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## Financialisation and the financial and economic crises: Theoretical framework and empirical analysis for 15 countries

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# **Financialisation and the financial and economic crises: Theoretical framework and empirical analysis for 15 countries**

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# Financialisation and the financial and economic crises: Theoretical framework and empirical analysis for 15 countries

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**Abstract:** This paper analyses the long-run effects of financialisation and of the recent financial and economic crises for 15 countries. In order to provide a theoretical framework, we first outline three types of regimes under the conditions of financialisation, namely a debt-led private demand boom, an export-led mercantilist, and a domestic demand-led regime. We then take a look at the sectoral financial balances of the main macroeconomic sectors and at the growth contributions of the demand aggregates for each of the 15 countries, focusing in particular on the trade cycle before the crises. This enables us to cluster these countries according to the typology of regimes and describe the development dynamics among various groups, which were complementary and often mutually reinforcing, in the years leading up to the crises. Subsequently, we focus on the period following the outbreak of the crises and, by considering transmission mechanisms and main obstacles to recovery, analyse how countries in each of these clusters were affected. Finally, we focus on the regime shifts which have taken place in the course of the crises and we discuss the implications of these recent developments for the world economy.

**Keywords:** finance-dominated capitalism, financialisation, financial and economic crises, trade cycle, financial balances, distribution of income, current account imbalances

**JEL code:** D31, D33, E44, E63, E65, F40, F43, G01, H12

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## 1. Introduction

This paper provides an overview of the effects of financialisation on the macro-economy and of the financial and economic crises for 15 countries.<sup>1</sup> As is well known, the succession of crises started in 2007 as a financial crisis, then became the Great Recession in 2008/09, which was followed by the euro crisis in 2010. The focus here will be on the first two crises, and the euro crisis will only be considered to the extent that the policy reactions towards the crisis extended the duration and intensity of the crisis in certain countries in our set. What was and remains of particular importance and interest for the country studies and this synthesis are the long-run developments of finance-dominated capitalism and the inherent inconsistencies and contradictions of this period of modern capitalism, which have led to the crises.

In the country studies the channels of transmission of an increasing dominance of finance and the financial sector, i.e. 'financialisation', on short- and long-run economic developments will be explored. The following structure was followed for each country study. Firstly, the long-run developments of each country starting from the early 1980s, if possible, or even earlier if required, were studied with a focus on the macroeconomic effects of the changes in the relationship between the financial and economic sectors since then. The developments in the financial and economic sectors leading to an increasing dominance of finance were explored extensively for each of the countries in the FESSUD Studies on Financial Systems No. 1–15,<sup>2</sup> and the studies could draw on these results. In the first part, the nature of the demand and growth regime in each of the countries before the crises should be assessed. In the second part, each study should examine the main channels through which financialisation might affect the macroeconomy: distribution, investment, consumption and the current and capital accounts. The third part should then trace the transmission mechanism of the financial and economic crises into the respective economy and assess the role of economic policies in dampening or accelerating the crises.

In this synthesis we will draw on the material supplied by the 15 country studies, but we will also provide some additional data analysis. In Section 2, the theoretical and general empirical framework for the country studies and this synthesis will be briefly outlined. Section 3 will then deal with the long-run development before the financial and economic crises, and we will provide a typology of regimes and cluster the 15 countries accordingly

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<sup>1</sup> The paper is based on 15 country studies, i.e. Badics and Szikszai (2015) on Hungary, Bahçe et al. (2015) on Turkey, Cornilleau and Creel, J. (2014) on France, Detzer and Hein (2014) on Germany, Dymarski (2015) on Poland, Evans (2015) on the USA, Ferreiro, Galvez and Gonzalez (2014) on Spain, Gabbi, Ticci and Vozella (2014) on Italy, Juuse and Kattel (2014) on Estonia, Lagoa et al. (2014) on Portugal, Lepper et al. (2015) on the UK, Newman (2014) on South Africa, Shabani and Toporowski (2015) on Japan, Stenfors (2014) on Sweden, and Varoufakis and Tserkezis (2014) on Greece.

<sup>2</sup> For the FESSUD Studies on Financial Systems, please consult: <http://fessud.eu/deliverables/>.

into debt-led private demand boom, export-led mercantilist and domestic demand-led economies. The focus in our analysis, based on a coherent dataset for all the countries, will be on the trade cycle before the financial and economic crises. Section 4 will then focus on the crisis in each of these clusters, considering transmission mechanisms and the main obstacles to recovery, if there are any. Section 5 will summarise and conclude.

## **2. Theoretical and general conceptual framework**

From a macroeconomic perspective, the development of finance-dominated capitalism or financialisation can be characterised by the following elements, as reviewed and elaborated in Hein (2012, 2014, Chapter 10), Hein and Dodig (2015), and Hein and van Treeck (2010), for example, and briefly summarised in Hein, Dodig and Budyldina (2015):

1. With regard to distribution, financialisation has been conducive to a rising gross profit share, including retained profits, dividends and interest payments, and thus a falling labour income share, on the one hand, and to increasing inequality of wages and top management salaries and thus of personal or household incomes, on the other hand. Hein (2015) has recently reviewed the evidence for a set of developed capitalist economies since the early 1980s and finds ample empirical support for falling labour income shares and increasing inequality in the personal/household distribution of market incomes with only a few exceptions, increasing inequality in the personal/household distribution of disposable income in most of the countries, an increase in the income share of the very top incomes particularly in the US and the UK, but also in several other countries for which data is available, with rising top management salaries as one of the major driving forces. Reviewing the empirical literature on the determinants of functional income distribution against the background of the Kaleckian theory of income distribution, it is argued that features of finance-dominated capitalism have contributed to the falling labour income share since the early 1980s through three main channels: the falling bargaining power of trade unions, rising profit claims imposed in particular by increasingly powerful rentiers, and a change in the sectoral composition of the economy in favour of the financial corporate sector at the expense of the non-financial corporate sector or the public sector with higher labour income shares.

2. Regarding investment in capital stock, financialisation has meant increasing shareholder power vis-à-vis firms and workers, the demand for an increasing rate of return on equity 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 a decrease in management's animal spirits with respect to real investment in capital stock

and long-run growth of the firm and increasing preference for financial investment, generating high profits in the short run. On the other hand, it has drained internal means of finance available for real investment purposes from non-financial 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 each have partially negative effects on firms' real investment in capital stock. Econometric evidence for these two channels has been supplied by Stockhammer (2004), van Treeck (2008), Orhangazi (2008), and Onaran et al. (2011), confirming a depressing effect of increasing shareholder value orientation on investment in capital stock, in particular for the US but also for other countries, like the UK and France.

3. Regarding consumption, financialisation has generated an increasing potential for wealth-based and debt-financed consumption, thus creating the potential to compensate for the depressing demand effects of financialisation, which were imposed on the economy via re-distribution and the depressing impact of shareholder value orientation on real investment. Stock market and housing price booms have each increased notional wealth against which households were willing to borrow. Changing financial norms, new financial instruments (credit card debt, home equity lending), deterioration of creditworthiness standards, triggered by securitisation of mortgage debt and 'originate and distribute' strategies of commercial banks, made credit increasingly available to low income, low wealth households, in particular. This potentially allowed for consumption to rise faster than median income and thus to stabilise aggregate demand. But it also generated increasing debt-income ratios of private households. Several studies have shown that financial and housing wealth is a significant determinant of consumption, particularly in the US, but also in countries like the UK, France, Italy, Japan and Canada (Ludvigson/Steindl 1999; Mehra 2001; Onaran et al. 2011; Boone/Girouard 2002). Furthermore, Barba and Pivetti (2009), Cynnamon and Fazzari (2008, 2013), Guttman and Plihon (2010), van Treeck and Sturn (2012) and van Treeck (2014) have presented extensive case studies on wealth-based and debt-financed consumption, with a focus on the US.

4. The liberalisation of international capital markets and capital accounts has allowed for rising current account imbalances at the global, but also at the regional levels, in particular within the Euro area, as has been analysed by several authors, including Hein (2012, Chapter 6, 2014, Chapter 10), Hein and Dodig (2015), Hein and Mundt (2012), Horn et al. (2009), Stockhammer (2010, 2012, 2015), UNCTAD (2009) and van Treeck and Sturn (2012). Simultaneously, it also created the problems of foreign indebtedness, speculative capital movements, exchange rate volatilities and related currency crises (Herr 2012).



Under the conditions of the dominance of finance, income re-distribution at the expense of labour and low income households, and weak investment in the capital stock, different demand and growth regimes may emerge, as has been analysed by the authors mentioned in the previous paragraph, using different terminologies. Considering the growth contributions of the main demand aggregates (private consumption, public consumption, private investment, public investment, net exports) and the sectoral financial balances of the main macroeconomic sectors (private household sector, financial and non-financial corporate sectors, government sector, external sector), we shall in this contribution distinguish three broad types of regimes, with two sub-types for the third regime: a) a debt-led private demand boom regime, b) an export-led mercantilist regime and c) a domestic demand-led regime.

The debt-led private demand boom regime is characterised by negative financial balances of the private household sectors, in some countries accelerated by corporate deficits and thus deficits of the private domestic sectors as a whole, positive financial balances of the external sector, and hence, current account deficits, high growth contributions of private domestic demand, and negative growth contributions of the balance of goods and services. The extreme form of the debt-led private demand boom regime is the debt-led consumption boom regime, in which the private household sector is running deficits and private consumption demand is the main contributor to GDP growth (Hein 2012, Chapter 6). However, the broader concept of a debt-led private demand boom regime also includes deficit financed expenditures by the non-corporate and the corporate business sectors for private investment purposes. This broader category takes into account that in the national accounts the private household sector contains non-corporate business, and thus, depending on the institutional structure of the respective economy, private household deficits to a larger extent may in fact be business deficits.

The export-led mercantilist regime is characterised by positive financial balances of the domestic sectors as a whole, and hence negative financial balances of the external sector, and thus, current account surpluses. The growth contributions of domestic demand are rather small or even negative in certain years, and growth is mainly driven by positive contributions of the balance of goods and services and hence rising net exports. Hein and Mundt (2012) have also considered a weakly export-led type, which is characterised by positive financial balances of the domestic sectors as a whole, negative financial balances of the external sector, and hence current account surpluses, positive growth contributions of domestic demand, but negative growth contributions of external demand, and hence falling export surpluses.

The domestic demand-led type is characterised by positive financial balances of the private household sector as well as the external sector, and hence, current account deficits. Here it is usually the government and, to a certain degree, the corporate sector, running deficits. We have positive growth contributions of domestic demand without a clear dominance of private consumption, and negative growth contributions of the balance of goods and services. Here we will distinguish between low-growth mature economies driven by domestic demand, and high-growth catching-up domestic demand-led economies.

### **3. Developments in the years leading up to the crisis**

Considering the typologies outlined in the previous section, we now take a look at the sectoral financial balances of the main macroeconomic sectors and also at the growth contributions of the demand aggregates for each of the countries under consideration. Doing so, we can identify which type of long-run development prevailed in these countries during the trade cycle<sup>3</sup> before the crisis. We find that a debt-led private demand boom regime was experienced by the USA, the UK, Spain, Estonia, Greece, and South Africa. Conversely, an export-led mercantilist type can be found in Germany, Japan, and Sweden. Given their contrasting characteristics and their positions at the ‘extremes’ in our classification, the countries belonging to these two groups are easier to identify and to allocate. The remaining countries under consideration, however, need to be examined more closely, as they do not clearly belong to either of the two groups. These are, namely, France, Hungary, Italy, Poland, Portugal, and Turkey. They all exhibit indicators of a domestic demand-led type of development as will be seen below. However, within the group there is much less coherence in terms of their respective stage of development and other characteristics of their economies. We will therefore take a closer look at these countries. In what follows, we will first discuss the debt-led private demand boom group; secondly, we do the same for the export-led mercantilist group. Then we will focus on the countries belonging to the domestic demand-led group, looking at their similarities but also at their differences.

#### **3.1 Developments before the crisis in the debt-led private demand boom countries**

Countries of the debt-led private demand boom type are those which, on average over the trade cycle before the crisis (our period of consideration), saw negative financial balances of the private household sector, but also of the corporate sector in some countries, as well as the public sectors. This was associated with high private consumption and high

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<sup>3</sup> The beginning of a trade cycle is given by a local minimum of annual real GDP growth. Consequently, it ends in the year preceding the subsequent local minimum. This method is applied for each of the country groups for the pre-crisis period. The trade cycle after the crisis is incomplete, beginning in 2009 and ending with latest available data.

domestic demand growth contributions, and relatively high GDP growth rates, compared to the export-led mercantilist economies in particular. These countries – especially the USA given its size and economic importance – were the drivers of world demand, displaying significant negative growth contributions of their net exports to the rest of the world and considerable current account deficits.

As can be seen in Table 1, all six countries of this group (the USA, the UK, Spain, Estonia, Greece and South Africa) had negative financial balances of the private household sector, or, as in South Africa, of the private sector as a whole. In the cases of the USA, the UK, and Greece, it was only in the household sector, rather than in the corporate sector, where the financial balances were negative. We can therefore say that these countries experienced a debt-led consumption boom. Spain and Estonia, meanwhile show even stronger negative financial balances of their corporate sectors, which would normally not be of concern – as we would expect the corporate sector to be in deficit and the private household sector to be in surplus in a healthy economy.<sup>4</sup> However, in these two countries this was not the case. Accelerating investment in real estate and construction led to housing bubbles and thus increasing fragilities. South Africa also experienced strong increases in house prices, with the credit expansion being supported by substantial capital inflows. Moreover, in all countries it is also visible that the public sector was in deficit; Spain is the interesting exception with a balanced government budget on average. Finally, as expected, all six countries show relatively high positive financial balances of the external sector, meaning they suffered from substantial current account deficits.

In the debt led private demand boom type countries we expect private consumption to be the main driver of GDP growth. This is exactly what we see in these six countries when looking at the respective growth contributions in Table 2. Negative growth contributions of the balance of goods and services are also observed for each country. Overall, such a debt-led private demand boom type of development allowed these countries to achieve relatively high growth rates in the cycle of the early 2000s – something that would not have been possible had the private sector not compensated for the slowly growing or stagnating demand out of mass incomes by accumulating debt.

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<sup>4</sup> In other words, that the net saving of the household sector is financing the investments of the corporate sector.

**Table 1: Sectoral financial balances as a share of nominal GDP, in per cent, average values for the trade cycle, for the USA, the UK, Spain, Estonia, Greece and South Africa**

	<b>USA</b>	<b>UK</b>	<b>Spain</b>	<b>Estonia</b>	<b>Greece</b>	<b>South* Africa</b>
	<i>2001-2008</i>	<i>2002-2008</i>	<i>2002-2008</i>	<i>1999-2008</i>	<i>2002-2008</i>	<i>2000-2008</i>
<b>External sector</b>	4.7	2.2	6.3	9.6	10.4	3.2
<b>Public sector</b>	4.3	-3.4	0.0	-0.3	-5.3	-0.5
<b>Corporate sector</b>	0.4	1.5	-4.2	-4.4	3.9	-2.8*
<b>Private household sector</b>	0.5	-0.3	-2.1	-4.9	-9.1	

*\*Financial balance of the private sector (corporate and private household sectors)*

*Source: European Commission (2015), own calculations, Hein and Mundt (2012) for South Africa.*

**Table 2: Real GDP growth, in per cent, and growth contributions, in percentage points, average values for the trade cycle, for the USA, the UK, Spain, Estonia, Greece and South Africa**

	<b>USA</b>	<b>UK</b>	<b>Spain</b>	<b>Estonia</b>	<b>Greece</b>	<b>South Africa</b>
	<i>2001-2008</i>	<i>2002-2008</i>	<i>2002-2008</i>	<i>1999-2008</i>	<i>2002-2008</i>	<i>2000-2008</i>
<b>Real GDP growth</b>	2.1	2.5	3.1	5.8	3.5	4.2
<b><i>Contribution to the increase of GDP of:</i></b>						
<b>Private consumption</b>	1.7	1.7	1.6	3.8	2.6	3.0
<b>Public consumption</b>	0.3	0.5	0.9	0.5	0.7	0.9
<b>Investment</b>	0.2	0.4	1.1	2.8	1.1	1.6
<b>Balance of goods and services</b>	-0.1	-0.1	-0.7	-1.5	-0.8	-1.2

*Source: European Commission (2015), World Bank (2015) for South Africa, own calculations*

From the 1980s the USA, the UK, Spain, Greece and South Africa all saw changes in functional as well as in personal income distribution at the expense of the wage share and of lower household incomes, respectively.<sup>5</sup> In the USA, a significant weakening in the position of labour and a marked strengthening in the position of financial capital was initially brought about by the response of the rentier class and of the government to the period of

<sup>5</sup> We do not consider Estonia before the dissolution of the Soviet Union.

high inflation in the 1970s. The labour market and social policies of the Reagan government as well as a wave of corporate takeovers, downsizing and outsourcing led to a decline in trade union power and in their bargaining position. The wage share in the US shows a moderate downward trend, falling from an average of 65.5 per cent in the 1980s to 64 per cent in the cycle leading up to the crisis (Evans 2015). According to Duménil and Lévy (2011), the US national income figures actually mask a more serious decline in the share of income for all but the highest paid 5 per cent of employees since the 1980s. They estimate that, for the corporate sector, if the top 5 per cent is excluded, the share of wages for the remaining 95 per cent fell from 62.2 per cent of income in 1980 to 51.5 per cent in 2009. These developments help explain why private households had to resort to accumulating debt to sustain their living standards. Following a short recession after the bursting of the 'dot com' bubble in 2001, the Federal Reserve (Fed) reduced interest rates sharply and thereby contributed to creating the conditions for a further phase of expansion from 2002 to 2007. This expansion was characterised by a wave of mergers and takeovers and a major boom in house prices, enabling in particular wealth-based consumption. This framework has then, up until the crisis, managed to compensate for the dampening effects that rising income inequality had on the ability to consume out of income, but it also triggered increasing debt-income ratios of private households and thus increasing financial fragility. This scenario, as we will see, is not much different for other countries of this group as well.

