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**Working Paper**

# Finance-dominated capitalism in Germany: Deep recession and quick recovery

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# Finance-dominated capitalism in Germany – deep recession and quick recovery

Authors: Daniel Detzer and Eckhard Hein

Working Paper, No. 39/2014

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# Finance-dominated capitalism in Germany – deep recession and quick recovery

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**Abstract:** Germany's recent export successes and the fast recovery from the 2007 -2009 crisis made it Europe's "economic superstar" in public opinion. This paper interprets the German performance against the background of financialisation. After an examination of the pre-crisis demand and growth regime, the focus is on how financialisation has contributed to the German 'export-led mercantilist' regime. The paper focuses subsequently on the determinants of the German current account balance, to then interpret the development of Germany during the financial and economic crisis and the causes for the quick recovery in light of the previous analysis.

**Keywords:** current account imbalances, financialisation, financial and economic crisis, Germany, trade balance

**JEL:** E25, E61, E63, E64, E65, F40, F43

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|---|---|
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# 1. Introduction

In the early 2000s Germany was widely perceived as the "sick man of Europe". However, this image had changed already before the financial and economic crisis. Based on strong net exports in 2006 and 2007, growth in Germany had resumed and, even though the financial and economic crisis hit Germany quiet heavily in 2008/09, the economy recovered remarkably fast, with high growth rates in 2010 and 2011. This fast recovery, coupled with the enduring current account surpluses turned Germany into Europe's "economic superstar" in public opinion. It is often argued that the wage moderation starting in the mid 1990s and the labour market reforms in the early 2000s were responsible for this favourable development and that the crisis countries of the Euro area periphery should now follow the German model (see for example Dustmann, Fitzenberger, Shönberg, Spitz-Oener 2014).

In this paper, we take a broader perspective and interpret the German development against the background of 'financialisation' or 'finance-dominated capitalism', a tendency which has dominated the world economy, starting in the US and the UK since the early 1980s.[1] We argue that financialisation has become increasingly relevant for Germany since the 1990s and has contributed to subdued internal demand development, which made Germany increasingly reliant upon net-exports as the engine for demand. Whereas other countries under the conditions of financialisation generated a 'debt-led consumption boom' type of development, Germany followed the 'export-led mercantilist' type (Hein 2012, chapter 6). We will argue that the rise in net exports and current account surpluses starting in the early 2000s was not primarily the reward for the wage moderation and labour market reforms, but were largely due to resumed external demand for specific German products. Germany's vulnerability to the worldwide financial and economic crisis can also be explained by the specific growth model it has followed. With the collapse of world trade and decreased international investment activity, export markets for German goods collapsed and dragged down the German economy in 2008/09. At the same time, global financial integration and high net capital exports associated with the current account surpluses made the German financial system conducive to contagion via financial markets. The fast recovery can be attributed to a range of domestic factors, such as the stabilising effects of fiscal policy packages, the successful containment of financial stress within a few large institutions, with the rest of the credit system still functioning well and stable consumption demand, due to labour market institutions, all

[1] See, for example, the contributions in Epstein (2005) on financialisation in the world economy, and Hein

coincided to keep unemployment low during the crisis. In particular, however, the quick recovery was caused by external stimulus, when emerging market economies started to resume their investment activities and ordered German capital goods on a large scale.

In order to elaborate this broader perspective on the German case, we will first examine the pre-crisis demand and growth regime in Germany making use of some descriptive statistics on real GDP growth, the growth contributions of the main demand aggregates and the financial balances of the macroeconomic sectors. Then, we will focus on financialisation and shortly discuss how and through which channels it has contributed to the German 'export-led mercantilist' regime. Here we will briefly review the effects of financialisation on distribution, investment and household consumption, and we will argue that the increasing dominance of finance has been an important factor in constraining domestic demand dynamics in Germany. We will then focus in particular on the determinants of the German current account before the crisis, applying Thirlwall's approach towards the Balance of Payment Constrained Growth Rate (BPCGR). Thereafter, we will outline the development of Germany during the financial and economic crisis and touch upon the causes of the quick recovery. In the final section, we will summarise and draw some overall conclusions.

## 2. The pre-crisis regime in Germany and the impact of financialisation

As analysed in detail in Detzer et al. (2013) and Detzer (2014a), 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: in 1991 the abolition of the stock exchange tax, in 1998 the legalisation of share buybacks, in 2002 the abolition of capital gains taxes for corporations, and in 2004 the legalisation of hedge funds, among others. At the same time, many of the big banks shifted their activities from traditional commercial banking towards investment banking and the German company network was increasingly dissolved. With those changes, a much more active market for corporate control emerged, along with the establishment of new financial actors, such as hedge funds and private equity funds. The rising dominance of finance was accompanied by a considerable redistribution of income at the expense of the wage share, and of low-income households in particular, as we will show in more detail below. Against this background, significant 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.

## 2.1 The pre-crisis demand and growth regime in Germany

Comparing the development of the two trade cycles from the early 1990s until the Great Recession (1993 – 2002 and 2003 – 2008) with the trade cycles before 1993, 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 1). Whereas average real GDP growth was between 2.4 and 3.8 per cent in the trade cycles of the late 1960 until the early 1990s, it fell to 1.4 per cent in the cycle of the 1990s and 1.6 per cent in the cycle of the early 2000s. 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 1980s was mainly driven by domestic demand and the balance of goods and services only contributed up to 0.25 percentages points to real GDP growth, which amounted to just 10 per cent of total 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, which meant 33 and 40 per cent of real GDP growth. 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 of imports rose from 23 per cent in 1995 to 44 per cent in 2013 (European Commission, 2014).

