was used and the SoFFin received fees of 2 billion euros for providing those guarantees. However, substantial risks from the capital provisions, which stood at 17.1 billion euros in June 2014, still exist, along with risks stemming from the bad banks, which still held assets with a nominal value of 233.8 billion euros at the end of 2013. The FMSA estimates that losses on those risks may reach a magnitude of 22 billion euros (Bundesministerium der Finanzen 2013).

All these measures were sufficient to contain the financial crisis and to prevent a financial meltdown in Germany. Despite the stabilisation, there were widespread fears that the damaged financial sector would be curbing loans, thus causing a credit crunch. However, the diverse structure of the German banking sector in which public, cooperative and private banks as well as regionally, nationally and internationally active banks coexist helped to prevent such a scenario and no widespread credit crunch undermined the recovery (Detzer 2014). However, the drawback of the financial

	Total volume	Bad ba	Bad banks (nominal asset volume)		Capital injections	Guarantees	Risk assumptions
	of all measures	Total	FMS-WM	EAA	_		
31.12.2008	32.1				8.2	23.9	
31.12.2009	166.4				25.7	140.7	5.9 (06/10/09)
31.12.2010	323	238.1	174.3	63.8	29.3	55.6	0
30.06.2011	267.5	217.6	160.5	57.1	17.7	32.2	0
31.12.2011	259.7	211.7	160.7	51	19.8	28.2	0
30.06.2012	227.8	197	151.4	45.6	19.8	11	0
31.12.2012	302.7	280.2	136.9	143.3	18.8	3.7	0
30.06.2013	263	244.8	128.5	116.3	17.1	1.1	0
31.12.2013	233.8	216.7	119.1	97.6	17.1	0	0
30.06.2014	N/A	N/A	N/A	N/A	17.1	0	0

*Table 7.4* Stabilisation aid of SoFFin, Germany, 2008–2014 (€ billion)

Notes: FMS-WM - FMS Wertmanagement, EAA - Erste Abwicklungsanstalt.

Source: FMSA (2014), our translation.

rescue measures was a considerable contribution to the rise in the government gross debt-GDP ratio, which increased from 65.2 per cent in 2007 to 82.5 per cent in 2010 and only decreased slowly thereafter (European Commission 2014a). This increase was also caused by the expansionary fiscal policies implemented in response to the crisis, which will be discussed in the following section.

# Macroeconomic Policies and Recovery from the Crisis

The global financial and economic crisis led to remarkably fast and strong economic policy reactions in many countries (OECD 2009). As an immediate measure, central banks provided extensive liquidity to money markets, thereby meeting their 'lender of last resort' functions. And, to a different extent in different economies, monetary policy and fiscal policy switched to expansion in order to tackle the crisis of the real economy.

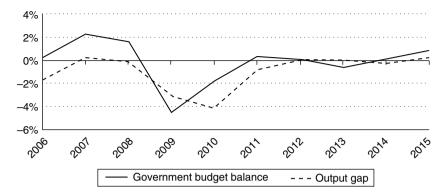
Since the start of the euro in 1999, of course, monetary policy has no longer been a German but a Euro area-wide policy in the hands of the European Central Bank (ECB). With respect to its role as a lender of last resort, the ECB acted in a very fast and internationally coordinated manner, thereby saving the financial system from collapse. However, with respect to interest rate policy, the ECB basically followed 'business as usual', which can be described as 'too little too late' (Hein and Truger

2007b) as compared with the US Fed. In July 2008, when the dramatic economic slowdown could not be ignored any longer, the ECB even increased the key interest rate, the main refinancing rate, by 25 basis points to 4.25 per cent with recourse to 'inflationary dangers' (ECB 2014). The ECB started cutting interest rates only after oil prices – and consequently the growth in the harmonised index of consumer prices – had started to fall. The coming dramatic real economic slowdown was completely ignored initially: interest rate cuts came well after GDP had started to fall strongly. This late reaction of the ECB was disadvantageous in particular for those Euro area member countries that were hit hard by the crisis, like Germany. But the consistently low nominal interest rates since then have favoured all Euro area member countries. And this provided an additional impetus for countries like Germany in which economic expansion, driven by net exports, resumed quickly.

Wage policies did not actively help to stabilise the German economy during the crisis (Table 7.3). In the crisis year 2009, the compensation per employee only increased by 0.1 per cent. However, a normalisation of compensation growth in the years 2010–2013, compared with the years before the crisis, contributed to the recovery of private consumption demand. Nominal unit labour cost growth increased in 2008 and 2009 and thus contributed to the rise in German inflation. However, this was due to the usual decrease in labour productivity growth in the course of the crisis because of labour hoarding, in particular, actively supported by the government.

It was therefore fiscal policy that mainly contributed to the quick recovery. In the 2008/9 crisis, fiscal policy reacted in a remarkably counter-cyclical way. After some hesitation and some merely 'cosmetic' measures, in the first months of 2009 a substantial stimulus package for 2009 and 2010 was enacted (Hein and Truger 2010). Overall, the packages together with some additional measures included substantial increases in public investment, as well as tax relief for business and households. The cumulative stimulus for 2009 and 2010 amounted to 3.1 per cent of 2008 GDP, which is certainly above the Euro area average level. However, the US stimulus package had a volume of more than 5 per cent of GDP in the period 2008–2010, and was therefore substantially bigger (OECD 2009).

Figure 7.9 shows the budget balance, as well as the output gap as a measure of the cyclical condition of the German economy. As can be seen, in 2009 the budget balance reacted by 0.49 per cent of GDP per one percentage point drop in the output gap. In 2010 German fiscal policies accepted a further increase in the budget deficits in the face of an improvement of the output gap and the recovery of the economy. With the fast



Note: OECD projections for 2014 and 2015.