In the UK, income inequality, and in particular asset inequality, had been rising since the 1980s, due to significant weakening of traditional labour unions during the Thatcher governments and the development of "flexible labour markets" under successive government legislation which removed protection for employees. In the UK, the adjusted wage share (in per cent of GDP at current market prices) declined from nearly 70 per cent of national income in 1975 to a low of 55 per cent in 1996, thereafter stabilising at around 59 per cent (European Commission 2015).<sup>6</sup> Regarding asset inequality, Lepper et al. (2015) report that in 2010 the Gini coefficient for asset wealth was as high as 0.61. The top decile of households was 4.3 times wealthier than the bottom 50 per cent of households combined, and in 2010 nearly a quarter of households had negative financial wealth. It was the UK's position as an international financial intermediary that made finance available to more people than ever before, in particular through a residential housing market whose inflation was fed by credit inflows and growing shortages of affordable housing (Lepper et al. 2015).

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<sup>6</sup> Adjusted wage share is calculated here as: (Compensation of employees / Total employees) / (Gross domestic product at current market prices / Total employment). (Eurostats – National Accounts)

In Spain, the rise in unemployment rates in the late 1970s and early 1980s and the wage moderation policies implemented at that time brought about a major decline in the adjusted wage share (as a percentage of GDP at current market prices) until the late 1980s. After a temporary recovery, the adjusted wage share entered a period of sustained decline from 1995 onwards decreasing from 60 per cent to about 53 per cent of GDP (European Commission 2015). In the trade cycle preceding the crisis, a housing bubble developed in Spain and the corporate sector's financial balance deteriorated from -2 to around -7.5 per cent of GDP at its peak in 2007. Similarly the financial balance of private households worsened significantly, from -0.44 per cent of GDP in 2002 peaking at -3.7 per cent of GDP in 2007 (European Commission 2015). The greater availability of external financial resources also allowed for an increase in external imbalances, both in terms of current account deficits and external debt (Ferreiro et al. 2014).

In Greece, income distribution worsened starting in the early 1990s. This was due mostly to the weakening of the Greek labour movement, as well as to the proliferation of part-time and precarious employment (Varoufakis and Tserkezis 2014). The adjusted wage share fell from around 58 per cent of GDP (at current market prices) in 1983 to around 48 per cent in 1996, but it rose again between 2000 and 2010 (European Commission 2015). With the entrance of Greece into the European Monetary Union (EMU), its current account deteriorated markedly. This was accompanied by large net-capital inflows needed to finance the sustained deficit. The financial inflows were mainly in the form of private and public debt, all of which made Greece, more than other Eurozone countries, extremely fragile, with a high fiscal deficit and a record current account deficit compared to other EMU countries.

The case of Estonia is rather specific because the country went through a transition process in the 1990s, driven by foreign direct investment (FDI), and featuring a high presence of foreign banks which were the main source of household borrowing. During the transition process income inequality was generally high, but this should be seen in the context of socio-economic turbulences and the wave of privatisations of the time. The wage share, which had been decreasing throughout the 1990s, has remained relatively stable in the 2000s (Juuse and Kattel 2014). The high(er) growth in the trade cycle before the crisis was largely based on consumption and investment demand, alongside a developing housing bubble, and was accompanied by high current account deficits.

South Africa experienced a brief growth spurt from the mid-2000s until the global financial crisis, driven by household consumption and capital investments associated with large infrastructure projects. While current account deficits were moderate in the 1990s, they increased rapidly during the 2000s. The wage share was declining in the same period up until 2007 (Newman 2014). In general, income inequality in South Africa was quite high

and was rooted primarily in high unemployment associated with de-industrialisation, whereas wage inequality had its roots in corporate restructuring, namely downsizing and outsourcing and in increasingly precarious employment standards. Nonetheless, growth in consumption was particularly relevant in the period from 2000 to 2007. Credit expansion in general including private households was correlated with capital inflows. The largest part of credits to private households consisted of mortgage loans, and the country saw strong increases in house prices in the 2000s.

### 3.2 Developments before the crisis in the export-led mercantilist countries

For the export-led mercantilist we would expect rather opposite developments relative to those described for the debt-led private demand boom countries. The countries of this group – namely Germany, Japan, and Sweden – did not see rising indebtedness of the private sector in the face of slowly growing or stagnating mass incomes. Quite the contrary as we can see from Table 3: In all three cases relatively high surpluses in the financial balances of the private household sector can be observed in the trade cycle before the crisis. In fact, the domestic sector as a whole exhibits positive financial balances. These are consequently accompanied by strongly negative financial balances of the external sector, meaning high current account surpluses for these countries. In Germany and Japan we also observe negative financial balances of the public sector.

In terms of growth contributions, the contribution of private consumption is relatively small (Table 4), with Sweden being somewhat of an exception here for reasons which will be outlined below. The balance of goods and services, on the other hand, features prominently and is, in the case of Germany in particular, the most important growth contributor. Overall, the growth rates are lower in comparison to those of debt-led private demand boom countries.

**Table 3: Sectoral financial balances as a share of nominal GDP, in per cent, average values for the trade cycle, for Germany, Japan and Sweden**

	<b>Germany</b> <i>2003-2008</i>	<b>Japan</b> <i>1998-2008</i>	<b>Sweden</b> <i>2001-2008</i>
<b>External sector</b>	-4.9	-3.0	-6.9
<b>Public sector</b>	-2.0	-5.6	1.0
<b>Corporate sector</b>	1.2	5.5	3.2
<b>Private household sector</b>	5.7	2.8	2.4

*Source: European Commission (2015), own calculations.*

**Table 4: Real GDP growth, in per cent, and growth contributions, in percentage points, average values for the trade cycle, for Germany, Japan and Sweden**

	<b>Germany 2003-2008</b>	<b>Japan 1998-2008</b>	<b>Sweden 2001-2008</b>
<b>Real GDP growth</b>	1.5	0.8	2.6
<b>Contribution to the increase of GDP of:</b>			
<b>Private consumption</b>	0.3	0.4	1.0
<b>Public consumption</b>	0.2	0.3	0.2
<b>Investment</b>	0.4	-0.3	0.9
<b>Balance of goods and services</b>	0.6	0.4	0.5

*Source: European Commission (2015), own calculations.*

Both Germany and Japan indeed have a long tradition of net export surpluses, however over the last decades several developments have strengthened their reliance on export-led growth. Again, as with the previous group, one of these reasons can be found in changing income distribution. In the case of Germany, the private household sector has traditionally been a net saver. However, in the early 2000s labour market and social policy reforms under the Schröder government led to extreme nominal wage moderation and a redistribution of income at the expense of wage earners and low income households, and this led to private household surpluses increasing even more (Detzer and Hein 2014). In the last trade cycle before the crisis, the adjusted wage share (as a percentage of GDP at current market prices) decreased from 58 per cent to around 54 per cent (European Commission 2015). Low domestic demand meant low imports. This coupled with the increasing price competitiveness of Germany, in particular vis-à-vis its EMU trading partners together with a flourishing world demand for German export goods contributed to rising net exports.

Japan, on the other hand, has had a current account surplus since 1981. But in the 2000s up until the outbreak of the crisis its current account registered a substantial increase in surpluses. This occurred alongside a decline in the wage share: the adjusted wage share (as a percentage of GDP at current market prices) fell from around 77 per cent in the mid-1970s to 59 per cent in 2007, with the most significant decreases occurring from the early 2000s (in the 1990s the wage share remained relatively stable) (European Commission 2015). Regarding personal income distribution, despite the relatively stable Gini coefficient for disposable income, the top 0.1 income share has been increasing consistently since 1992 and in particular during the 2000s (Shabani and Toporowski 2015).



Sweden, as mentioned above, differs somewhat from the previous two countries, primarily because it experienced a house price boom with high wealth and high debt increases. Financial balances of the private households remained nonetheless positive, and for these reasons Sweden demonstrates some elements of a domestic demand-led development – which helps explain its better growth performance relative to Germany and Japan. Regarding income distribution in Sweden, the adjusted wage share, expressed as a percentage of GDP at current market prices, remained relatively stable since the mid-1990s, but there was a significant deterioration in personal income distribution. Top income shares (including capital gains) increased strongly from the mid to late 1980s onwards, while the Gini coefficient for disposable income increased from 0.21 to 0.26 between 1995 and 2006. Overall, Sweden belongs to the countries with the highest increases in inequality (Stenfors 2014).

### **3.3 Developments before the crisis in the domestic demand-led countries**

Generally, the domestic demand-led economies are characterised by positive financial balances of the private household and external sectors, and hence, current account deficits, but with negative financial balances of the governments, being the main counterpart to the external sector surpluses. GDP growth is driven by positive growth contributions of domestic demand without a dominance of private consumption being financed by private household deficits. Growth contributions of the balance of goods and services are negative.

Here, we broadly distinguish between the catching-up domestic demand-led economies, on the one hand, and the mature domestic demand-led economies, on the other hand. The former consists of dynamic, high(er) growth countries which are characterised by a strong presence of financial inflows into their economies. We identify Turkey, Poland, and Hungary, as part of such a group. The latter sub-group, consisting of more mature economies with relatively lower growth rates, features France, Italy and Portugal. It ought to be noted at this point that within this typology there is much less coherence among countries, relative to the debt-led private demand boom type or the export-led mercantilist type. As we go further, we will try to acknowledge these differences, yet it remains our primary aim to stress the commonalities.

### 3.3.1 Catching-up domestic demand-led countries

This group of catching-up domestic demand-led countries is characterised by significant foreign financial inflows. This also increases vulnerability and makes these countries more susceptible to balance of payment crises. However, these countries, unlike our mature domestic demand-led group, also have their own currencies.

This is broadly what we see when taking a look at Tables 5 and 6 for Turkey, Poland, and Hungary: All three countries had high current account deficits in the cycle before the crisis, as can be seen from the positive financial balances of the external sector, and all three countries also registered substantial public sector deficits. In Poland and Hungary the balances of the private household sector were positive as well therefore their growth was not private household debt-led. We cannot say this with certainty for Turkey where the available data is only for the private sector as a whole. The yearly data for Turkey show that the trade cycle average is driven by very high surpluses of the private sector following the 2001 crisis, while from 2005 until 2008 the private sector was in substantial deficit (European Commission 2015). Taking this into consideration, Turkey could also be described as a debt-led private demand boom country. However, given that we have thus far focused on average values over the trade cycle, we will consider Turkey part of the domestic demand-led group.

**Table 5: Sectoral financial balances as a share of nominal GDP, in per cent, average values for the trade cycle, for Turkey, Poland and Hungary**

	<b>Turkey</b> <i>2001-2008</i>	<b>Poland</b> <i>2002-2008</i>	<b>Hungary</b> <i>2003-2008</i>
<b>External sector</b>	3.3	3.7	7.4
<b>Public sector</b>	-6.5	-4.5	-6.6
<b>Corporate sector</b>	3.2*	0.1	-2.0
<b>Private household sector</b>		0.7	1.2

\* *Financial balance of the private sector (corporate and private household sectors)*  
Source: European Commission (2015), own calculations.

**Table 6: Real GDP growth, in per cent, and growth contributions, in percentage points, average values for the trade cycle, for Turkey, Poland and Hungary**

	<b>Turkey 2001-2008</b>	<b>Poland 2002-2008</b>	<b>Hungary 2003-2008</b>
<b>Real GDP growth</b>	4.5	4.4	3.0
<b>Contribution to the increase of GDP of:</b>			
<b>Private consumption</b>	3.3	2.6	1.3
<b>Public consumption</b>	0.4	0.7	0.3
<b>Investment</b>	1.1	1.4	0.7
<b>Balance of goods and services</b>	-0.3	-0.5	0.8

*Source: European Commission (2015), own calculations.*

In terms of real GDP growth we see very high growth rates, also relative to those in the debt-led private demand boom group. The main growth contributor was in all cases private consumption, but we can observe also a relatively high growth contribution of investment and of public consumption and, except for Hungary, a negative growth contribution of the balance of goods and services.

Both Turkey and Hungary have been very dependent on foreign financial inflows, especially since the early 2000s. Neither of these countries has a leading currency like the euro or dollar, which makes it much harder for them to borrow in their own currency. Domestic sectors, in particular public sectors in these countries, accumulate therefore foreign debt, which gives rise to a particular sort of vulnerability and a possible balance of payment crisis. There is a risk of sudden stops of capital inflows, and even significant capital outflows, which may lead to the inability to pay for essential imports and/or service debt denominated in foreign currency. Financial inflows dominated the developments of the Turkish economy, particularly after 2002. Large capital inflows brought about an appreciation of the domestic currency and led to increasing imports while restricting export growth. At the same time, large capital inflows led to an expansion of domestic credit, increased asset prices and lower interest rates. In this context, we can say that Turkey, which indeed experienced long-lasting exchange rate appreciation periods, increasing borrowing from the rest of the world and increasing current account deficits, was showing some features of the debt-led private demand boom type, despite positive financial balances of the private sector. It remains an open question how the situation would have progressed had the global financial crisis not erupted. A development that cannot be excluded is that Turkey would have transformed from the domestic demand-led country to a debt-led private demand boom one. In fact, private consumption, which was a key driver of growth from 2001, relied heavily

on consumer credit. The ratio of consumer credit and credit card debt to consumption of households increased from 3 per cent in 2002 to 31 per cent in 2013 (Bahce et al. 2015). Alongside this development, the housing sector was showing signs of a real estate boom, with housing loans increasing from 1 per cent of total loans in 2002 to about 4 per cent in 2008 (Bahce et al. 2015). All this was accompanied by a strong decrease in the adjusted wage share (as percentage of GDP at current market prices) from 52 per cent to below 33 per cent between 1999 and 2008 (European Commission 2015), and overall a relatively low wage growth, especially in the export goods sector resulting in increasing competitiveness. The nonetheless rising current account deficits are ultimately due to the fact that Turkey exports low-value added products, whereas it is heavily reliant on importing large amounts of energy, and intermediary and capital goods.

The main forces driving growth in Hungary during the short and intensive growth period between 1996 and 2006 were household consumption and residential investment, accompanied by massive inflows of foreign direct investment (Badics et al. 2015). In the last trade cycle before the crisis, the adjusted wage share (as percentage of GDP at current market prices) had fallen from about 53 per cent to around 51 per cent. In this period, consumption increased faster than median income. Both the corporate and the public sectors were in deficit, and were hence counterparts to the surpluses of the foreign sector. Hungary's current account deficit was substantial, at times reaching up to 10 per cent of GDP (Badics et al. 2015). These deficits were associated with rising foreign debt, mainly through the banking sector and the corporate sector. However, since households' financial savings stayed positive for most of the period and the contribution of the foreign sector to growth was positive after 2004, the long-run development pattern does not fit the debt-led private demand boom type but rather that of the domestic demand-led economies.

Poland went through a transition process in the 1990s. The economic transformation was based on monetarist premises – the so-called 'shock therapy' – aimed at reducing inflation, liberalising the markets, and completing a far-reaching privatisation of the economy (Dymarski 2015). In the face of fast growing labour productivity, the adjusted wage share (calculated at current market prices) declined from 62 to 54 per cent of GDP, between 1992 and 2002. In the last trade cycle before the crisis, the adjusted wage share fell even further to 48 per cent of GDP in 2008 (European Commission 2015). However, in the years preceding the crisis, Poland experienced fast and accelerating growth, with an increase in GDP of 39 per cent, relative to the year 2000, and with growth being driven mainly by private demand.

### 3.3.2 Mature domestic demand-led countries

France, Italy and Portugal are in our view best described as mature domestic demand-led economies during the trade cycle before the crisis. Relative to the former sub-group, these countries are characterised by somewhat lower growth rates, and of course they also have the euro as their common currency. Taking a look at the financial balances of the main sectors (Table 7), we can see that all three countries have had high public sector deficits and surpluses in the private household sector. All three have also had current account deficits, although they differ substantially in size. France exhibited a rather small current account deficit, whereas that of Portugal was very large. Overall, France outperforms the other two countries of the group in several aspects. In terms of real GDP growth (Table 8) France fared better than the others, with healthy growth contributions of private consumption and investment, whereas in the other two countries the growth contribution of investment was very low (Italy) or even negative (Portugal).