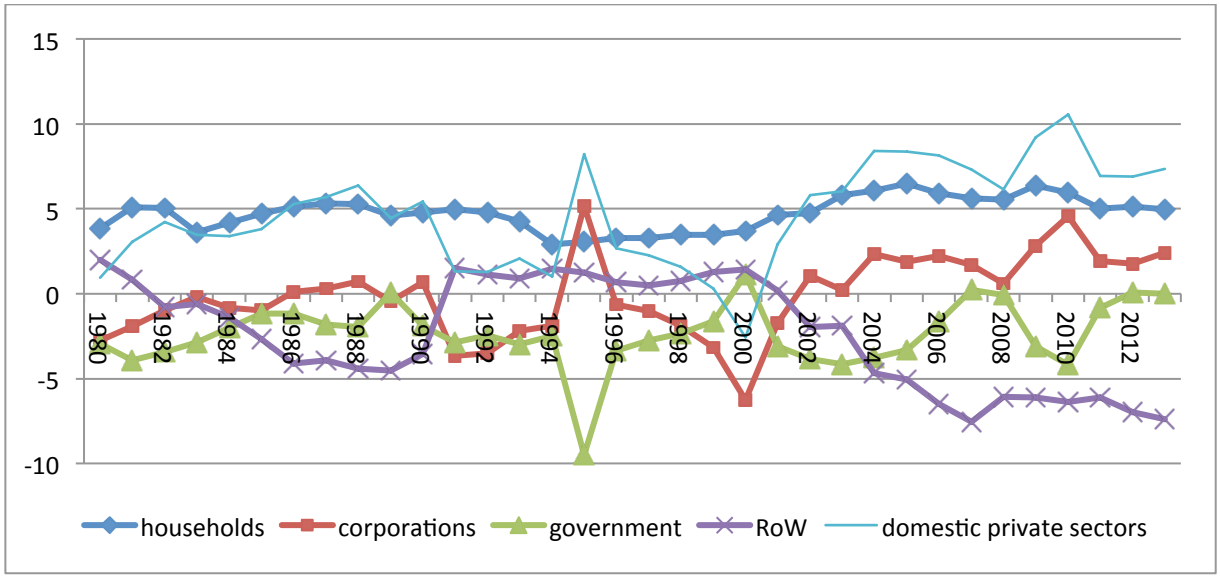
Growth was thus increasingly driven by net exports and the relevance of domestic demand declined dramatically. This was equally true for private consumption and for investment. The average growth contributions of private consumption were between 1.42 and 2.25 percentage points in the trade cycles of the 1960s, 1970s and 1980s and declined to 0.72 and 0.28 percentage points on average in the trade cycles of the 1990s and early 2000s. The average growth contributions of investment in capital stock were between 0.38 and 0.69 percentage points in the trade cycles of the 1960s, 1970s and 1980s and they came down to 0.04 and 0.4 percentage points on average in the trade cycles of the 1990s and early 2000s.

**Table 1: Real GDP growth in Germany (in percent) and growth contributions of the main demand aggregates (in percentage points), 1961 – 2013, cyclical averages**

| | 1961 - 1966 | 1967 - 1974 | 1975 - 1981 | 1982 - 1992 | 1993 - 2002 | 2003 - 2008 | 2009 - 2013 |
|---|---|---|---|---|---|---|---|
| Real GDP growth, per cent | 4.49 | 3.82 | 2.40 | 2.77 | 1.40 | 1.59 | 0.66 |
| Growth contribution of (percentage 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 | 0.60 |
| 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 | 0.69 | 0.04 | 0.40 | -0.10 |
| change in inventories and net acquisition of valuables | -0.29 | 0.03 | -0.28 | 0.20 | -0.11 | 0.10 | -0.19 |
| the balance of goods and services | -0.01 | 0.23 | 0.04 | 0.25 | 0.47 | 0.64 | 0.08 |

Source: European Commission (2014), our calculations
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.

**Figure 1: Financial balances, Germany, 1980 – 2013 (per cent of nominal GDP)**




Source: European Commission (2014), our calculations
Notes: 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".

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 1). The financial balance of the external sector (RoW), which had turned positive in the 1990s after German re-unification, became negative in the early 2000s and decreased to -7.5 percent of nominal GDP in 2007. German growth was thus relying on current account surpluses – the mirror image of the deficits of the external sector – to an

historically unprecedented extent. The largest surplus in the current account (and thus deficit of the financial balance of the external sector) had been at 4.5 per cent in 1989. The financial balances of the German private households have a long tradition of being in surplus, but these surpluses increased even further in the early 2000s, indicating weak consumption demand. Growing household savings were accompanied by positive and rising financial balances of the corporate sector in this period, indicating weak investment. This meant large and increasing financial surpluses of the private sector as a whole, which were only temporarily and partly compensated by government sector deficits; the public sector was balanced in 2007, just before the Great Recession.

The German type of development from the early/mid 1990s, and in particular from the early 2000s until the Great Recession 2008/09 can thus be classified as 'export-led mercantilist'.[2] The export-led mercantilist type of development is characterised by positive financial balances of the domestic sectors as a whole, negative financial balances of the external sector, and thus current account surpluses based on restrictive wage policies, low inflation and weak domestic demand. This means only small positive growth contributions of domestic demand, but relatively high growth contributions of the balance of goods and services. As we will analyse in more detail in the following sections, the foundations for rising German net exports were laid, on the one hand, by nominal wage moderation, which increased the price competitiveness of German producers in international markets, in particular with respect to the other Euro area member countries. On the other hand pressure on wages together with restrictive macroeconomic policies contributed to low domestic demand, which made imports fall short of rising exports, the latter being dominated by a high income elasticity and dynamic world demand. In what follows we will argue that the second channel seems to have been the more important one.

Contrary to public and political opinion before the financial and economic crises, this German 'export-led mercantilist' model was as fragile as the 'debt-led consumption boom' type of development in the US, the UK and other countries. The moderate growth rates experienced in Germany were highly dependent on the dynamic growth of export markets, and hence an expansion of the world economy. A collapse of the latter would therefore have major effects on German growth, in particular. At the same time, increasing capital exports to more

[2] For a classification of 'export-led mercantilist', 'debt-led consumption boom' and 'domestic demand-led' types of development or regimes and its application to different sets of countries, see, for example among others Hein (2012, Chapter 6), Hein and Mundt (2012; 2013), Stockhammer (2010a; 2010b; 2012a; 2012b), and van Treeck and Sturn (2012; 2013), with slightly different terminologies.

dynamic economies carried the risk of contagion in the case of a financial crisis in these markets. Germany then got affected by both channels – trade and financial markets – during the 2007-09 crisis. Before continuing, it needs to be underlined that we do not argue that the German type of export-led mercantilist development before the crisis was exclusively due to the increasing dominance of finance. As has been analysed by Bibow (2003, 2005), Herr and Kazandziska (2011) and Hein and Truger (2005, 2007a, 2009), among several others, in more detail, restrictive macroeconomic policies have contributed significantly to depressed investment and consumption demand, and hence to the mediocre growth and employment performance in Germany starting in the mid-1990s and, in particular, after the recession in the early 2000s. Increasing uncertainty, caused by policies of 'structural reforms' and deregulation in the labour market (Agenda 2010 and Hartz-laws), subsidies for capital-based private pension schemes ('Riester'- and 'Rürup'-pensions), and redistribution at the expense of (low) labour income and in favour of profits and high income recipients associated with nominal wage moderation, have led to an increase in the propensity to save of private households since 2001, and contributed to weak consumption demand which also negatively affected investment in capital. Finally, high unemployment and pressures on trade unions caused moderate wage increases and contributed to inflation rates below the Euro area average, leading to above average real interest rates. This made Germany particularly vulnerable to the 'anti-growth' bias (Bibow, 2002, 2006, 2007; Hein, 2002; Hein and Truger, 2007b) in the monetary policies of the European Central Bank (ECB) in the period from 1999 until the Great Recession. Fiscal policies aimed towards balancing the budget by means of expenditure cuts in periods of weak private demand, in particular in the early 2000s until 2006, merely served to reinforce weak domestic demand without reaching the consolidation target.