Source: OECD (2014).

Figure 7.9 Government budget balance (per cent of GDP) and output gap (per cent of potential GDP), Germany, 2006–2015

recovery in Germany the output gap closed in 2011 and the government reduced its deficit accordingly.

From the analysis so far it can be concluded that the rapid German recovery since 2009 has been based on three main pillars. First, the successful containment of the crisis in the financial sector and the resilience of the three pillar banking system (public banks, cooperative banks, private banks) prevented a collapse of the financial system and a credit crunch. Second, the German mercantilist type of development, which was a major cause for global imbalances before the crisis and the severity of the crisis in Germany itself, allowed for a rapid recovery via the net export channel as soon as the world economy recovered from the crisis and growth in emerging market economies of Asia and the Americas picked up, in particular. Third, expansionary fiscal policies contributed to the quick recovery of the German economy by means of stabilising domestic demand.

However, this German type of recovery suffers from two major draw-backs. First, to the extent that it is driven by net exports, it has to rely on the export-led mercantilist type of development that considerably contributed to world and regional imbalances and to the severity of the crisis in Germany itself. It therefore contains the seeds for further imbalances, fragilities and future vulnerabilities of the German economy, and it contributes significantly to the persistent euro crisis (see Cesaratto and Stirati 2010; Uxo et al. 2011; Hein 2013/14). Second, as a political precondition for the German stimulus packages, the so-called 'debt brake' was introduced

into the German constitution. From 2016 onwards, the federal budget will only be allowed to run a cyclically adjusted deficit of 0.35 per cent of GDP. The federal states' (*Länder*) budgets will have to be structurally balanced from 2020 onwards. As the cyclically adjusted or 'structural' deficit will be determined by a variation of the European Commission's method of calculating structural deficits, it will exhibit the same strong sensitivity to short-term revisions of GDP forecasts, and will therefore prevent the full working of automatic stabilisers. Discretionary fiscal policy will only be allowed under very restrictive conditions. This type of fiscal austerity has also been imposed on the Euro area via a tightened Stability and Growth Pact and the new Fiscal Compact. All this will severely limit the room for manoeuvre for German and European fiscal policies in the future, impede current account rebalancing and constrain aggregate demand management in the Euro area (Hein and Truger 2014; Truger and Will 2012).

# 7.5 CONCLUSIONS

In this chapter we have studied the long-run changes between the financial and the non-financial sectors in Germany, and in particular the effects of these changes on the macroeconomic developments that led or contributed to the financial crisis starting in 2007 and the Great Recession in 2008/09. In the second section we classified the development in Germany since the early/mid 1990s as 'export-led mercantilist'.

In the third section we then examined the long-run effects of financialisation on the German economy in more detail. First, we explored the effects of an increasing dominance of finance on income distribution and found some indications that the channels of re-distribution in favour of gross profits in the era of financialisation identified in the general literature were operating in Germany.

Second, the effects of an increasing dominance of finance on investment in capital stock were examined. Again, we found some indications that the internal means of finance and the preference channels through which financialisation is said to dampen real investment were operating in Germany as well.

Third, the relationship between financialisation and household consumption was analysed in more detail. In the case of Germany, no indication of significant wealth effects or emulation effects ('Keeping up with the Joneses') on consumption could be detected. Instead, we found that consumption expenditure was dominated by an increasing average propensity to save before the crisis, driven by re-distribution of income, on the one hand, and rising pre-cautionary saving triggered by policies of

deregulation of the labour market and downsizing of the welfare state, on the other hand.

Fourth, we more closely examined the development and the determinants of the current account in the period of an increasing dominance of finance. Net exports were the main drivers of German growth, in particular in the trade cycle before the financial crisis and the Great Recession. We argued that Germany, due to the institutional setting and the strong industrial sector, benefitted from high non-price competitiveness, which provides a favourable position when world demand is strong. Price competitiveness only had a minor role to play. Therefore, when global investment demand picked up in the early 2000s, wage moderation policies and restrictive macroeconomic policies as a whole contributed to depress import demand, while growing activity in the rest of the world stimulated export growth, explaining the widely praised export performance of Germany. However, actual growth performance lagged behind most other developed countries.

This specific integration of Germany into the world economy explains to a large extent the transmission of the international financial and economic crisis to Germany. In Section 7.4 we argued that Germany was particularly exposed to the international trade channel and the financial contagion channel of the crisis. However, the specific German export-led mercantilist type of development was also able to provide the condition for a quick recovery, as soon as world demand accelerated again. Active counter-cyclical fiscal policies, as well as expansionary effects of low interest rate monetary policies contributed to this quick recovery. However, we finally argued that this German type of recovery suffers from two major drawbacks. First, it has continued to rely on the export-led mercantilist type of development that has considerably contributed to world and regional imbalances, to the severity of the crisis in Germany itself, and also to the ongoing euro crisis. Second, as a political price for the active fiscal policies during the crisis, Germany – and, under the pressure of Germany, the Euro area member countries - have implemented 'debt brakes' into their constitutions - or agreed to do so. This will mean continuously restrictive fiscal policies for the future, highly constrained room for manoeuvre in future crises, as well as severe obstacles to internal rebalancing and recovery of the Euro area.

#### NOTES

 For a macroeconomic approach towards 'financialisation' or 'finance-dominated capitalism' highlighting the four channels mentioned below, see Hein (2012).

- 2. For a more extensive treatment of the effects of financialisation on income distribution in Germany see Hein and Detzer (2015).
- 3. The share of investment goods production in total value added for Germany was about 12.5 per cent, Japan was at only 10 per cent, Spain at 7 per cent, the USA at 6 per cent, the UK at 6 per cent (Grömling 2014). See also European Commission (2010b).

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