**Table 7: Sectoral financial balances as a share of nominal GDP, in per cent, average values for the trade cycle, for France, Italy and Portugal**

	<b>France 2003-2008</b>	<b>Italy 2003-2008</b>	<b>Portugal 2003-2008</b>
<b>External sector</b>	0.4	1.2	8.5
<b>Public sector</b>	-3.1	-3.2	-4.7
<b>Corporate sector</b>	-0.2	-0.7	-5.5
<b>Private household sector</b>	2.9	2.6	1.7

*Source: European Commission (2015), own calculations.*

**Table 8: Real GDP growth, in per cent, and growth contributions, in percentage points, average values for the trade cycle, for France, Italy and Portugal**

	<b>France 2003-2008</b>	<b>Italy 2003-2008</b>	<b>Portugal 2003-2008</b>
<b>Real GDP growth</b>	1.7	0.9	1.0
<b>Contribution to the increase of GDP of:</b>			
<b>Private consumption</b>	1.0	0.5	1.0
<b>Public consumption</b>	0.4	0.1	0.3
<b>Investment</b>	0.7	0.2	-0.2
<b>Balance of goods and</b>	-0.4	0.0	-0.2

*Source: European Commission (2015), own calculations.*

France has possibly demonstrated one of the healthiest developments among the countries we consider in this report. After having experienced a drastic fall in the labour income share in the course of the 1980s, functional income distribution remained roughly constant up to the Great Recession. Personal income distribution has also remained more stable than in other countries, in particular through government redistribution (Cornilleau and Creel 2014). In this context, and alongside a stable average propensity to save since the early 1990s, consumption has been growing in line with income, i.e. income-financed consumption dominated the scene. No housing boom and no debt-financed consumption bubble could be observed. The foreign trade balance, which had improved from the mid-1980s until the late 1990s, showed a downward trend, with negative values in the 2000s. French competitiveness suffered particularly from the overly restrictive wage policies of its main trading partner, Germany.

Italy has presented characteristics of a domestic demand-led economy since the 1980s, with private consumption rather than investment being the main driver of growth, and with saving rates of private households remaining roughly constant even in the years leading up to the crisis. The adjusted wage share in net national income was falling from the early 1980s until the early 2000s, but has been rising again since then. Personal income distribution has seen a tendency towards rising inequality in the 1990s, but has shown declining inequality in the 2000s (Gabbi et al. 2014). The Italian current account worsened from the mid-1990s until the crisis, becoming negative in the early 2000s, mainly driven by falling net exports. These deficits led to a deterioration the Italian international investment position, making it a net debtor in the mid-2000s. Slight, but constant losses of price competitiveness were witnessed in the 2000s.

Throughout the 1990s, and in the context of waves of privatisation and financial sector liberalisation, the Portuguese economy boomed but this was associated with increasing indebtedness of domestic private sectors. From the mid-1980s until the late 1990s, in fact, the average saving rate of private households dropped dramatically. High indebtedness levels of private households inherited from previous periods prevented the development of asset price or stock market bubbles in the years leading up to the crisis (Lagoa et al. 2014). Overall, the 2000s were characterized by a stable labour income share and relatively stable (only slightly increasing) bank credits to households as a share of GDP. Nevertheless, the current account balance deteriorated in this period, due to, on the one hand, a deterioration of the balance of net primary incomes (high foreign indebtedness and a decline in remittances and EU transfers) and, on the other hand, the negative balance of goods of services due to the loss of price competitiveness. The main counterparts of the external sector surpluses were the public and corporate sector deficits.

#### **4. The effects of the crisis – contagion, transmission and economic policy responses**

In this section we deal with the contagion and transmission mechanisms of the financial and economic crises, whereby we distinguish between:

- i. contagion effects of the crisis in the international financial markets;
- ii. problems related to financial flows (balance of payment channel);
- iii. uncertainty and expectations channel of transmission;
- iv. transmission of the economic crisis into the respective economy via international goods markets, i.e. exports and imports;
- v. the role of economic policies in dampening or accelerating the financial and economic crises.

The first two of the aforementioned channels are the financial contagion and transmission channels of the crisis, where the former should be more important for lender countries, and the latter should be applicable rather to debtor countries which are vulnerable to sudden stops of capital inflows. The third channel refers to the adverse effects of an increase in uncertainty, be it from investors leading to negative consequences for the financial sector, or from the general public, resulting in a contraction of private spending. The fourth channel focuses on contagion through exports and imports. And finally, we will consider the responses of fiscal and monetary policies in dealing with the crisis. Here we will distinguish between the developments in those countries with monetary autonomy and those without autonomy.

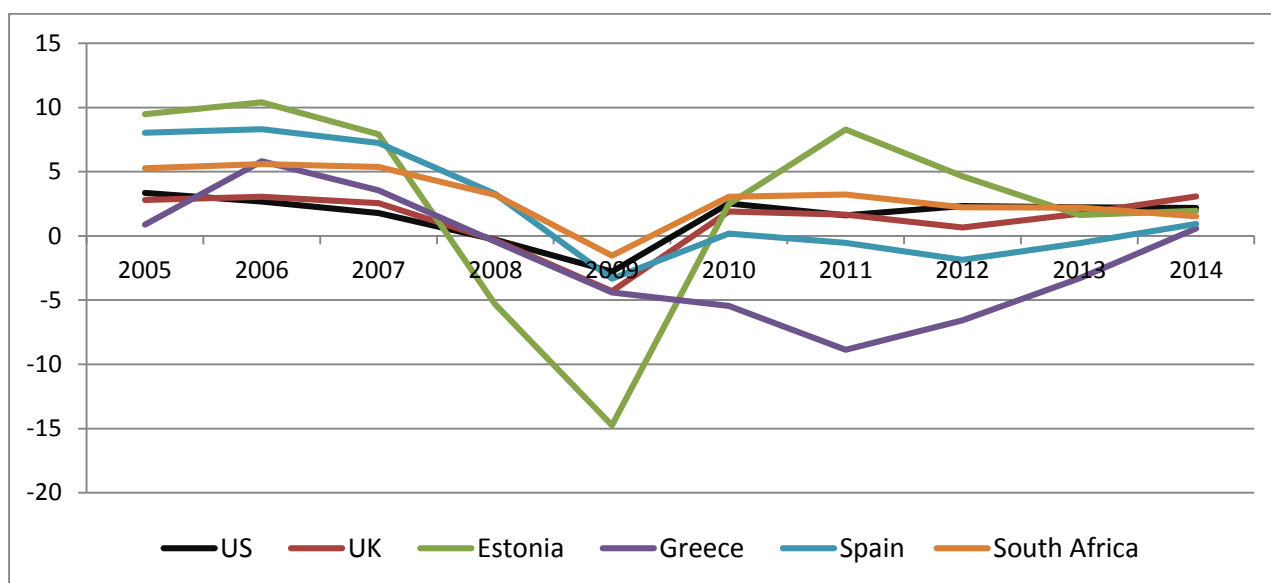
The aim of this section is to see how the crisis affected different countries and country groups. Again we will present the data on sectoral financial balances and growth contributions of the demand aggregates, focusing on the period since 2009. It should be noted that the trade cycle after the Great Recession is not yet complete, however the average values might give us an approximate idea of what has occurred since the crisis and, in particular, whether any shifts in the type of development can be observed among countries. Figures with annual data on sectoral financial balances for each of the countries are presented in the Appendix.

##### **4.1 The crisis in the debt-led private demand boom countries**

Figure 1 shows the real GDP growth in the USA, the UK, Spain, Estonia, Greece, and South Africa. The financial crisis which broke out in the USA in 2007 hit all of these countries, but whereas the USA and the UK began a slow recovery process from 2009 onwards, Greece was in a recession up until 2014. Spain experienced a double-dip

recession due to the euro crisis while Estonia, which was especially negatively affected by the financial crisis, experienced a strong return to growth until 2011, but has had a much weaker performance since. South Africa appears to have managed to contain the effects of the global financial crisis. After experiencing a short-lived recession in 2009 it returned to positive, although weak, growth. In general, as of 2014 all of the countries in this group exhibit sluggish recovery and none have returned to their pre-crisis growth rates.

**Figure 1: Real GDP growth in the USA, the UK, Spain, Estonia, Greece and South Africa, 2005-2014, in per cent**



Source: European Commission (2015), own calculations.

In Tables 9 and 10, we again show the sectoral financial balances and growth contributions, respectively, for each of the six countries in the period 2009-2014. The most obvious development is related to the financial balance of the respective public sectors, all of which have registered enormous deficits (with the exception of Estonia where the average government deficit is rather small). Moreover, in each country the financial balances of the private sector went from deficit to (substantial) surplus, presumably due to deleveraging by both households and corporations, and to an exhaustion of the deficit financing possibilities. In terms of the current account, the USA, the UK and South Africa have continued to have current account deficits. Whereas in the case of the USA they are somewhat smaller than in the pre-crisis period, in the UK and in South Africa they have actually increased. The remaining three countries however have seen considerable improvements of their external balances. Estonia successfully turned into a current account surplus country, while Spain and Greece have substantially reduced their current account deficits on average over the period. In terms of growth contributions, the most notable changes can be seen in the cases of Spain, Estonia, and Greece, all of which have



registered negative growth contributions of private consumption and investment but exhibit a strongly positive contribution of the balance of goods and services. However, neither in Spain nor in Greece has this been able to offset the depressed domestic demand, which resulted in negative real GDP growth rates on average over this period. The USA, the UK and South Africa, on the other hand, have continued to be led primarily by private consumption, albeit with weaker overall growth than before the crisis.

**Table 9: Sectoral financial balances as a share of nominal GDP, in per cent, average values, for the USA, the UK, Spain, Estonia, Greece and South Africa**

	<b>USA</b>	<b>UK</b>	<b>Spain</b>	<b>Estonia</b>	<b>Greece</b>	<b>South Africa*</b>
	<i>2009-2014</i>	<i>2009-2014</i>	<i>2009-2014</i>	<i>2009-2014</i>	<i>2009-2014</i>	<i>2009-2013</i>
<b>External sector</b>	2.7	3.1	1.2	-2.9	5.5	3.4
<b>Public sector</b>	-9.1	-7.9	-8.7	-0.9	-9.8	-4.3
<b>Corporate sector</b>	3.3	2.8	4.2	2.1	12.4	0.9
<b>Private household sector</b>	4.0	1.9	3.3	1.6	-8.3	

*\*For South Africa: The financial balance of the government is taken as net lending/borrowing of the government; for the financial balance of the external sector it was assumed that it equals the inverted current account balance of SA; the private sector financial balance (corporate and private household sectors) was calculated as the residual from the other two balances.*

*Source: European Commission (2015), IMF (2015) for South Africa, own calculations.*

**Table 10: Real GDP growth, in per cent, and growth contributions, in percentage points, average values for the trade cycle, for the USA, the UK, Spain, Estonia, Greece and South Africa**

	<b>USA</b>	<b>UK</b>	<b>Spain</b>	<b>Estonia</b>	<b>Greece</b>	<b>South Africa</b>
	<i>2009-2014</i>	<i>2009-2014</i>	<i>2009-2014</i>	<i>2009-2014</i>	<i>2009-2014</i>	<i>2009-2013</i>
<b>Real GDP growth</b>	1.3	0.8	-1.0	0.7	-4.7	1.8
<b>Contribution to the increase of GDP of:</b>						
<b>Private consumption</b>	1.0	0.3	-0.8	-0.2	-3.4	1.6
<b>Public consumption</b>	0.0	0.2	0.0	0.2	-0.9	0.6
<b>Investment</b>	0.1	0.1	-1.7	-0.2	-2.5	0.3
<b>Balance of goods and services</b>	0.1	0.1	1.5	0.9	2.3	-0.7

*Source: European Commission (2015), World Bank (2015) for South Africa, own calculations.*

In the following we analyse in more detail which channels of contagion and transmission of the crisis were present in each of these countries, in an attempt to also explain their differing developments over the past five years.

The USA is the country of origin of the financial crisis, and from here the crisis spread worldwide, in the first place through the financial contagion channel. Furthermore, the international trade channel to other countries became important in the course of the deep recession in 2008/09, which had a negative impact particularly on Europe. By 2012, the USA's economic output recovered to the pre-crisis level of output, not least due to wide government rescue measures for the financial sector and stimulus packages for the non-financial business sector, as well as immediate and prolonged supportive action by the Fed (Evans 2015).

The UK was affected immediately and strongly by the crisis in the USA, due to its strong linkages to global financial markets, resulting in a series of massive government-backed recapitalization of banks as well as an immediate response from the Bank of England, which enacted a substantial package of measures to prevent the breakdown of the financial system (Lepper et al. 2015). Thus, in the UK, the government stimulus was mainly to save the City of London. After a brief introduction of austerity measures in 2012, this policy was relaxed and the UK has been slowly recovering since.

In South Africa the crisis was relatively mild. The financial sector had little exposure to US toxic assets and no bailouts were needed. The South African economy was affected by the crisis via two channels. South African exports are primarily in metals and minerals, which makes its economic growth particularly susceptible to external market conditions and world commodity prices. With the onset of the crisis, exports declined substantially in 2009, which was partially due to the collapse in commodity prices. The second channel of contagion was the collapse of capital inflows in 2009. This led the financial sector to scale back credit, which hit manufacturing, retail and wholesale sectors. In this situation, the government decided not to scale down large infrastructure projects and was thus able to stabilize demand. Another reaction to the crisis consisted in further liberalisation of the capital account. Once the capital inflows returned, the financial sector rapidly resumed with extending credit which allowed consumption to recover and aided wholesale and retail sectors (Newman 2014). South Africa, therefore, experienced a rather quick recovery both in exports and in capital inflows.

The cases of Spain, Estonia and Greece are specific, as these three are EMU countries and were thus affected by the euro crisis and the government responses since 2010. In Spain, which had become highly dependent on external funding in the years preceding the

crisis, the collapse of international financial and inter-banking markets led to massive deleveraging both by financial and non-financial private agents and thus resulted in a sharp abrupt decline in private demand (Ferreiro et al. 2014). With the Greek crisis in 2010, Spanish risk premiums on government bonds reached record levels. In Spain the banking crisis went hand in hand with a sovereign debt crisis that obliged the Spanish government to request financial assistance from the European Stability Mechanism (ESM) in 2012. Since then, the main obstacle to Spanish recovery has been the nature and effect of austerity policies that Spain had to implement.

In Estonia, two channels of transmission of the crisis were relevant. These were, on the one hand, the liquidity and funding channel, because of a high presence of foreign banks which reduced lending even faster than Estonian domestic banks after the outbreak of the crisis in 2008. This led to a drop in asset prices and high uncertainty, weakening investment and consumption. On the other hand, Estonia was affected by the external trade channel, to which it was especially vulnerable due to its high openness. This aggravated the situation further since Estonia is indebted in foreign currency and depends on foreign exchange income to pay for debt services and imports (Juuse and Kattel 2014). Overall, the crisis hit Estonia hard, due to the absence of both fiscal stimulus and of monetary policy interventions tackling the banking crisis, because the country at the time had a currency board. However, quick recovery occurred soon thereafter, largely thanks to net exports. However, since then Estonia has seen only meagre growth.

The international financial crisis of 2008 was transmitted to the Greek economy through three main channels. The first operated through the domestic banking system which was adversely affected by the ensuing credit crunch and the almost total collapse of interbank financing, although it was not particularly exposed to toxic financial assets. The second operated through the inability of financing the fiscal deficit which, being already rather high, rose abruptly when economic growth slowed down. Thirdly, a dramatic rise in the uncertainty over the country's solvency led, from the last quarter of 2009 onwards, to a rapid rise in the interest rates that the Greek State faced in the primary market. This culminated eventually to the exclusion of Greece from international capital markets. Furthermore, the initial freezing and subsequent reversal of the capital inflows directed towards the real economy left the latter in stagnation and disarray (Varoufakis and Tserkezis 2014). However, no account of the causes of the economic crisis in Greece can be complete without recognising the adverse role of the economic policies (fiscal austerity and internal devaluation) that were followed after Greece was compelled to request official financial assistance from the International Monetary Fund (IMF) and the EU member states, as a result of which a debt crisis was transformed into an unprecedented depression which is still ongoing.

Having taken a brief look at the developments in the (former) debt-led private demand boom countries, we can identify some common characteristics of the transmission of the crisis, but also some differences, which relate mainly to the handling of the crisis by the respective governments. We have seen that the debt-led private demand boom economies were most vulnerable to contagion effects from the financial crisis originating in the USA, either directly – like the UK – due to substantial holdings of toxic US financial products, or indirectly – as was the case for Spain, Estonia, and Greece – due to widespread global panic and uncertainty affecting the terms of lending of domestic banking sectors, and finally through the collapse of economic activity in the USA and the effects on international trade. Furthermore, in all cases the prolonged deleveraging due to excessive build-up of debt by the private sector before the crisis postponed the process of recovery, and the countries have had to suffer from high unemployment rates for a longer time period.