### 2.2 The impact of financialisation on distribution, investment and consumption

The period of finance-dominated capitalism has been associated with a massive redistribution of income in several respects.[3] First, functional income distribution has changed at the expense of labour and in favour of broad capital income in several countries. While redistribution was more marked in some other countries, the fall in Germany was still considerable: The labour income share of GDP at current factor costs fell from 67.11 per cent on average over the trade cycle of the 1980s, to 66.04 in the trade cycle of the 1990s to finally

[3] See Hein (2013) for an in depth theoretical analysis based on the Kaleckian theory of income distribution and a review of supportive empirical literature for different sets of countries.

63.34 per cent in the trade cycle of the early 2000s until the Great Recession (Hein 2012, Chapter 2). Second, personal income distribution has become more unequal in the period of finance-dominated capitalism. Comparing German Gini-coefficients of the mid 1980s with those of the late 2000s, the Gini for market incomes has risen from 0.439 to 0.504 and the Gini for disposable income has increased from 0.251 to 0.295 (Hein 2013). Although redistribution policies still dampen inequality considerably, the tremendous rise in inequality of market incomes has been matched by a remarkable rise in disposable income inequality. In fact, according to the OECD (2008), applying further indicators for inequality, Germany is one of the countries where income dispersion increased the most from 2000 to 2005 - that is before the Great Recession. Third, as data based on tax reports provided by Alvaredo et al. (2014) have shown, there has been an explosion of the shares of the very top incomes since the early 1980s, in particular in the US and the UK. Although Germany has not yet seen such an increase for 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, has been substantially higher in this country than in the US or the UK for longer periods of time and that it was only surpassed by the US and the UK in the mid-1980s and the mid-1990s, respectively (Hein 2013). Furthermore, a rising trend of the top 10 per cent income share between the early 1980s and 2007 can be observed, culminating in levels of inequality not seen in Germany since the early 1930s.[4]

According to Hein (2013), applying a Kaleckian theory of income distribution, financialisation has affected functional income distribution and a rising profit share generally through three main channels: first, depressing bargaining power of trade unions, second, higher overhead costs in terms of interest and dividend payments and hence higher gross profit targets, and third, a change in the sectoral composition of the economy from the government and the non-financial corporate sector with higher wage shares towards the financial corporate sector with lower wage shares. We find some evidence for these three channels for Germany. First, trade union bargaining power has been weakened through several channels: restrictive macroeconomic policies focussing on low inflation and (close to) balanced public budgets meant low growth and high unemployment;[5] policies of deregulation and liberalization of the labour market (Hartz-laws, Agenda 2010) explicitly and successfully aimed at weakening trade union bargaining power through lowering unemployment benefits

[4] However, the data is not directly comparable, since for the earlier time period of the 1930s capital gains were excluded, while they were included in the more recent data.

[5] See for example Bibow (2003, 2005), Herr and Kazandziska (2011) and Hein and Truger (2005, 2007a, 2009)

(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;[6] trade and financial openness of the German economy increased significantly and put pressure on trade unions;[7] and shareholder value orientation and short-termism of management increased significantly and heightened pressure on workers and trade unions. Second, the increase in management salaries as a part of overhead costs, together with rising profit claims of the rentiers, in particular rising dividend payments of the corporate sector, have in sum been associated with a falling labour income share, though management salaries are part of compensation of employees in the national accounts and thus of the labour income share (Dünhaupt 2011, 2012). And third, the sectoral composition of the economy has shifted at the expense of the government sector – but not at the expense of the non-financial corporations. The share of the government sector in value added declined 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 effects of financialisation on investment in capital stock, the literature identifies two potential channels of transmission (Hein 2012, chapter 3; Hein and van Treeck 2010). Financialisation is associated with 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, as bonuses, stock option programmes, and so on. On the one hand, this has imposed short-termism on management and has caused decreasing managements' 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 the 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 on long-run growth of the economy to the extent that productivity growth is capital embodied.

In the Detzer et al. (2013, chapter 11) study on Germany financial profits of non-financial corporations are taken as an indicator for the 'preference channel' of financialisation and shareholder value orientation effects on real investment, finding evidence for the increasing

[6] See Hein and Truger (2005, 2007a)
[7] Deutsche Bundesbank (2014a)

importance of this channel beginning in the late-1990s. The share of received property income (interest and dividends) in the gross operating surplus of German non-financial corporations more than doubled from around 10 per cent in the late 1990s to more than 20 per cent in 2007 (and increased above 25 per cent until 2011) (Detzer et al. 2013, p. 194). Taking the share of distributed profits as an indicator for the 'internal means of finance' channel there is also evidence for the importance of this channel in Germany starting in the mid-1990s. The share of distributed property income (interest and dividends) in the gross operating surplus of non-financial corporations increased at the expense of retained earnings, from around 55 per cent in the mid 1990s to close to 70 per cent before the Great Recession (with a rising trend further on) (Detzer et al. 2013, p. 195).

The era of finance-dominated capitalism created an increasing potential for debt financed and wealth based consumption of private households (Hein 2012, chapter 5). In many countries, asset price booms have increased notional wealth against which households were willing to borrow. At the same time financial innovations (credit card debt, home equity loans), securitization of debt, and changing financial norms have increased the access to credit for low-income households, as well. Habit persistence, social visibility of consumption, 'Keeping up with the Joneses', or just maintaining a basic standard of living in the face of falling real incomes led consumption to rise faster than median incomes and to low or negative saving rates (Barba and Pivetti 2009, Cynamon and Fazzari 2008).