As for the differences within this group, we have observed that the economic crisis was harsher and more prolonged in those countries where austerity policies were implemented, and this has been the case in particular in the EMU countries of Greece and Spain. Here high public sector deficits resulting from the attempt of the governments to rescue domestic banking sectors during the crisis ultimately led to the euro crisis, which was mainly due to the lack of a lender of last resort for the governments, backing and guaranteeing government debt. Economic policy responses, linking the stabilisation of government debt of crisis countries with strict austerity policies fundamentally undermined the recovery. These policies, in the context of the institutional framework of the EMU, have pushed Spain, and to a large extent Greece and Estonia, towards an export-led mercantilist type of development. However, the major driving force for this was the depression of domestic demand and thus imports. Taking a look at the annual data on sectoral financial balances (Figures A3-A5 in Appendix), we see a dramatic decline in the financial balance of the external sectors from 2008 onwards, accompanied by the improvement of private households financial balance and achievement of surpluses in the cases of Spain and Estonia. Contrary to these developments, the USA, the UK and South Africa have turned towards domestic demand-led growth, with the government – and not the private sector – as the main deficit sector (Figures A1, A2, and A6 in Appendix).

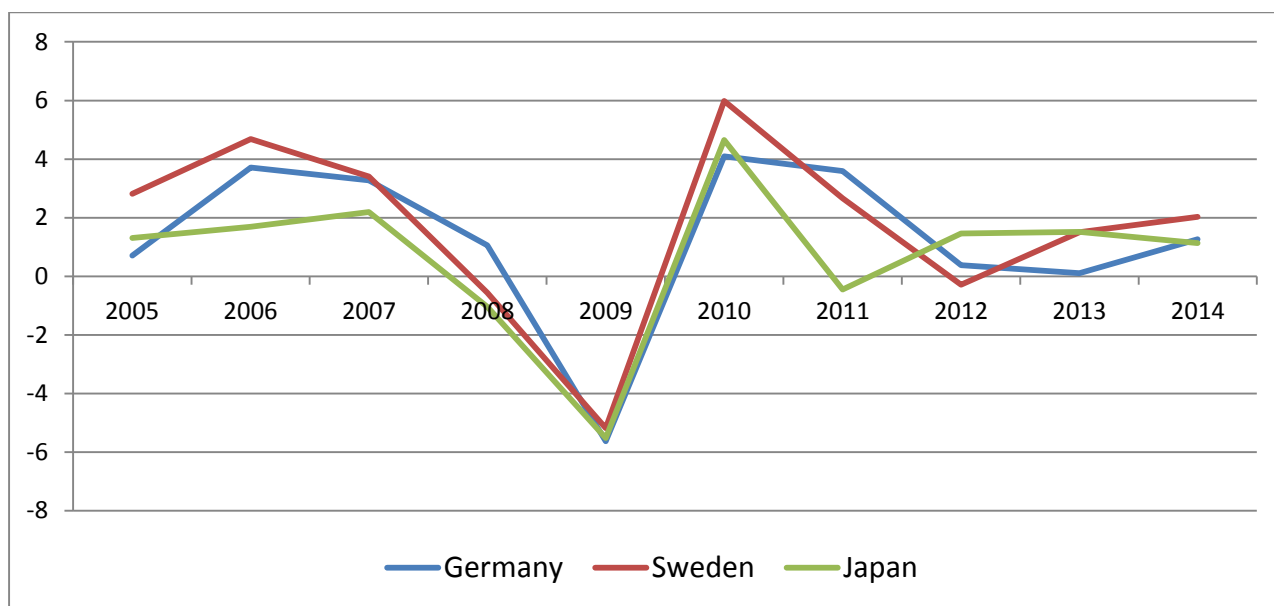
#### **4.2 The crisis in the export-led mercantilist countries**

The export-led mercantilist group distinguishes itself from the others particularly in terms of the effects of the crisis on growth. Figure 2 shows that the recovery from the Great Recession 2008/09 happened rather quickly. On the one hand, this was due to the fact that these countries benefitted from the recovery of the world economy driven by high growth in emerging market economies like China or India, but also, on the other hand, because

domestic policy responses were immediate, especially in terms of dealing with the financial sector, rescuing banks in trouble and successfully preventing/containing a financial system breakdown, as well as due to fiscal stimuli. All three countries came close to a recession for the second time, Japan in 2011, Sweden in 2012 and Germany in 2013. Japan did in fact experience a double-dip recession, having suffered severely from a decline in its exports in 2011 (Shabani and Toporowski 2015). In the case of Sweden, although the onset of the Eurozone crisis had a dampening effect on Swedish growth, the economy still outperformed the Euro area, likely due to the fact that Sweden entered the global financial crisis with strong public finances – with one of the lowest government debt-to-GDP ratios in Europe (Stenfors 2014).

Ultimately, despite recovering rather quickly from both recessions, this group of countries has since returned to low growth. We will see below that this is also due to the fact that their export-led growth strategies have not changed, the only thing that did was the dynamics of their trade partners.

**Figure 2: Real GDP growth in Germany, Sweden and Japan, 2005-2014, in per cent**



Source: European Commission (2015), own calculations

Tables 11 and 12, show the sectoral financial balances and the growth contributions on average over the last six years for the export-led mercantilist group of countries. All three countries continued with their model, with Germany even strengthening its export-led mercantilist position, while the private sector kept positive financial balances. Growth, however, has been very weak, with the exception of Sweden where private consumption was the major contributor to the Swedish recovery.

**Table 11: Sectoral financial balances as a share of nominal GDP, in per cent, average values for the trade cycle, for Germany, Japan and Sweden**

	<b>Germany</b> <i>2009-2014</i>	<b>Japan</b> <i>2009-2014</i>	<b>Sweden</b> <i>2009-2014</i>
<b>External sector</b>	-6.6	-1.8	-6.1
<b>Public sector</b>	-1.2	-8.5	-0.9
<b>Corporate sector</b>	2.6	7.7	0.7
<b>Private household sector</b>	5.2	2.5	6.2

*Source: European Commission (2015), own calculations.*

**Table 12: Real GDP growth, in per cent, and growth contributions, in percentage points, average values for the trade cycle, for Germany, Japan and Sweden**

	<b>Germany</b> <i>2009-2014</i>	<b>Japan</b> <i>2009-2014</i>	<b>Sweden</b> <i>2009-2014</i>
<b>Real GDP growth</b>	0.6	0.5	1.1
<b><i>Contribution to the increase of GDP of:</i></b>			
<b>Private consumption</b>	0.5	0.6	0.9
<b>Public consumption</b>	0.2	0.3	0.4
<b>Investment</b>	0.1	0.0	0.0
<b>Balance of goods and services</b>	0.0	-0.3	-0.2

*Source: European Commission (2015), own calculations.*

The main channels of transmission of the crisis to Germany were the financial contagion and the international trade channels. In particular, the latter was relevant with a sharp decline in exports to the rest of the world in 2008/09, especially to European countries. Germany recovered rather quickly from the financial and economic crises. Overall, four reasons can be identified for the swift German recovery (Detzer and Hein 2014). Firstly, the financial crisis was quickly contained by strong government intervention; secondly, the three pillars of the German financial system, with two strong non-profit pillars (public and mutual banks) aided in avoiding a credit crunch; thirdly, there was an exceptionally strong and immediate government intervention in the real economy in the form of stimulus packages; and fourthly, foreign demand picked up rather quickly thus supporting German export performance. In the following years, Germany also benefitted from the depreciation of the euro and from very low interest rates, due to the policies of the ECB, on the one hand, and German government bonds being considered a safe haven in the course of the euro crisis, on the other hand.

In the case of Japan there is little evidence of financial contagion from the USA. The Japanese banking system had not really been involved in the acquisition of sub-prime financial products and was thus not directly affected by the crisis in the USA. However, the Japanese stock market suffered due to panic caused by the crisis, especially by foreign investors (Shabani and Toporowski 2015). The main channel of transmission of the crisis to Japan lies, however, in exports, which declined substantially in 2009. Japan's government has since been trying to stimulate the economy with both substantial fiscal packages as well as with massive monetary easing, but after a short recovery in 2010 Japan slipped into recession again in 2011 but has been growing at a low pace again since 2012.

The Swedish banking system also had little exposure to US subprime financial products and was therefore not really affected by the financial crisis which broke out in the USA. A minor disturbance came via contagion from the Baltic countries where the presence of Swedish banks is high. Ultimately, only one bank needed government rescue (Stenfors 2014). As with the previous two countries, the main transmission channel of the crisis was the trade channel. Sweden experienced a downturn in the last quarter of 2008 and in 2009, but, as in Germany, the recovery began rather quickly, aided by its status – again like Germany - as a safe haven for foreign saving, leading therefore to a beneficial reduction of the interest rate once the euro crisis started.

Overall we can conclude that the export-led mercantilist economies were affected by the crisis primarily via the trade channel, that is, through falling exports due to a contraction in foreign demand, and only partially by the financial contagion channel. However, recovery came much faster than it did in the debt-led domestic demand boom economies: On the one hand, the financial crisis was dealt with immediately and successfully by the respective governments, if required, and the long process of deleveraging did not need to take place since the indebtedness of the private sector had been low relative to the other group of countries. On the other hand, foreign demand picked up from other global players, in particular China and other emerging market economies, and export performance was strong despite the lack of demand from debt-led consumption economies. In Europe, both Germany and Sweden benefitted from the safe haven effect and thus very low interest rates.

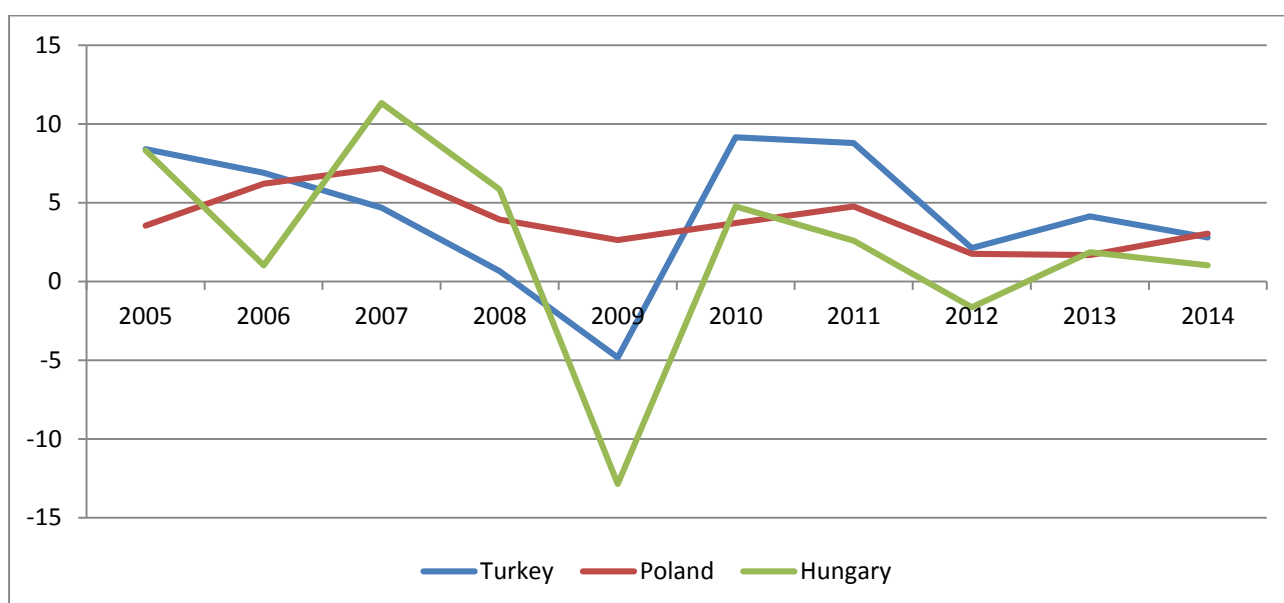
Of these three countries, which in the trade cycle before the crisis were clearly following an export-led mercantilist pattern, only Germany has remained firmly on this path. Japan as well as Sweden have become weakly export-led economies, Sweden with still high current account surpluses, but both with overall negative growth contributions of net exports in the crisis/post-crisis period (Figures A7-A9 in Appendix).

### 4.3 The crisis in the domestic demand-led countries

#### 4.3.1 The catching-up domestic demand-led countries

Figure 3 shows the real GDP growth of Turkey, Poland and Hungary. Despite the highest growth rates in our set of countries in the years leading up to the crisis, none of these countries managed to go back to pre-crisis growth rates. Overall we observe a slow and weak recovery. Poland is an exception here as it seems to have avoided the worst effects of both crises; its growth has slowed down but the country never entered a recession. The economies of Turkey and Hungary have been more volatile, with Hungary experiencing a recession for the second time in 2012.

**Figure 3: Real GDP growth in Turkey, Poland and Hungary, 2005-2014, in per cent**



*Source: European Commission (2015), own calculations.*

Looking at sectoral financial balances of these countries since 2009 (Table 13) several interesting features emerge. Relative to the trade cycle before the crisis, Poland has managed to decrease its current account deficits, while Hungary has become a net exporter with quite substantial current account surpluses. Turkey, on the other hand, saw its current account deficits widen. Both Turkey and Hungary have also seen their public sector deficits decrease, unlike in Poland, and whereas Poland and Hungary saw a significant increase of the corporate sector surplus, in Turkey the private sector as a whole went from surplus in the pre-crisis period to being in deficit over the last five years.



**Table 13: Sectoral financial balances as a share of nominal GDP, in per cent, average values for the trade cycle, for Turkey, Poland and Hungary**

	<b>Turkey</b> <i>2009-2014</i>	<b>Poland</b> <i>2009-2014</i>	<b>Hungary</b> <i>2009-2014</i>
<b>External sector</b>	6.3	1.7	-4.4
<b>Public sector</b>	-2.6	-5.5	-3.7
<b>Corporate sector</b>	-3.8*	4.9	4.5
<b>Private household sector</b>		-1.0	3.6

\* *Financial balance of the private sector (corporate and private household sectors)*

*Source: European Commission (2015), own calculations.*

**Table 14: Real GDP growth, in per cent, and growth contributions, in percentage points, average values for the trade cycle, for Turkey, Poland and Hungary**

	<b>Turkey</b> <i>2009-2014</i>	<b>Poland</b> <i>2009-2014</i>	<b>Hungary</b> <i>2009-2014</i>
<b>Real GDP growth</b>	3.7	2.9	-0.1
<b><i>Contribution to the increase of GDP of:</i></b>			
<b>Private consumption</b>	2.1	1.4	-0.8
<b>Public consumption</b>	0.7	0.3	0.1
<b>Investment</b>	0.8	0.4	-0.3
<b>Balance of goods and services</b>	0.0	1.0	1.2

*Source: European Commission (2015), own calculations.*

In terms of growth contributions (Table 14), private consumption in Turkey and Poland has continued to be the main driver of growth, whereas Hungary now exhibits a major growth contribution from the balance of goods and services, mainly because of weak domestic demand and thus imports. The importance of net exports as a growth contributor features prominently in the case of Poland as well.

The transmission of the crisis to Turkey occurred via three main channels, namely an expectations channel, the trade channel and the financial channel. First, the expectations channel was activated, which meant a substantial deterioration in consumer and investor confidence, particularly in early to mid-2008, ultimately resulting in a fall in investment and then consumption expenditure. Secondly, the trade channel of crisis transmission became active, and Turkey experienced a strong and negative export shock. The cumulative effects were a massive drop in production. Finally, the crisis also affected Turkey through the financial channel, in the form of a sudden stop in capital inflows which had a contractive effect on credit conditions. However, the decline in financial inflows was relatively short

lived (registered only in 2 quarters). The combination of these factors, however, resulted in Turkey experiencing one of its worst economic downturns since World War II (Bahce et al. 2015). However, unlike during previous crises, Turkish financial markets did not collapse. This could be attributed to the fact that the financial shock was small and short in duration. The government and the central bank attempted to take significant policy measures in response to the crisis. However, these measures were either relatively late or/and not very effective. A first fiscal package was announced in March 2009, with tax cuts targeted at stabilising demand. Employment measures were introduced to alleviate the impact on unemployment and a range of measures targeting the attraction of capital inflows were adopted. Interestingly, after the initial problem of capital outflows, later in the crisis the concern shifted to destabilising inflows, caused by the enormous liquidity injection of major developed countries' central banks (Bahce et al. 2015).