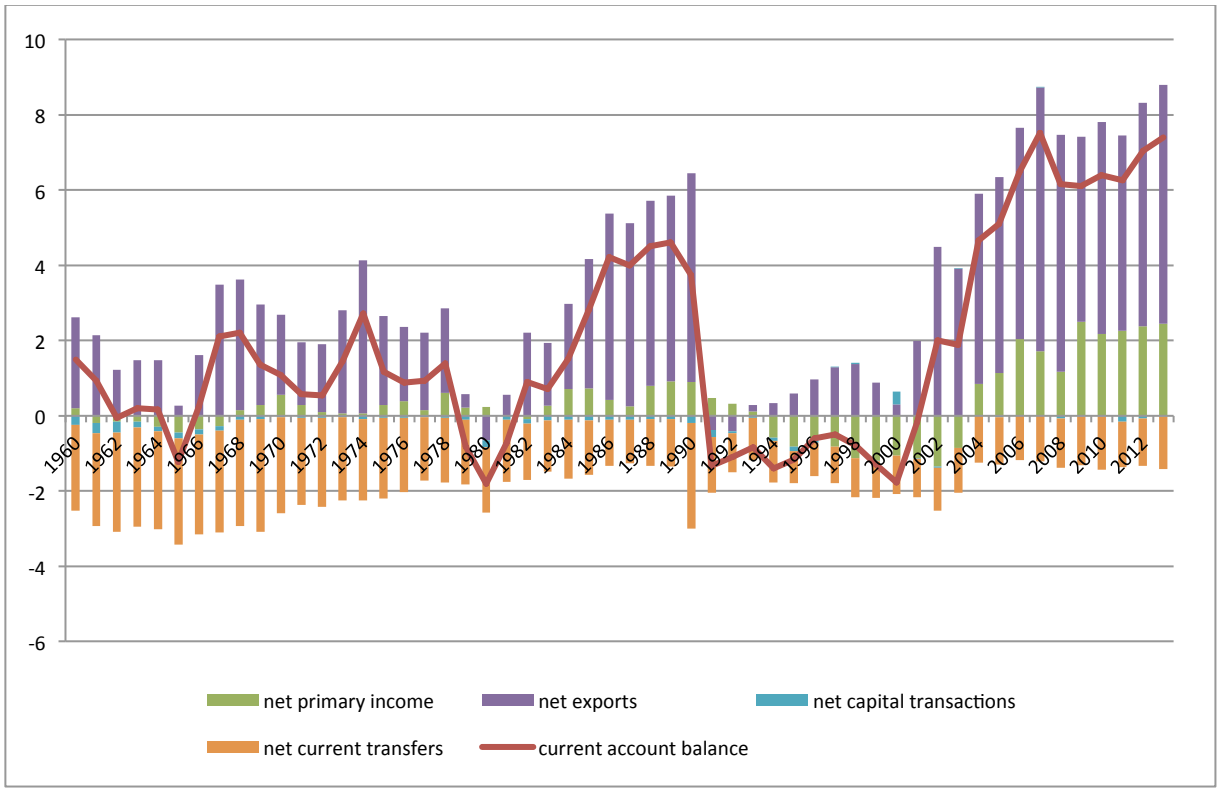
This does not seem to have been the case in Germany: Private households were running considerable and increasing surpluses in their financial balances, as shown above (Figure 1). Against the background of redistribution at the expense of the wage share and low income households, growth contributions of private consumption remained modest from the early/mid 1990s onwards and were particularly weak in the trade cycle of the early 2000s (Table 1). Before German unification, the net saving rate of West German households out of disposable income was around 13 per cent. After unification, the saving rate for united Germany saw a tendency to decline in the course of the 1990s and by 2000 had fallen below 10 per cent. However, when the new economy crisis hit in the early 2000s, this tendency was reversed and the saving rate has since increased to well above 11 per cent (European Commission, 2014). Detzer et al. (2013, chapter 14) reviewing the related literature and data broadly agree with Klär and Slacalek (2006) that this increase can be related to three main causes, which can be connected to financialisation. First, redistribution of income at the expense of the labour income share and low-income households (as discussed earlier) has increased the average

saving rate; second, 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 (Agenda 2010, Hartz-Laws); and third, the absence of wealth effects on consumption, due to the generally lower rate of consumption out of wealth in bank based systems (Dreger and Slacalek 2007), the absence of house price increases in Germany in this period, and the highly unequal distribution of real and financial wealth (Frick and Grabka 2009, ECB 2013).

### 2.3 Financialisation, the current and the capital account

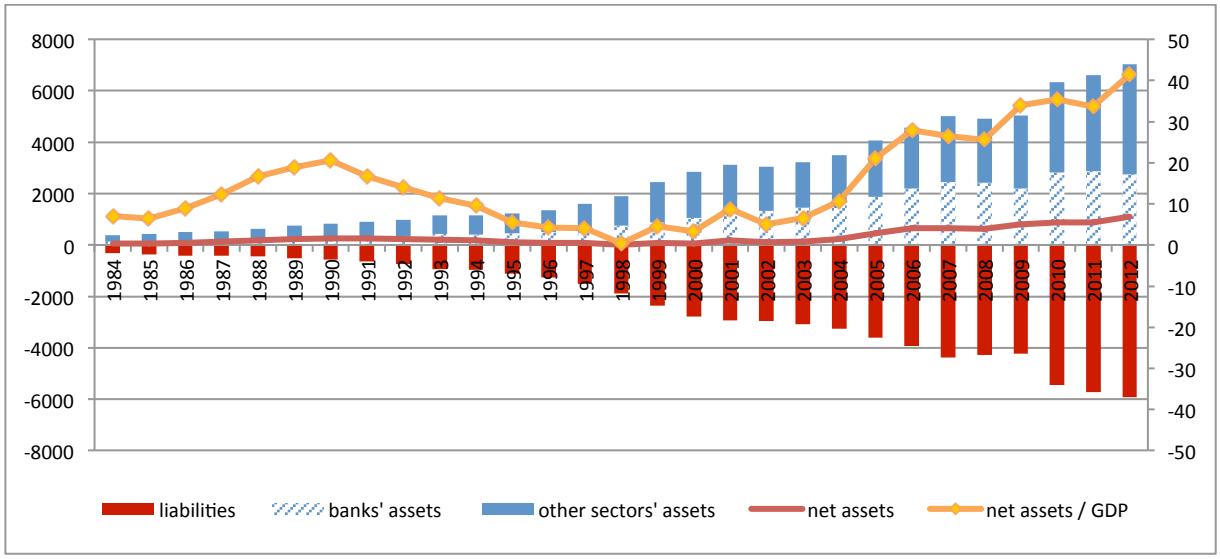
The period of financialisation was not only characterized by the growth of domestic financial markets, but also by the growth of international financial integration. The liberalisation of finance and the capital account since the 1980s allowed for the financing of persistent current account deficits in some countries and large current account surpluses in other countries, with Germany being one of the important contributors since the early 2000s.