Poland has been affected only mildly by the crisis and shows signs of a healthy recovery based on increasing private consumption and an improvement in the trade balance. Why has the Polish economy coped with an impact of the global crisis better than any other EU country? Financialisation did not play an important role in Poland, and despite a housing bubble developing in the years leading up to the crisis, housing prices did not increase as much as in Hungary or the Baltic countries, meaning the end of the bubble did not have a significant impact on the Polish financial sector or the performance of individual banks. Dymarski (2015) specified several factors, which jointly may provide an explanation. Firstly, Poland, like Turkey and Hungary, has retained its own currency, allowing the Polish central bank more freedom to pursue internal policy objectives. Secondly, in the years leading up to the crisis, the floating exchange rate helped to prevent the economy from getting into a deep current account deficit. Thirdly, unlike in Turkey and in Hungary, the majority of Poland's domestic debt has been denominated in national currency, thus reducing the country's vulnerability to the crisis. Moreover, the Polish financial system is mainly bank-based, with the banking sector being the least concentrated among the Central and Eastern European (CEE) countries. It is important to underline here that the State exercised effective supervision over the banking sector before the crisis; for instance, to curb the accelerating growth in mortgage and consumer loans, and foreign currency loans. In 2006, the Polish Financial Supervision Authority issued the *Recommendation S* on good practices related to credit exposures, enforced by *Recommendation S II* of 2008, which required banks to apply stricter credit underwriting standards and to disclose foreign currency risks when providing foreign currency loans (Dymarski 2015). As a result, in 2008 new foreign currency loans in Poland accounted for only 25 percent of total new loans (in Hungary, for instance, they were around 55%).

The crisis hit Hungary very hard, but this was not due to the problems in the domestic financial sector, but rather had to do with the fact that Hungary was extremely dependent on, and exposed to, large external public and private debt in foreign currency (Badics et al. 2015). In addition, due to its high accumulation of private debt and public external debt, Hungary needed to request IMF financial assistance in 2008. Austerity policies that were attached to the IMF assistance and which Hungary was obliged to implement prolonged the recession and turned Hungary from a domestic demand-led economy towards and export-led mercantilist economy, building up current account surpluses since 2010 (Figure A12 in Appendix).

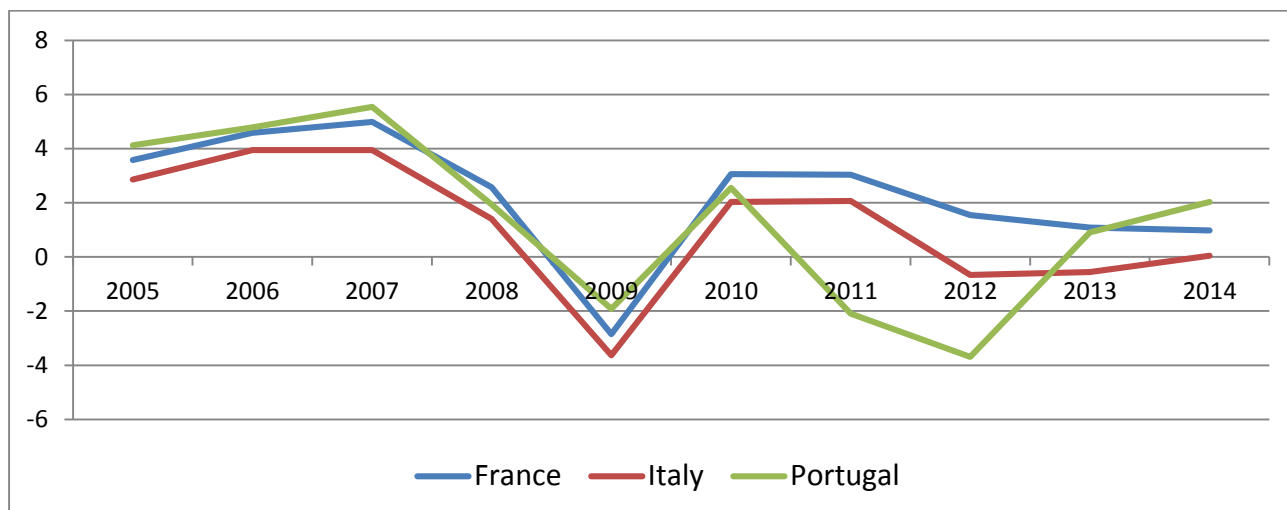
Overall, the crisis transmission experienced by this group of countries was mainly via financial flows – that is via the balance of payments channel – although this channel only affected the countries briefly. Therefore, the financial contagion channel was dominant here as it was for the debt-led private demand boom countries. In the latter group, however, we had Spain and Greece where this transmission was rendered more severe and translated into the euro crisis, which is a specific crisis due to the EMU institutional framework. In the non-EMU countries of the catching up domestic demand-led type, however, the countries experienced to a certain extent a balance of payments crisis. The economic crisis developed then as a result of contracting domestic demand, which became more severe when combined with weak (Turkey) or adverse (Hungary) government responses.

#### **4.3.2 The mature domestic demand-led countries**

France, Italy and Portugal were hit by the global financial crisis and experienced a recession in 2009 (Figure 4). After a brief recovery in 2010, both Portugal and Italy fell again into a recession, in 2011 and 2012, respectively. Of this country group, Portugal was most affected by the euro crisis, whereas the crisis in France was least severe. In the aftermath of the crises, none of the three countries has returned to the pre-crisis growth rates.

Whereas Italy and in particular Portugal managed to reduce their current account deficits since the crisis, France saw an increase in the financial balance of the external sector (Table 15). In all three countries government deficits increased relative to the previous trade cycle. Furthermore, private households in both Portugal and France increased their net saving. Expectedly, net exports were the main driver of growth in the case of Italy and Portugal, although they were not sufficient enough to offset the negative contributions of domestic demand components (Table 16). Of the three countries, France was the only one with a positive real GDP growth averaged over the last six years, to which the main contributor was public consumption.

**Figure 4: Real GDP growth in France, Italy and Portugal, 2005-2014, in per cent**



Source: European Commission (2015), own calculations.

**Table 15: Sectoral financial balances as a share of nominal GDP, in per cent, average values for the trade cycle, for France, Italy and Portugal**

	France 2009-2014	Italy 2009-2014	Portugal 2009-2014
External sector	2.0	1.0	3.4
Public sector	-5.4	-3.6	-7.3
Corporate sector	-0.7	1.2	-0.4
Private household sector	4.1	1.5	4.3

Source: European Commission (2015), own calculations.

**Table 16: Real GDP growth, in per cent, and growth contributions, in percentage points, average values for the trade cycle, for France, Italy and Portugal**

	France 2009-2014	Italy 2009-2014	Portugal 2009-2014
Real GDP growth	0.3	-1.3	-1.1
<b>Contribution to the increase of GDP of:</b>			
Private consumption	0.2	-0.7	-0.9
Public consumption	0.4	-0.1	-0.3
Investment	-0.3	-0.9	-1.3
Balance of goods and services	0.0	0.6	1.6

Source: European Commission (2015), own calculations.

The crisis affected the French economy via two channels: Firstly, via a consumption and investment demand slowdown, due to the international financial crisis and increased uncertainty (expectations channel), and secondly, via a decline in foreign demand due to problems abroad which worsened the French trade balance (trade channel) (Cornilleau and Creel 2014). With some help from government stabilisation policy, the French banking system weathered the crisis; there were no major bankruptcies since 2008 nor did a credit crunch develop. Additionally, France was negatively affected by the austerity measures implemented since the outbreak of the euro crisis while trying to meet the European Stability and Growth Pact targets.

As in France, the Italian banking system did not particularly suffer during the crisis. This was largely due to its low leverage ratios by international comparison. However, the stability of Italian banks has been undermined in the course of the crisis, because of the negative feedback loops between fiscal sustainability concerns, banks' exposure to the Italian sovereign bonds and weakening real economic activity. High uncertainty and deterioration in expectations have caused Italian debtors to suffer from high interest rates in international comparison since then. The Italian recovery has suffered from fiscal austerity measures as has the French; in the Italian case this was due in particular to tax hikes (Gabbi et al. 2014).

Portugal's banking sector was not affected by the crisis since it was not involved in buying subprime financial products from the USA, and it was also not involved in excessive lending to support bubbles, because Portugal did not have a house price boom. The global financial crisis affected Portugal's economy through the uncertainty and expectations channel, via increasing perceived credit risk which pushed up interest rates and thus adversely affected consumption and investment (Lagoa et al. 2014). Ultimately, the problem in Portugal was the high public debt, with debt-to-GDP and deficit-to-GDP ratios worsening after the government's attempt to stabilise the economy, which finally resulted in the need for Portugal to ask for assistance from the IMF and the European Financial Stability Facility (EFSF) in 2010. Conditionality of the rescue packages which included austerity policies then worsened the crisis in Portugal.

In sum, France and Italy have both been negatively affected by austerity measures implemented since the outbreak of the crisis. Portugal was hit even harder and earlier, because it experienced the strongest financial market pressures among the countries within the group. Also, in terms of economic policies, Portugal, due to the fact it had requested a bail-out suffered from more extensive and harsher austerity measures. What we can conclude for the group of advanced, mature domestic demand-led economies is that when the global financial crisis broke out, they were primarily affected through rising borrowing costs and rising uncertainty. However, given the low exposure of domestic banks

to sub-prime financial products from the USA, no major or prolonged problems in the banking sector occurred. It was with the euro crisis that a slowdown in private consumption and investment became more marked – largely a result of ‘soft’ (in cases of France and Italy) or severe (in case of Portugal) austerity policies. All three countries have been growing weakly since.

France, which was least affected by the euro crisis, has remained a domestic demand-led economy even in the aftermath of the crises. In Portugal and Italy, however, a shift towards export-led mercantilism can be observed, driven by the collapse of imports due to austerity policies (Figures A13-A15 in Appendix). Italy has been building current account surpluses since 2013, accompanied by private sector surpluses and government deficits, and the situation is similar in Portugal, which saw a sharp reduction in current account deficits and as of 2013 has a roughly balanced current account.

#### **4.4 Current account (im)balances before and after the crisis**

Before concluding, we briefly look at the global development of current account (im)balances since the crises. Figure 5 shows current account balances for all the countries we considered in this paper, and it also includes China which of course is one of the biggest contributors to global current account surpluses. Several issues should be pointed out.

Firstly, all of the export-led mercantilist countries of the pre-crisis period have remained current account surplus countries. However, the surpluses of Japan have significantly declined and those of Sweden have remained roughly constant, whereas the German surpluses have even increased. Therefore, while Germany has continued with the radical export-led mercantilist regime, Japan and Sweden seem to have turned towards a weakly export-led regime with current account surpluses, but negative growth contributions from falling net exports.

Secondly, a distinction should be made between those debt-led private demand boom economies, and also those domestic demand-led economies of the pre-crisis period with respect to whether or not they have monetary policy autonomy. The USA, the UK and South Africa have largely remained current account deficit countries. However, it is now the government, rather than the private sector, that is running deficits, indicating that these countries have moved towards a domestic-demand led configuration. Unlike these three countries, the six EMU countries (Spain, Greece, Estonia, France, Italy, Portugal) suffered from the euro crisis and the lack of a proper lender of last resort for the government, due to the lack of an own autonomous central bank acting as a lender of last resort to the

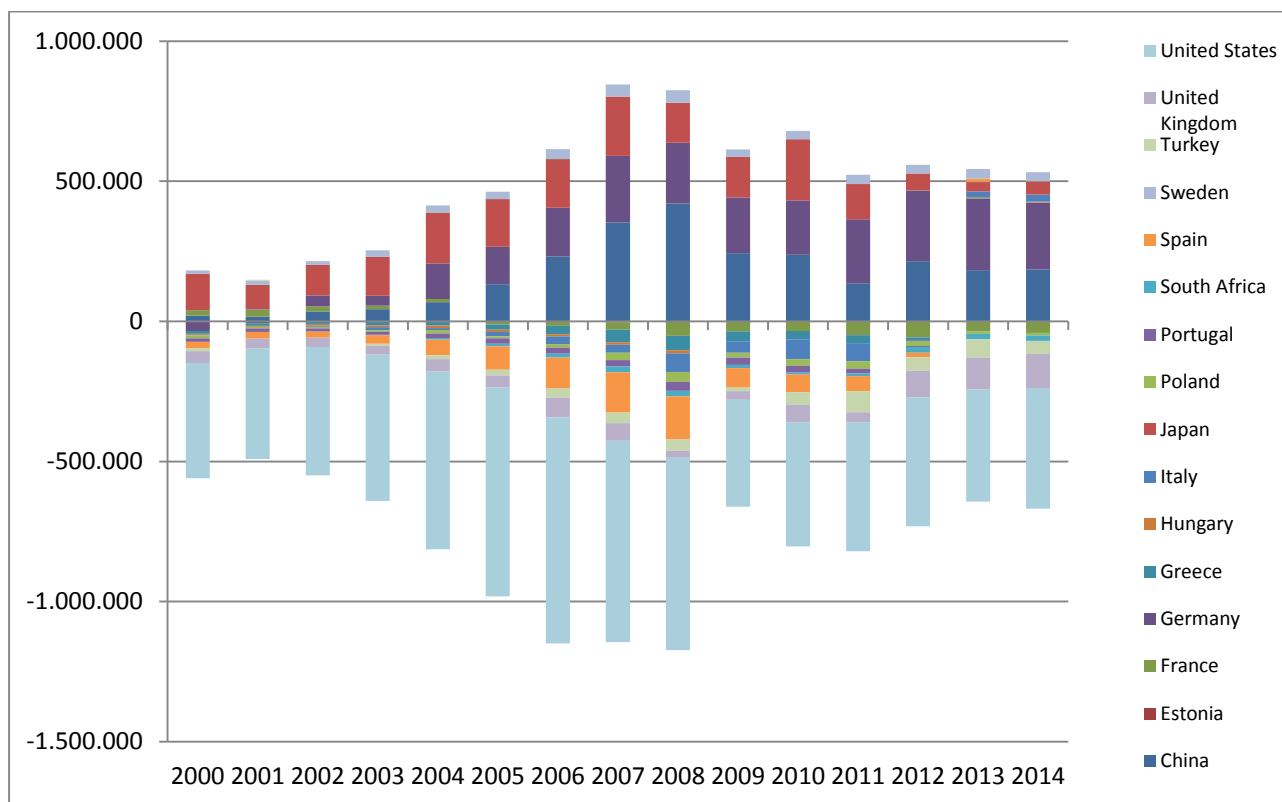
government and a proper substitution at the Euro area level.<sup>7</sup> Additionally, they were subject to more or less extensive austerity measures, and policies to increase competitiveness and stimulate exports (internal devaluation). In particular, in those countries where such measures were more extensively adopted, namely in Greece, Spain, and Portugal which received financial assistance in exchange for reforms, but also in the case of Italy, we can observe the shift towards export-led mercantilism, mainly through dampening domestic demand and imports. Spain and Italy have registered current account surpluses since 2013, while Portugal sharply reduced its deficits and its current account has been roughly balanced since 2013. Greece saw a substantial reduction in current account deficits related to a sharp drop in imports, but continues to register current account deficits, although on a much smaller scale. France, on the other hand, is the only country of the group that remained domestic demand-led, while Estonia – coming from a group of debt-led private demand boom countries – has now become domestic demand-led. Estonia initially shifted to having current account surpluses in 2009 and 2010 but has since registered current account deficits, accompanied by positive financial balances of the private sector and government deficits (Figure A4 in Appendix).

Thirdly, regarding the group of catching-up domestic demand-led economies, we can see that both Turkey and Poland continued registering current account deficits, however these were accompanied by negative financial balances of the private household sector (Poland) or the private sector as a whole (Turkey). We can say that these countries now show characteristics of a debt-led private demand boom type of development (Figures A10-A11 in Appendix). In the case of Hungary the opposite has occurred, namely the country shifted towards current account surpluses in 2010 and has registered increasing surpluses ever since. This development has been accompanied by positive financial balances of the private household and of the corporate sectors, thus turning Hungary towards an export-led mercantilist economy.

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<sup>7</sup> Estonia however joined the Euro area only in 2011.

**Figure 5: Current account balance, selected countries, 2000-2014, in billions of US dollars**



Source: IMF (2015), own illustration

## 5. Conclusions

In this paper we have firstly outlined three types of regimes under the conditions of financialisation, namely a debt-led private demand boom, an export-led mercantilist and a domestic demand-led regime. We have then taken a look at the sectoral financial balances of the main macroeconomic sectors and at the growth contributions of the demand aggregates of 15 countries, focusing in particular on the trade cycle before the crises. This has allowed us to cluster these countries according to the typology of demand regimes. We found that a debt-led private demand boom regime was experienced by the USA, the UK, Spain, Estonia, Greece, and South Africa, while an export-led mercantilist type could be found for Germany, Japan, and Sweden. These two types of regime contain internal contradictions, with respect to household debt and with respect to foreign debt of the counterpart current account deficit countries, which may finally undermine the sustainability of these regimes and lead to financial and economic crises. We also found that France, Hungary, Italy, Poland, Portugal, and Turkey, all exhibit indicators of a domestic demand-led type of development.



In the second part of the paper we focused on the period following the outbreak of the crises and, by considering transmission mechanisms and the main obstacles to recovery, we analysed how countries in each of these clusters were affected. Countries belonging to the export-led mercantilist group, in particular Germany and Sweden, recovered quickly because their domestic balance sheets were largely in order, the financial crisis was contained by immediate government responses, and these countries also benefitted from the recovery of world economy. In the post-crisis period it is, however, only Germany which has effectively remained an export-led economy. But such a “beggar thy neighbor” strategy cannot be considered as a role model for the world economy, because it requires counterpart current account deficit countries. Japan and Sweden have become weakly export-led, with continuing (high) current account surpluses, but on a declining trend. Average growth contributions of net exports in the crisis/post-crisis period were negative.