**Figure 2: Current Account, Germany, 1960 – 2013 (per cent of GDP)**




Source: European Commission (2014)
Notes: until 1990 W-Germany, from 1991 Germany, for West Germany the trade balance was still positive in 1991; 2014, 2015 estimates

**Figure 3: International investment position, Germany, 1984 – 2012 (billion euro (lhs), per cent of GDP (rhs))**




Source: Deutsche Bundesbank (2013)

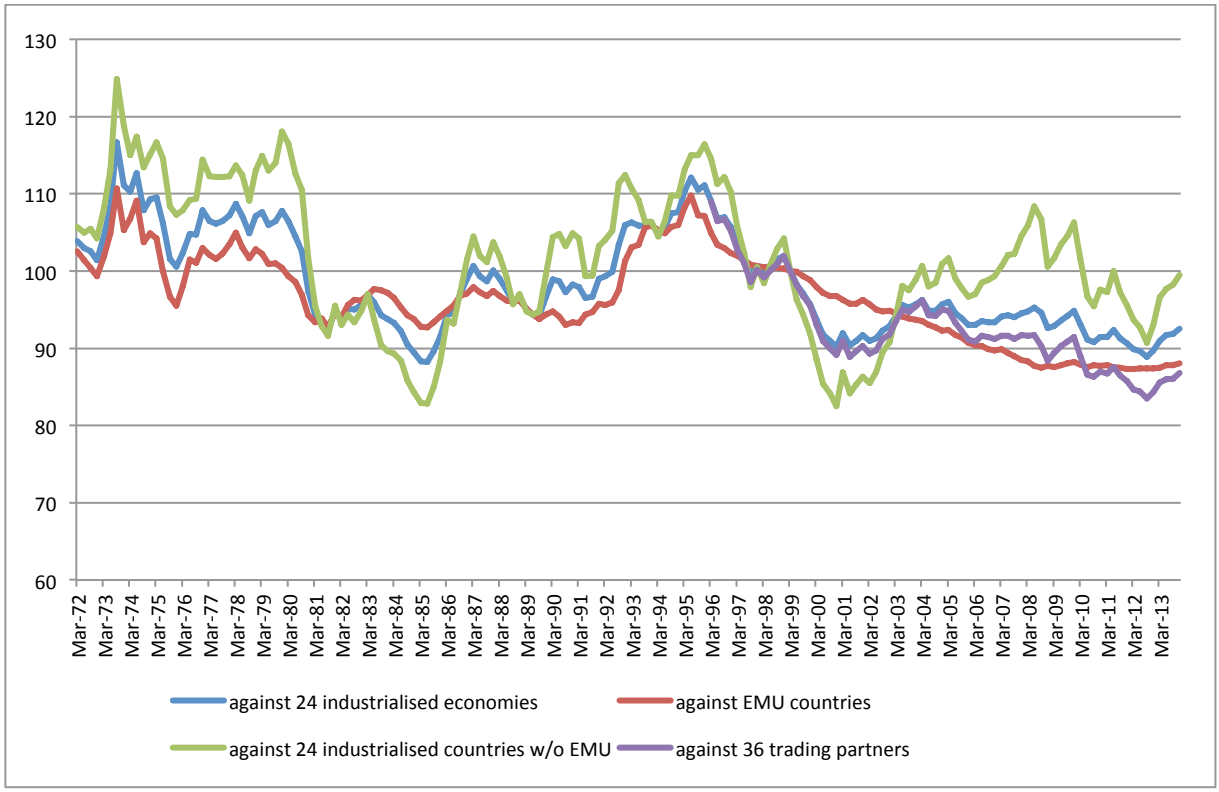
In the period from the 1960s until the breakdown of Bretton Woods in 1973, Germany had a positive trade balance and the most important negative counterpart in those years were net current transfers (Figure 2). On average, the current account had a positive balance of around one per cent of GDP during this time. This was maintained in the 1970s, and after the recession of the early 1980s net exports strongly increased and peaked at 5.5 per cent in 1990. This was accompanied by strong increases in current account surpluses, too. The positive current account balances led to the accumulation of an increasing positive net international investment position (Figure 3), which reinforced the current account surpluses by increasing positive contributions of the net primary income balance. Germany's net international investment position peaked at 21 per cent of GDP in 1990, where the trend was interrupted by reunification. Both the trade balance and the current account turned negative in the newly unified Germany. While the trade balance recovered and turned positive in 1993 again, the current account remained negative until 2001. Germany's international investment position deteriorated from a positive balance of 21 per cent of GDP in 1990 to zero in 1998. Despite a still negative current account from 1999 to 2001 the net international investment position improved mainly due to strong valuation gains of foreign assets caused by the stock market booms at the end of the 2000s (Klär et al. 2013). From 2001 on, net exports increased rapidly until 2007, when they peaked at 7 per cent of GDP, and the current account surplus reached 7.5 per cent of GDP. The net international investment position increased rapidly as well, reaching 26 per cent of GDP in 2007. During the crisis, net exports decreased but recovered relatively quickly after 2009.

To assess the developments of the German trade balance as the main driver of the current account, it is useful to take Thirlwall's (1979; 2013) concept of a balance of payment constrained growth rate (BPCGR) as a starting point.[8] If growth exceeds the BPCGR, a country will incur current account deficits, and if growth falls short of this rate it will run current account surpluses. The BPCGR depends, first, on the price competitiveness of a country. Here the price elasticity of exports and imports, the inflation differential between a country and its trading partners and the development of the nominal exchange rate are important. Thirlwall considers this channel to be of minor importance, in particular in the long run. Instead he stresses the relevance of GDP-growth of a country's trading partners and the income elasticities of imports and exports for the determination of the BPCGR. The latter ones are determined by the structure of production, the quality, technical sophistication, and marketing of the produced goods.

Therefore, assuming that the respective elasticities have not substantially changed since the early/mid-1990s, three factors are important to explain the development of Germany's trade and current account balances: the development of external demand for German export goods, the price competitiveness of German producers in international markets, and the actual growth rate of domestic demand in Germany. The meagre dynamics of domestic demand have already been analysed in the previous sections.

[8] See Hein, Truger and van Treeck (2012) for an application of this approach to the explanation of current account imbalances in the Euro area.

**Figure 4: Indicator of the German economy's price competitiveness against selected countries, based on the deflators of total sales, 1972 – 2013 (Index, March 1999 = 100)**




Notes: Belgium, Denmark, Estonia (from 2011), Finland, France, Greece (from 2001), UK, Ireland, Italy, Latvia (from 2014), Luxembourg, Malta (from 2008), the Netherlands, Austria, Portugal, Sweden, Slovakia (from 2009), Slovenia (from 2007), Spain, Cyprus (from 2008), Norway, Switzerland, Japan, Canada and USA;
For the indicator with 36 countries additionally Australia, Bulgaria, China, Croatia, Czech Republic, Hong Kong, Hungary, Lithuania, Poland, Romania, Singapore, South Korea;
Decrease of the indicators is an increase in competitiveness.
Source: Deutsche Bundesbank (2014a)

Let us therefore now take a closer look at the potential determinants of German exports. Figure 4 provides data on the price competitiveness of the German economy with respect to different country groups. One can see that with the end of Bretton Woods, and the strong appreciation of the deutschmark, Germany lost competitiveness against most of its trading partners in the early 1970s. This changed when the US-dollar appreciated heavily against the deutschmark after the Federal Reserve under Paul Volcker ratcheted up interest rates in the US in the early 1980s. However, the 1980s saw a trend of real appreciation of the deutschmark and hence a loss in price competitiveness, once again, continuing throughout the reunification process and the subsequent boom. The reaction was tight nominal wage moderation starting in the early/mid-1990s (Hein and Truger 2005; Danninger and Joutz 2007), which was supported by a depreciation of the deutschmark against the US-dollar, so that when the euro was introduced, price competitiveness was almost at the level where it had been before reunification. However, with the initial weakening of the euro 1999-2000, Germany's competitiveness against non-Euro area countries went up strongly. Thereafter it

decreased again, when the euro appreciated. When the financial crisis started in the US and confidence in the US-dollar diminished initially, the euro appreciated even more and Germany's competitiveness against non-Euro area countries declined. This changed when the euro crisis undermined confidence in the euro and it started depreciating in 2010. Restrictive nominal wage growth continued in Germany after 1999. With the exchange rate fixed, Germany constantly gained in price competitiveness against the other Euro area countries until 2008.

Interestingly, the two periods with rapid increases in German net exports, the 1980s and the 2000s (Figure 2), were not associated with improved price competitiveness against its main trading partners. In the 1980s, price competitiveness deteriorated. And in the early 2000s it remained constant, because the improvement with respect to the other Euro area member countries, which received less than 50 per cent of German exports, was more or less compensated by a deterioration of German price competitiveness with respect to the non-Euro trading partners, which received more than 50 per cent of German exports. Thirlwall's conclusion, that international price competitiveness is of minor importance for the determination of the BPCGR and thus for current account imbalances, seems to be in line with this observation for Germany.[9]

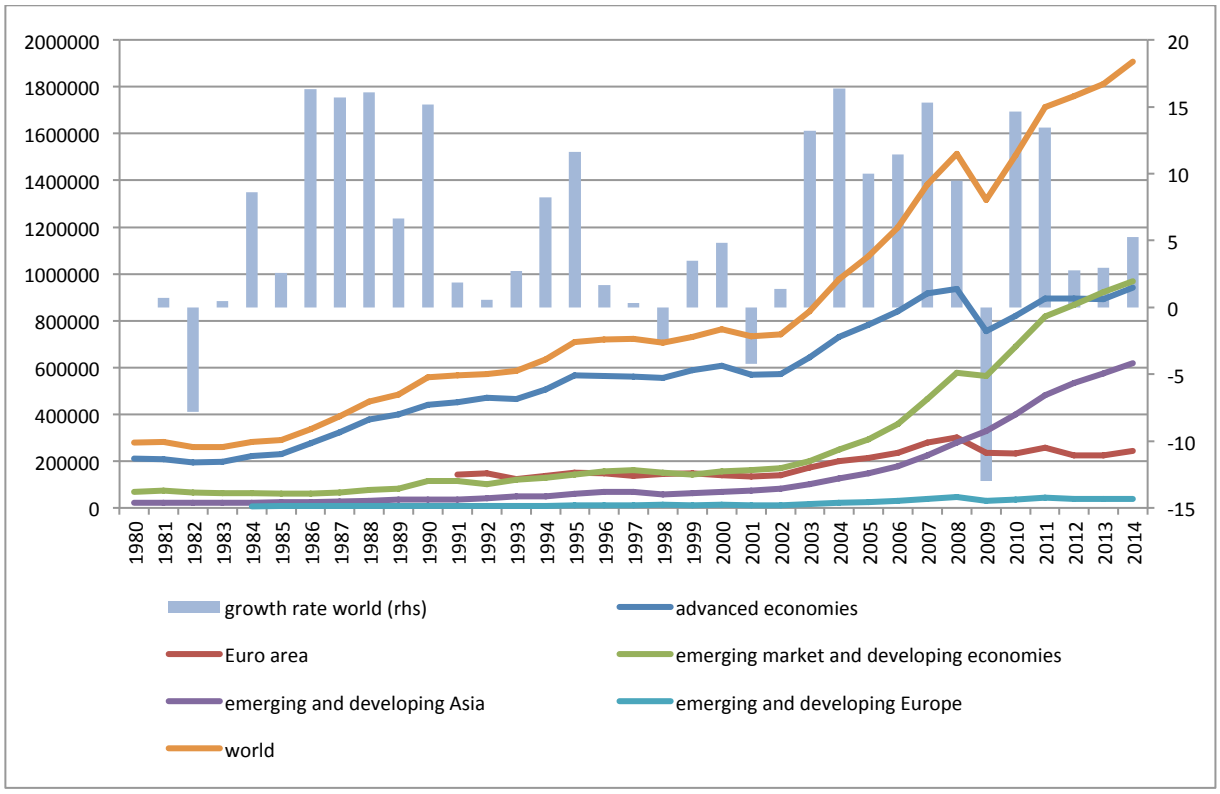
Let us next look at Germany's non-price competitiveness and the demand for its goods in the rest of the world. Germany, unlike other developed countries maintained a relatively high share of manufacturing in net value added before the crisis (24 per cent in 2007, France 12 per cent, UK 12 per cent, US 13 per cent (OECD 2014)). Large industrial firms, together with a vibrant sector of small and medium sized companies, are focused on the production of high quality, R&D intensive products. Additionally, production is comparatively heavily geared towards the production of capital goods.[10] According to Jannsen and Kooths (2012) this focus on top quality segments of R&D intensive products provides German exporters with high non-price competitiveness. Storm and Naastepad (2014) relate this ability to produce in the high quality segment to the German corporatist model, which they claim still exists, despite political attempts to alter its structure during the 1990s and the early 2000s. With the high non-price competitiveness of German exports the German BPCGR can be assumed to be

[9] Storm and Naastepad (2014) and Schröder (2011) only find very small effects of price competitiveness on the German trade balance in their estimations. The development of the German trade balance is almost completely explained by foreign demand.

[10] 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 7 per cent, US 6 per cent, UK 6 per cent (Grömling 2014). See also European Commission (2010).

relatively high, as long as the important German trading partners and markets grow dynamically. And due to its focus on capital goods, Germany can particularly benefit from growth in countries that are "catching up", with high rates of investment in capital goods (Storm and Naastepad 2014).