Debt-led private demand boom, as well as domestic demand-led, economies with monetary policy autonomy were successful in stabilising the financial sector and the economy by government deficits. However, they have had lower growth rates and to a large extent have been relying on public sector deficits. For the debt-led private demand boom countries in this group, the US, the UK, and South Africa, there are some indications of a shift towards domestic demand-led growth accompanied by an improvement of the financial balances of the private sector. For the catching-up domestic demand-led countries in this group, consisting of Turkey, Hungary and Poland, we observed a rather quick recovery of financial flows. However, such economies – with their own but not leading currencies – should be wary of accumulating private and/or public debt in foreign currency during a boom. In the debt-led private demand boom, as well as in the domestic demand-led, economies without monetary policy autonomy, on the other hand, macroeconomic stabilisation was terminated first by financial market pressure and then by fiscal austerity. This refers to six EMU countries (Estonia, France, Greece, Italy, Portugal, and Spain) which have been showing a movement towards export-led mercantilist economies, mainly through a contraction of domestic demand and imports, in the crisis/post-crisis period. However, it remains to be seen whether this regime can be maintained when domestic demand will rise again.

What conclusions can we draw from these developments for the perspectives of the world economy? The tendency towards balanced or surplus current accounts in several countries seems to be based to a large extent on the contraction of domestic demand and imports in the former current account deficit countries, and thus on ‘stagnation policies’ (Steindl 1979). This has a depressing effect on global economic activity. And to the extent that export-led strategies will be maintained in the medium run, they face a fallacy of composition problem. Therefore, if pre-crisis export-led economies continue to stick with their model and some previously debt-led private demand boom and domestic demand-led economies turn

towards export-led strategies, counterpart current account deficit countries are required by definition. Currently it seems that these will either be some mature economies, which have now become domestic demand-led and which are relying on sustained public sector deficits, as well as some catching-up economies relying on a combination of public sector and private sector deficits and the counterpart capital inflows.

Of course, this constellation suffers from two risks: First, high government deficits and debt in mature domestic demand-led economies as stabilisers of national and global demand may be reversed for political reasons (debt ceilings, debt brakes), although there may be no risks of over-indebtedness of governments, if debt can be issued in the own currency. Second, capital inflows into catching up domestic demand-led economies may be unstable and face 'sudden stops' because of changes in expectations and/or over-indebtedness in foreign currency. Therefore, if this global constellation cannot be overcome by a more balanced development based on expansionary contributions by the current account surplus countries, economic policy making in two areas would have to be re-thought and re-assessed. First, the role of public deficits and debt in order to provide global demand at a reasonable growth rate would have to be accepted, in particular for governments being able to go into debt into their own currency. Second, the stable recycling of current account surpluses towards the high-growth catching-up countries financing their current account deficits would have to be provided in order to avoid unsustainable booms, 'sudden stops' and capital flight.

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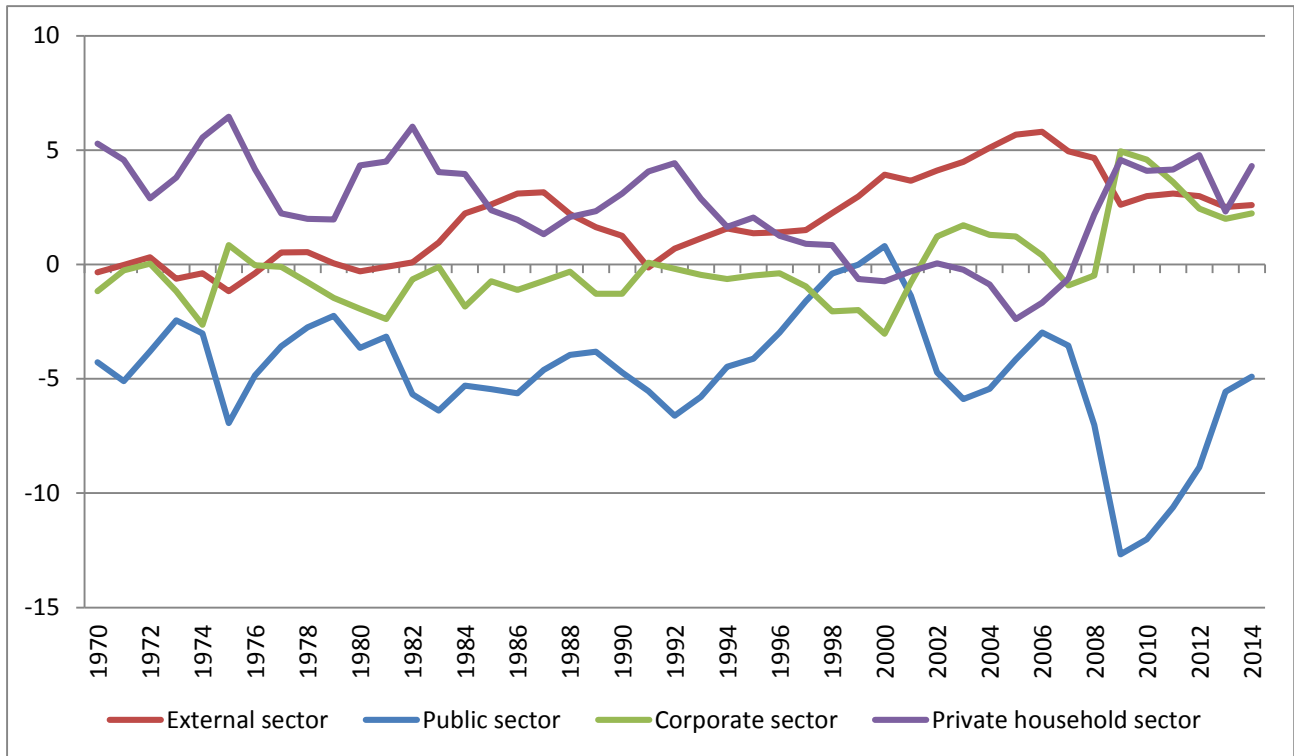
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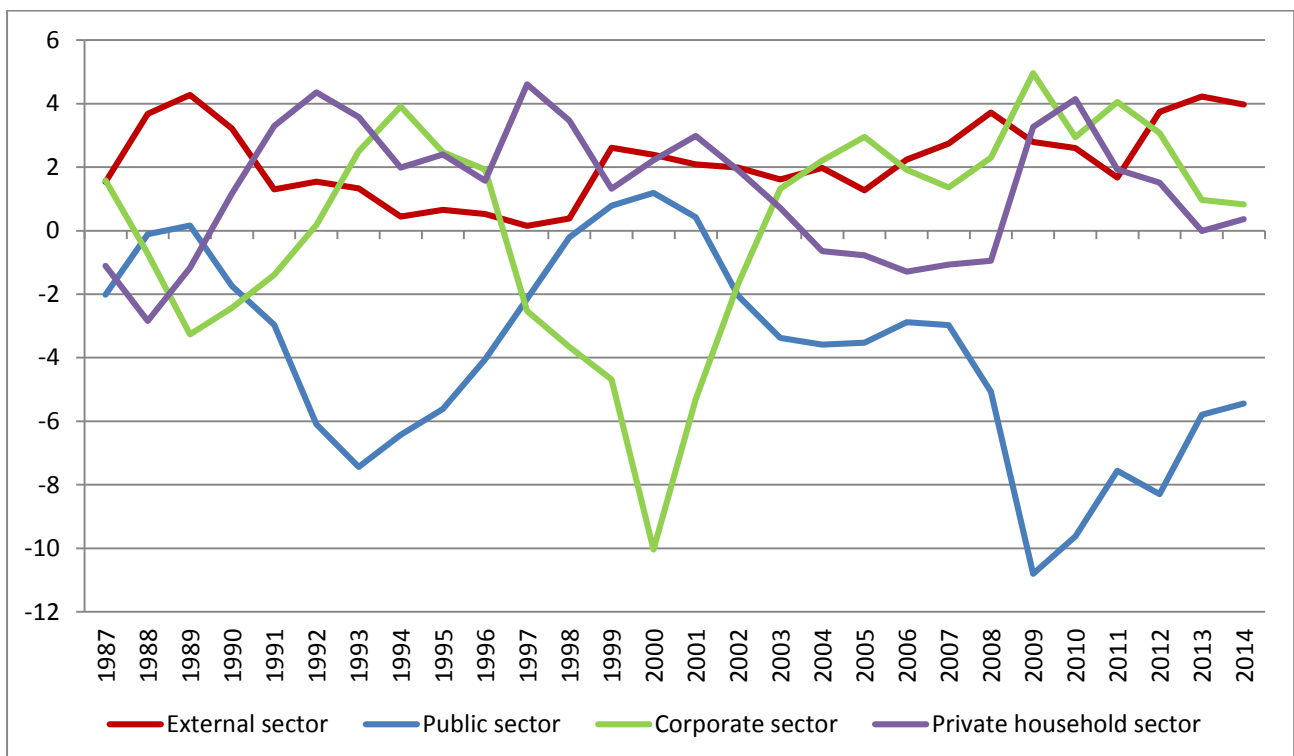
## Appendix

**Figure A1: Sectoral financial balances as a percentage share of nominal GDP, the USA, 1970-2014**



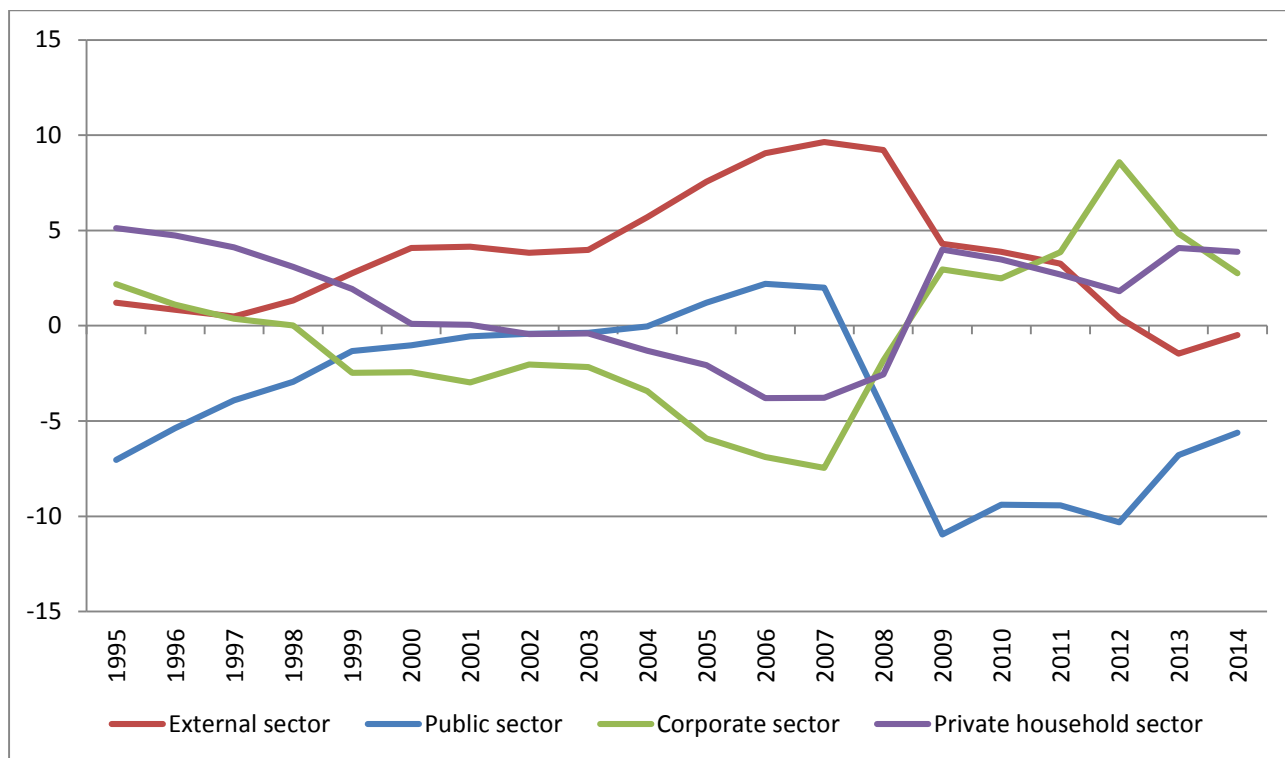
Source: European Commission (2015), own calculations.

**Figure A2: Sectoral financial balances as a percentage share of nominal GDP, the UK, 1987-2014**



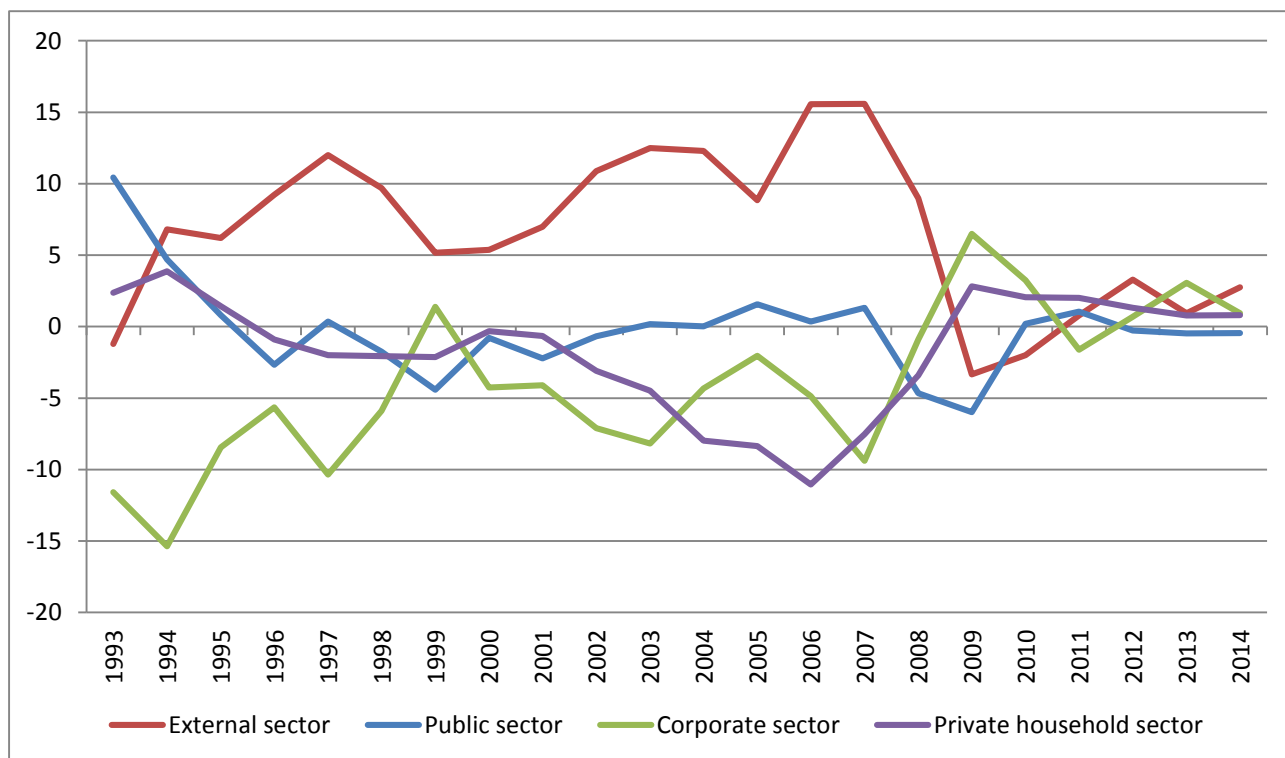
Source: European Commission (2015), own calculations.