**Figure 5: Gross fixed capital formation for different country groups (Billion US-Dollar (lhs), in per cent (rhs))**




Source: International Monetary Fund (2014), own calculations

Therefore, 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. Figure 5 shows the development of gross fixed capital formation in different regions of the world from 1980 until 2014. As can easily be seen, comparing Figure 2 and Figure 5, the accelerations of German net exports in the 1980s and the 2000s highly correlate with an acceleration of worldwide investment expenditures: After a relatively stagnant phase in the beginning of the 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. New to this extraordinary growth was that a large part of the demand came from emerging and developing

countries, which had only contributed a relatively small part to total investment demand until then.[11]

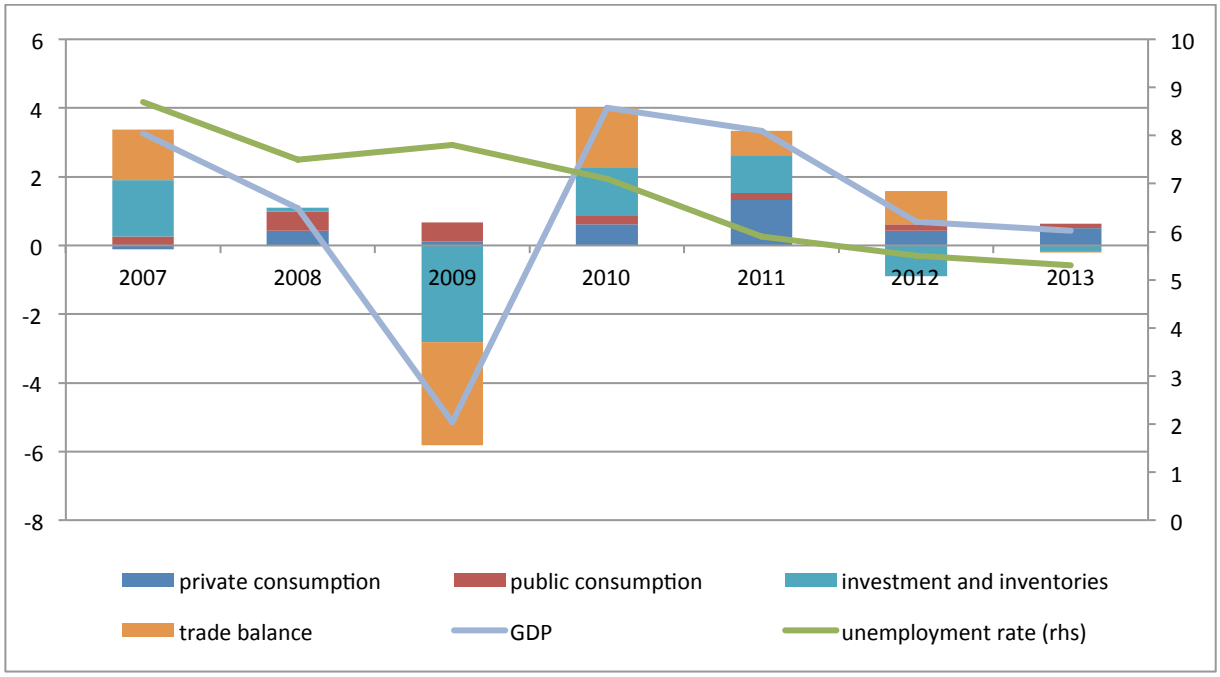
To sum up, we would argue that Germany, due to its institutional setting and its strong industrial sector, has a high non-price competitiveness, which provides a favourable position when world demand is strong. Germany's export performance is therefore highly dependent on global investment activity. When, in the 1990s, global demand for investment was weak and at the same time Germany's domestic demand growth lacked dynamism as well, the strategy of moderating wage growth to regain competitiveness only worsened the situation. It depressed domestic demand even further and had only minor effects on external demand, leading to low growth rates in the second half of the 1990s and the early 2000s. However, as global investment demand in the early 2000s picked up and wage moderation policies contributed to depress import demand, the growing activity in the rest of the world stimulated export growth and so can explain the widely praised export performance of Germany. Actual growth performance, however, fell behind most other developed countries – and, of course, also below Germany's BPCGR.

## 3. Deep recession – quick recovery – but several problems remaining

The 2008/09 recession in Germany proved to be particularly strong (see Figure 6) also by international comparison. This was mainly due to the fact that, as a neo-mercantilist economy mainly driven by export demand, Germany was particularly hard-hit by the global slowdown and the dramatic decline in export demand. 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 (see Figure 6). 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 sacking workers (see OECD 2010; SVR 2009b; Will 2011). Another striking feature of this time was the fast recovery in Germany. After the large drop in GDP in 2009, growth picked up strongly in 2010 and 2011 and the unemployment rate fell to levels recently experienced only during the reunification boom.

[11] Over the period 1980 – 2000 the share of emerging and developing economies in total gross fixed capital formation remained below 25 per cent, by 2007 it had reached 34 per cent and in 2013 it stood at 51 per cent.

**Figure 6: Real GDP growth, growth contributions and unemployment rate, Germany, 2007 – 2013 (in percentage points (lhs), in per cent (rhs))**




Source: European Commission (2014)

In line with our analysis so far, the German Council of Economic Experts has identified two channels through which the crisis was transmitted into the German economy (SVR 2009a):[12] the foreign trade channel and the financial market channel. The foreign trade channel became particularly effective because of the rapid increase in German dependence on exports and the specialisation in more volatile sectors and products (investment goods and cars in particular). As can be seen in Figure 5 above, gross capital formation plummeted in 2009 (-13 per cent).

According to the SVR (2009a), a peculiar financial transmission channel of the crisis into Germany has been active, which is 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 650 billion euro in 2007. Total foreign assets stood at 5,000 billion euros. A large part of those assets were held by German banks (2,500 billion euros) (Figure 3). The enormous increase of foreign assets in bank portfolios is reflected in the ratio of foreign assets to equity of the German banking sector, which increased tremendously. While total foreign exposure stood at about 2.7 times banks' equity in 1995, it had increased to 7.6 at the end of 2007 (SVR 2009a). Soon after the crisis started, German banks and other financial institutions registered heavy losses on those assets. The write-offs of

[12] See also Horn et al. (2009a, 2009b, 2009c) for detailed analysis of causes and transmission of the crisis to Germany.

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). To put this into perspective, the total capital and reserves of German banks at the end of 2007 stood at 428 billion euros (Deutsche Bundesbank, 2014b), while that of insurance companies stood at 284 billion euros (Deutsche Bundesbank, 2014c).

Germany's quick recovery from the crisis depended on three main favourable factors: the successful containment of the crisis in the financial sector, macroeconomic policies supporting recovery and exports once again stimulating aggregate demand. Let us briefly touch on these in turn.

The losses in the financial sector rather swiftly translated into problems at large major banking institutions in Germany. First, public or partly public, then also increasingly private institutions were threatened with insolvency. However, the German government intervened on a massive scale to contain the problems in the financial sector, providing guarantees of up to €168 billion euros. It also recapitalised banks with almost €30 billion euros and allowed them to transfer their toxic assets to government-owned "bad banks". Despite the fact that all of the guarantees have now expired or were returned without costs to the taxpayer, the bad banks still hold a substantial amount of assets and the capital injections have not been fully repaid. The Federal Agency for Financial Market Stabilisation expects losses of 22 billion euros (Bundesministerium der Finanzen, 2013). Additionally, there were costs for the budgets of the Länder and municipalities related to the stabilisation of the Landesbanken (Deutscher Bundestag, 2014). All together, these interventions contributed to the stabilisation of the German financial sector and the avoidance of a widespread banking crisis in Germany. Despite the stabilisation, there were widespread fears that the damaged financial sector would be curbing loans, thus causing a credit crunch which would affect the real economy. 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, 2014b).

Macroeconomic policies, and here in particular fiscal policies, also helped to stabilise the German economy. Regarding monetary policy, the ECB took over its role as a lender of last resort. However, with respect to interest rate policy, the ECB initally followed 'business as usual' before the crisis, which can be described as 'too little too late' (Hein and Truger, 2010). Interest rate cuts came well after GDP in the Euro area had started to fall steeply. This late

reaction of the ECB was disadvantageous in particular for those Euro area member countries which were hit hard by the crisis, like Germany. But the consistently low interest rates since then have favoured Euro area member countries, and in particular countries like Germany, where economic expansion had already resumed.

Wage policies did not actively help to stabilise the German economy during the crisis. The compensations per employee only increased by 0.1 per cent in the crisis year 2009. However, a normalisation of compensation growth in the years 2010 (2.4 per cent), 2011 (3 per cent), 2012 (2.6 per cent), 2013 (2 per cent) compared to the years before the crisis[13], have helped to enable the recovery by stabilising private consumption demand (OECD 2014).

It was therefore fiscal policy which mainly contributed to the quick recovery, reacting 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. Overall, the 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 was 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, Hein and Truger 2010).[14]

Therefore, on the domestic level, the fast stabilisation of the financial sector and the expansionary fiscal policies played a major role to stabilise the economy. However, looking at quarterly data, one can see that the recovery in 2010 only set in after a resumption of export demand (Statistisches Bundesamt, 2014) and that demand and growth in Germany after the crisis, in particular between 2010 and 2012, were again largely driven by net exports. As discussed earlier, Germany's export performance depends to a high degree on international capital formation. Figure 5 shows that after the collapse of worldwide capital formation in 2009 it recovered rapidly in 2010. The resumption of global demand for capital goods jump-started growth in Germany by stimulating net exports.

From the analysis, it can be concluded that Germany's rapid recovery from the Great Recession had three main causes: 1. the successful containment of the crisis in the financial sector and the resilience of the three pillar banking system (public banks, cooperative banks,

[13] From 2000 to 2007 compensation per employee increased by only 1 per cent on average.
[14] For a more extensive analysis of the macroeconomic policies during the crisis see Hein and Truger (2010) and Detzer et al. (2013, Chapter 17).

private banks); 2. the specific German structure of export production combined with a neo-mercantilist type of development allowed for a rapid recovery via the net export channel as soon as the world economy recovered from the crisis; 3. 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 drawbacks. First, to the extent that it was driven by net exports, it relied on the neo-mercantilist type of development that had considerably contributed to world and regional imbalances and to the severity of the crisis in Germany in the first place. It therefore contains the seeds for further imbalances, fragilities and future vulnerabilities of the German economy, and it contributes significantly to the still persistent euro crisis (Cesaratto and Stirati, 2010; Hein, 2013/14; Hein et al., 2012; Uxo et al., 2011). Second, as a political precondition for the German fiscal stimulus packages, the so-called 'debt brake' was introduced into the German constitution and has been imposed on the other Euro area member countries as well. This will severely limit the room for manoeuvre for German fiscal policy in the future, prevent current account rebalancing and constrain aggregate demand management in the Euro area as a whole (Hein and Truger 2014a, 2014b, Truger and Will, 2012).

## 4. Conclusion

On the surface, it seems that Germany has transformed from Europe's "sick man" to Europe's "economic superstar". This view is based on the strong export performance and Germany's quick recovery from the Great Recession. Many have related these successes to the wage moderation and the labour market reforms in the 1990s and early 2000s. We have taken a broader perspective and have examined German development against the background of worldwide tendencies towards financialisation, which became increasingly apparent in Germany since the mid 1990s, too. In this process, Germany has become one of the major 'export-led mercantilist' economies at the global scale, contributing to worldwide and intra-European imbalances which were at the roots of the Great Recession and the still persisting euro crisis. We have outlined how financialisation contributed to rising inequality in Germany, and to low investment and consumption demand.

Looking at the current account, we have argued that Germany, due to its institutional setting and its 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 for German export successes. Therefore, when global investment demand picked up in the early 2000s, wage moderation policies, restrictive macroeconomic policies together with the examined effects of financialisation 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 remained well 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, which was more severely affected than other countries. We have argued that Germany was particularly exposed to the international trade channel and the financial contagion channel of the crisis. But the specific German mercantilist export-led type of development, relying on high-quality exports, provided the necessary conditions for a speedy recovery, as soon as world demand, particularly in emerging market economies, accelerated again. Active counter-cyclical fiscal policies contributed to this quick recovery, which was reinforced by the expansionary effects of low interest rate monetary policies of the ECB.

We have argued that this German type of recovery suffers from two major drawbacks. First, it continues to rely on the neo-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 in the course of the crisis, Germany – and, under the pressure of Germany, the Euro area member countries – have either agreed to or have already implemented 'debt brakes' into their constitutions. This will mean continuously restrictive fiscal policies for the future and highly constrained rooms for manoeuvre in future crises.

We can finally conclude that, on the one hand, Germany's extraordinary export performance and quick recovery from the crisis should not be attributed to the supposed benefit of the wage moderation and labour market flexibilisation of the 1990s and the 2000s. Instead, the performance seems to be based on high non-price competitiveness of German exports, which takes effect when international investment activity speeds up. This high non-price competitiveness can be attributed to the specific corporatist German model, which seems to have survived in the export industries. It is based on long-term employment for core workers, which allows gaining firm-specific human capital, relatively decent wages for those core workers, participation of labour in decision making processes at the firm level, and still strong unions and employer organisations. Therefore, further labour and financial market

liberalisation, far from being the reason for the success of German exports and for the quick recovery from the crisis, may actually undermine the underlying conditions for the current success in the long run. But even if the German export model survives further liberalisation and financialisation pressures, it remains highly vulnerable. Another phase of stagnating worldwide investment activity will constrain the demand for German exports, and severely curtail prospects for growth. Finally, the German type 'export-led mercantilist' regime cannot serve as a role model for other countries for two reasons. First, the underlying structural conditions (high quality, rather price inelastic export industries) cannot easily be replicated. Second, the world is a closed economy; export-led expansionary strategies in one country necessarily imply balance of payments deficits and imbalances in other parts of the world.

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