**Figure A3: Sectoral financial balances as a percentage share of nominal GDP, Spain, 1995-2014**



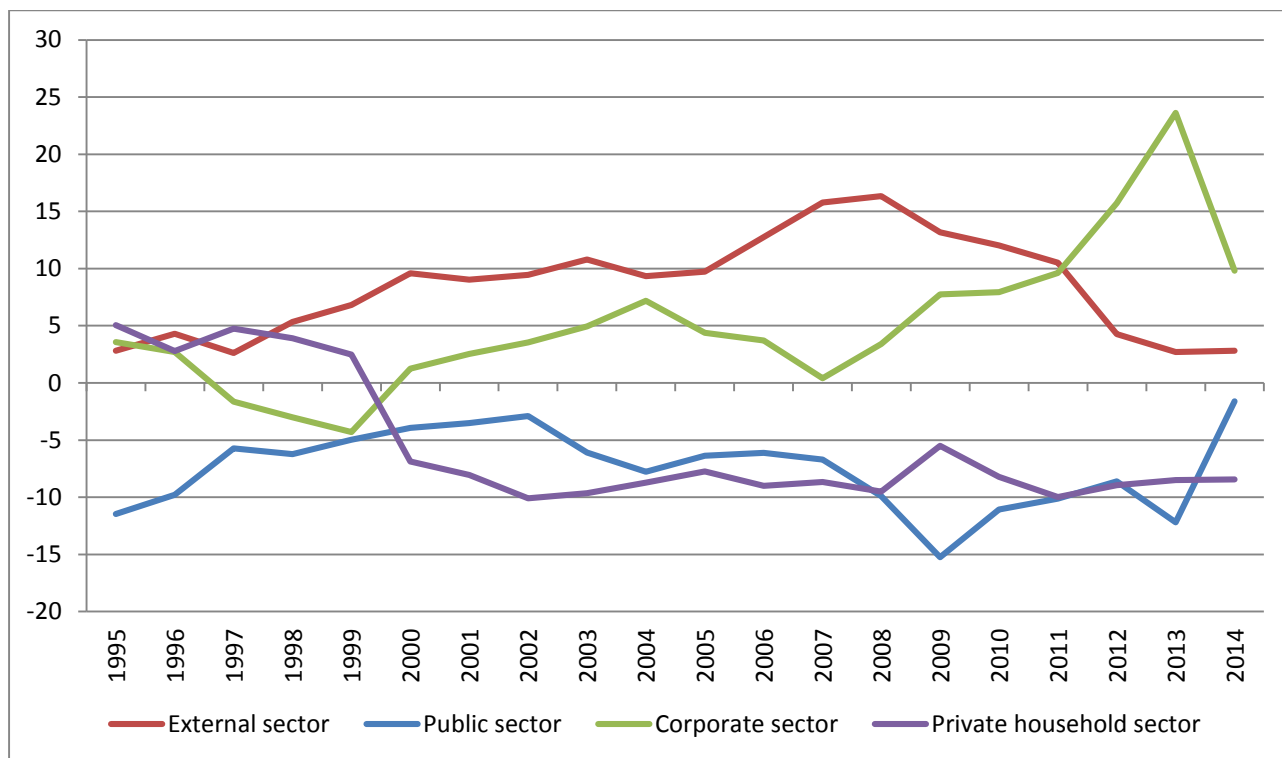
Source: European Commission (2015), own calculations.

**Figure A4: Sectoral financial balances as a percentage share of nominal GDP, Estonia, 1993-2014**



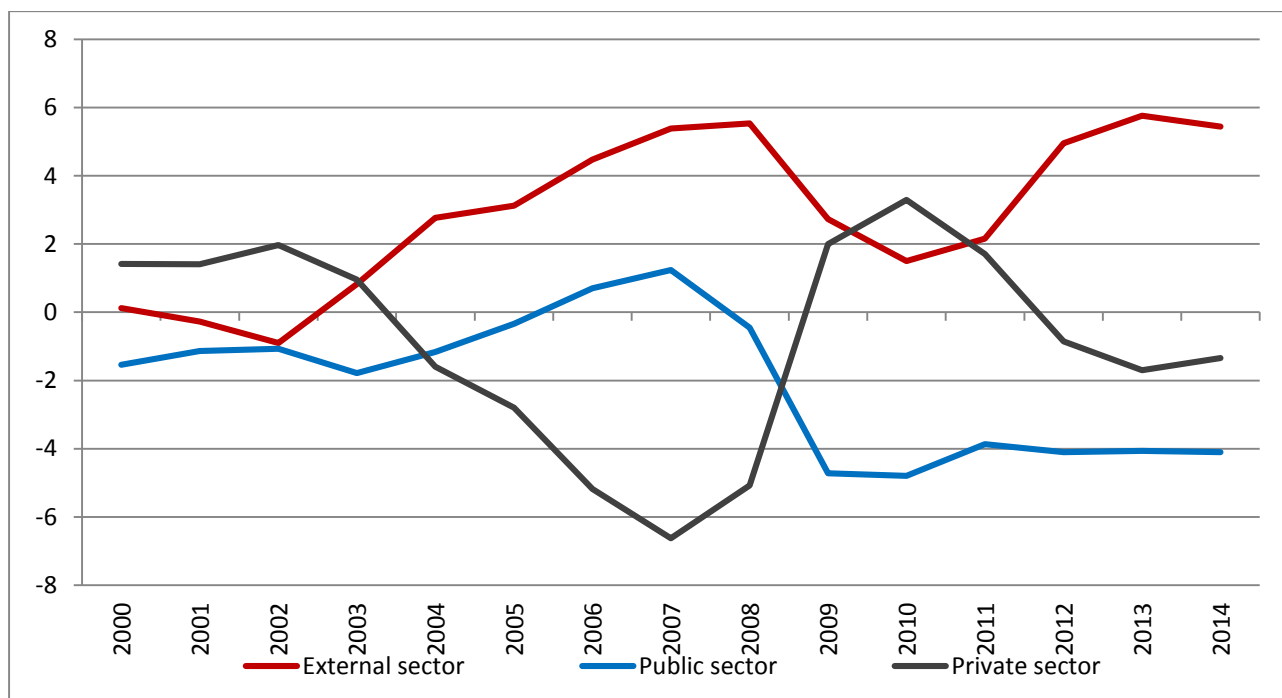
Source: European Commission (2015), own calculations.

**Figure A5: Sectoral financial balances as a percentage share of nominal GDP, Greece, 1995-2014**



Source: European Commission (2015), own calculations.

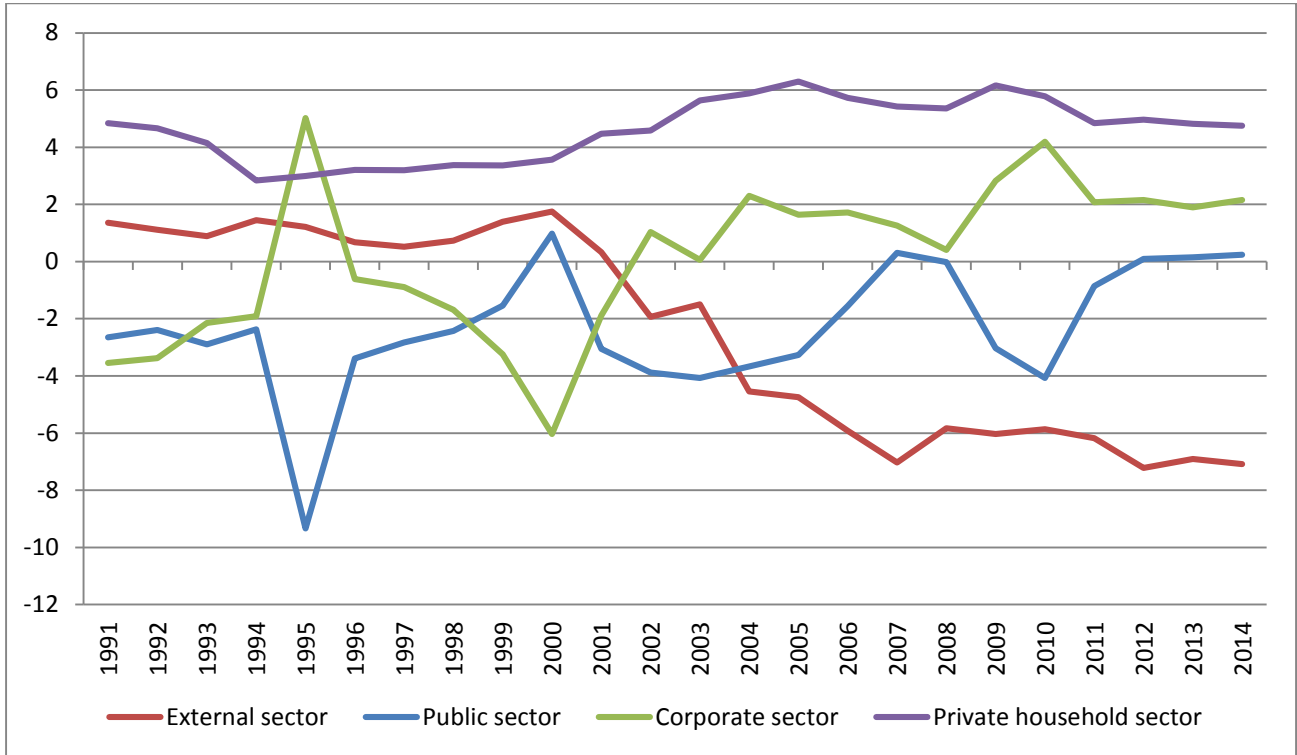
**Figure A6: Sectoral financial balances as a percentage share of nominal GDP, South Africa, 2000-2014**



Source: International Monetary Fund (April 2015), own calculations.

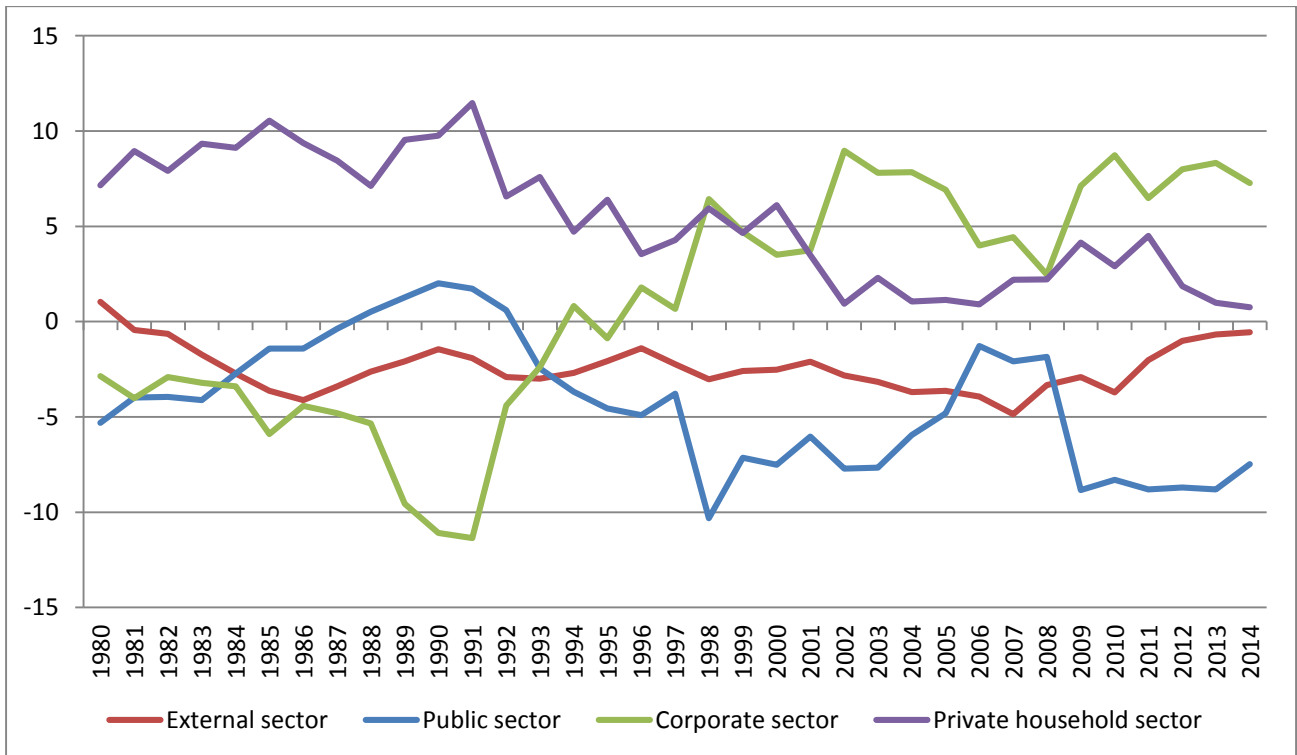


**Figure A7: Sectoral financial balances as a percentage share of nominal GDP, Germany, 1991-2014**



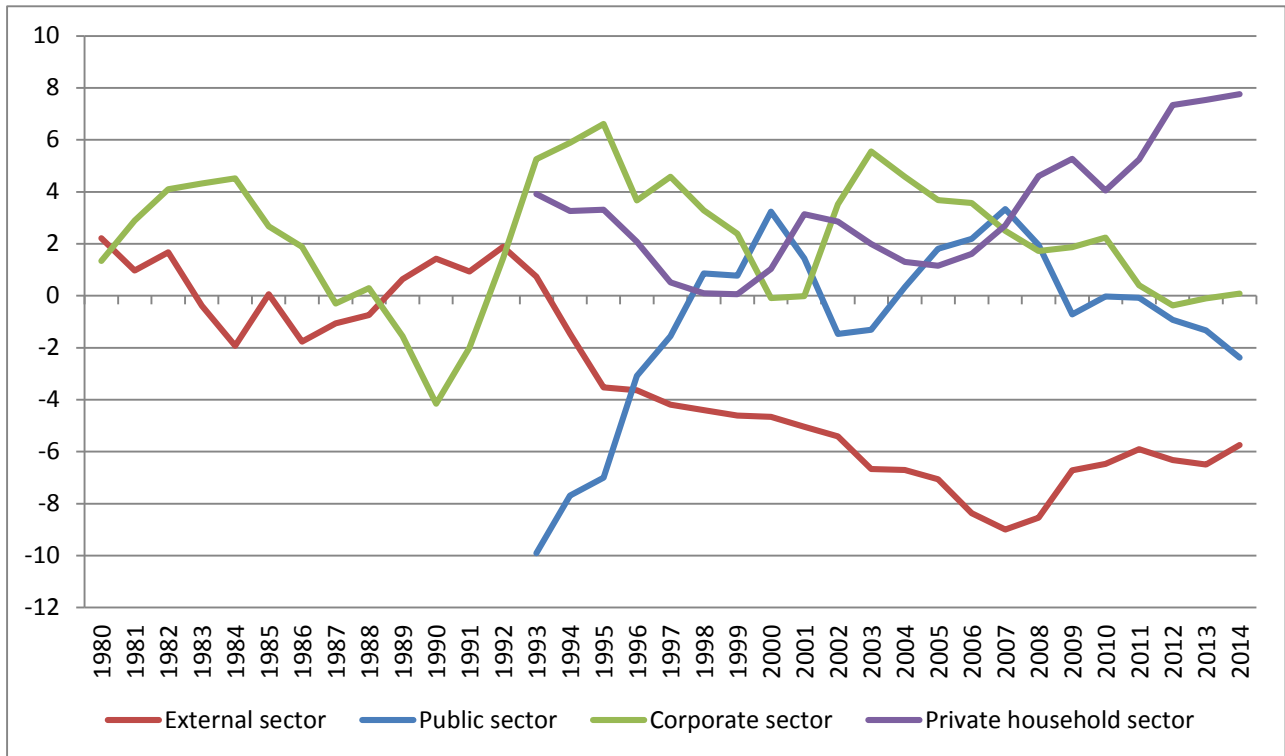
Source: European Commission (2015), own calculations.

**Figure A8: Sectoral financial balances as a percentage share of nominal GDP, Japan, 1980-2014**



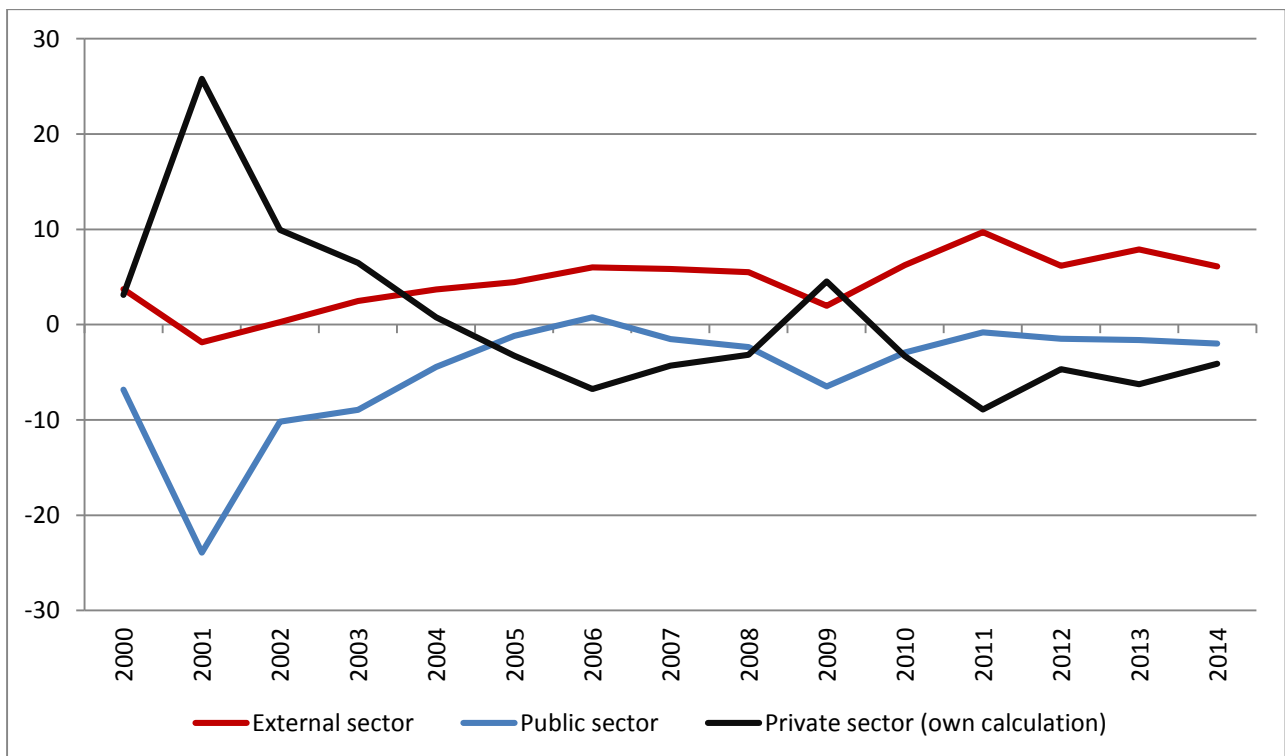
Source: European Commission (2015), own calculations.

**Figure A9: Sectoral financial balances as a percentage share of nominal GDP, Sweden, 1980-2014**



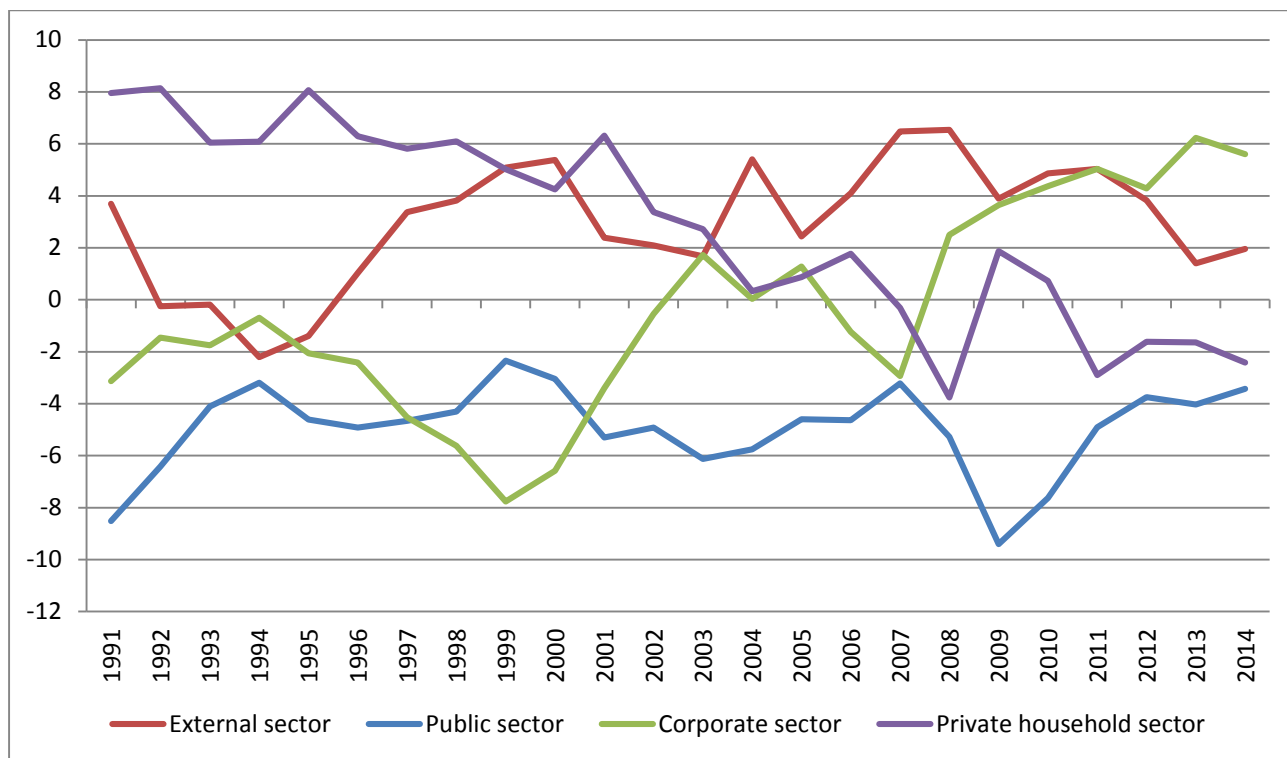
Source: European Commission (2015), own calculations.

**Figure A10: Sectoral financial balances as a percentage share of nominal GDP, Turkey, 2000-2014**



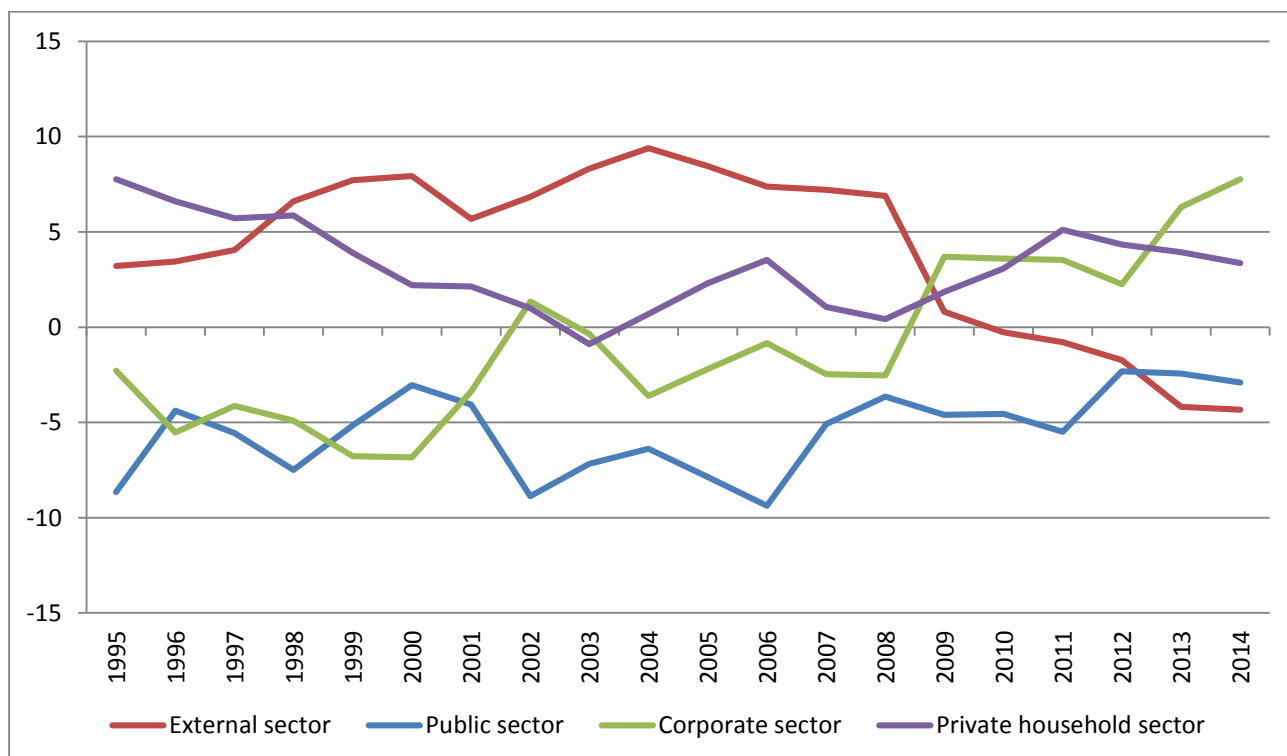
Source: European Commission (2015), own calculations.

**Figure A11: Sectoral financial balances as a percentage share of nominal GDP, Poland, 1991-2014**



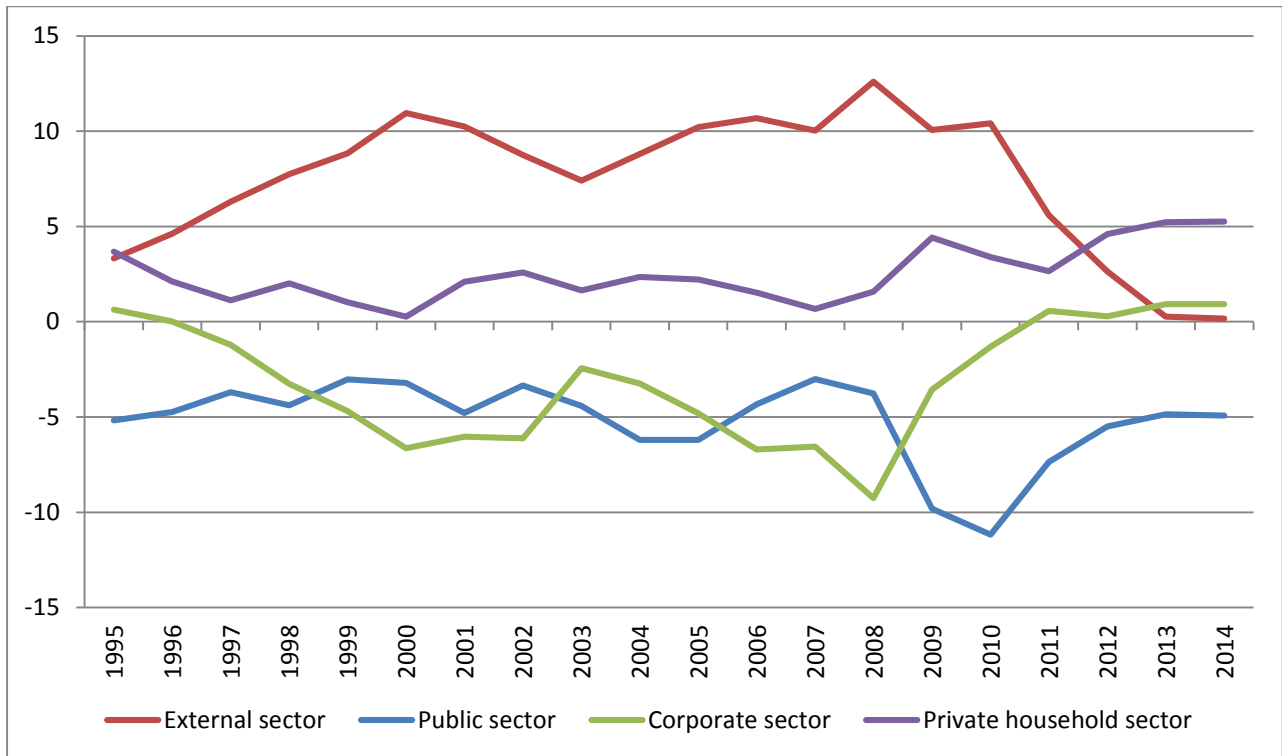
Source: European Commission (2015), own calculations.

**Figure A12: Sectoral financial balances as a percentage share of nominal GDP, Hungary, 1995-2014**



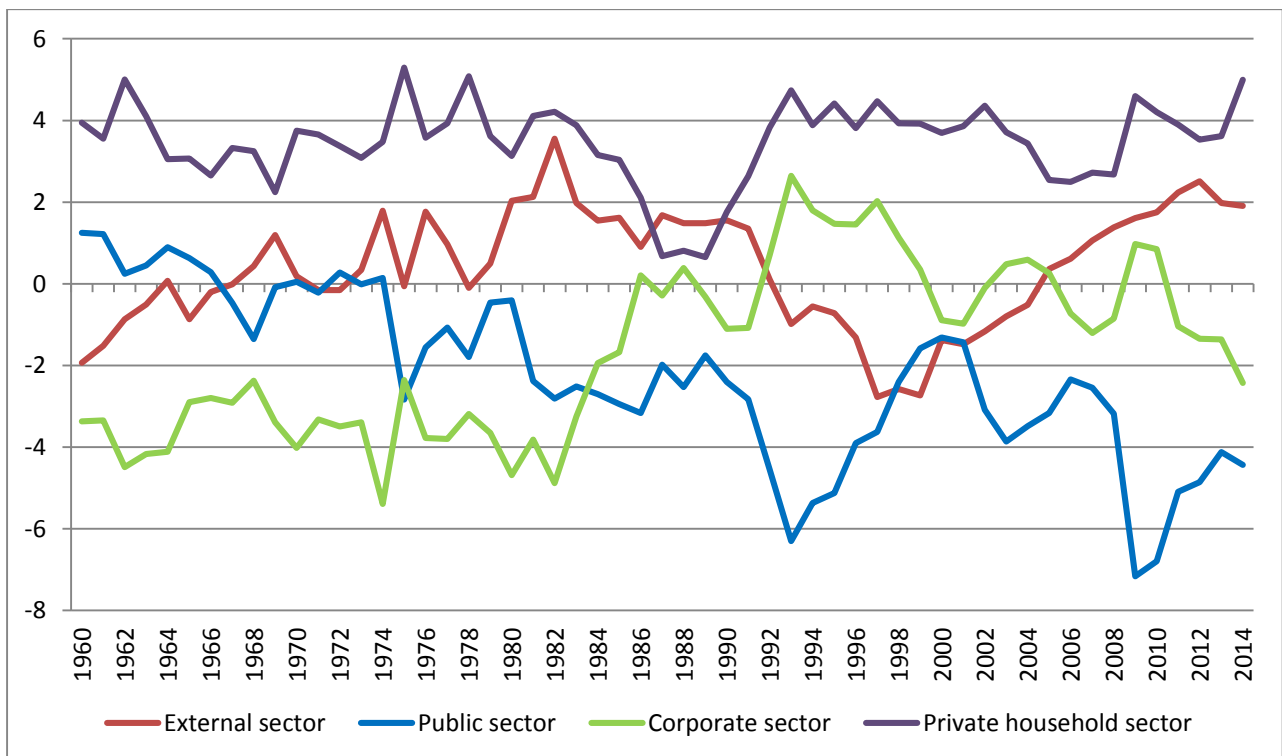
Source: European Commission (2015), own calculations.

**Figure A13: Sectoral financial balances as a percentage share of nominal GDP, Portugal, 1995-2014**



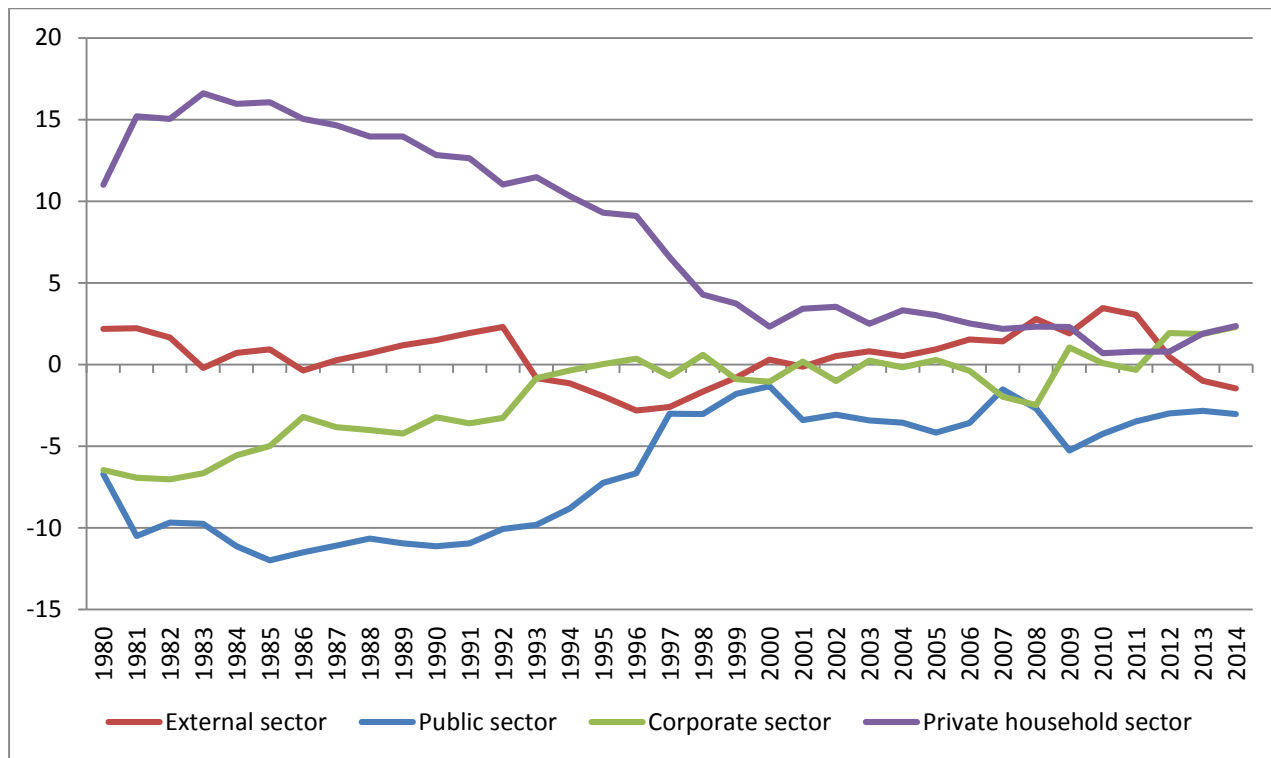
Source: European Commission (2015), own calculations.

**Figure A14: Sectoral financial balances as a percentage share of nominal GDP, France, 1960-2014**



Source: European Commission (2015), own calculations.

**Figure A15: Sectoral financial balances as a percentage share of nominal GDP, Italy, 1980-2014**



Source: European Commission (2015), own calculations.

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