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Financialisation and tendencies towards stagnation: the role of macroeconomic regime changes in the course of and after the financial and economic crisis 2007-9

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Working Paper, No. 90/2017

Financialisation and tendencies towards stagnation: the role of macroeconomic regime changes in the course of and after the financial and economic crisis 2007-9*

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Abstract

This paper argues that the re-emergence of stagnation tendencies in modern capitalism can be related to financialisation and its macroeconomic failures leading to the recent crises, and in particular to the macroeconomic responses towards the crisis and the respective regime shifts in mature capitalist economies. The focus of the paper is on the latter, and it examines the regime changes for six mature capitalist economies, the two liberal Anglo-Saxon economies of the US and the UK, a representative country from the Nordic welfare states, Sweden, the three important Eurozone countries France, Germany and Spain, as well as the core Eurozone (EA-12) as a whole. The concept of macroeconomic regimes under the conditions of financialisation is recapitulated, applied to the period before the crisis, and finally the regime changes during and after the crisis are examined. It is shown that a dominant tendency towards export-led mercantilism, in particular in the Eurozone and its main member countries, imposes an aggregation problem on the global economy and thus contributes to stagnation and rising global macroeconomic risks. Finally, short- and long-run alternative policies to deal with these problems are suggested.

Keywords: Financialisation, stagnation, macroeconomic regimes, policy alternatives

JEL codes: E02, E60, E61, F62, G38

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* This paper partly draws on the results of the project 'Financialisation, Economy, Society and Sustainable Development (FESSUD)', 2011-16. The FESSUD project received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 266800. The paper builds, in particular, on the outcomes of Work Package 3 of the FESSUD project 'Causes and Consequences of the Financial Crisis', which I coordinated (see Hein, 2015a, for a summary and the contributions in Hein et al., 2015a; 2016). Major parts of the current paper were written while I was a Visiting Research Professor at Sapienza University Rome in May 2017. I would like to thank the Sapienza University, and especially Claudio Sardoni, for the invitation and the hospitality. I am also indebted to Daniel Detzer for helpful comments and to Ryan Woodgate for excellent research assistance and proof reading. Of course, remaining errors are exclusively mine.

1. Introduction

The three decades before the recent financial and economic crises, which started as a financial crisis in 2007, became the world-wide Great Recession of 2008/2009 and then the euro crisis starting in 2010, have seen major changes in the financial sectors of developed and developing countries and their relationship with other sectors of the economy. Those changes included: a rapid development of new financial instruments triggered by national and international legal liberalisation and by the development of new communication technologies, an increase in the overall importance of financial factors for distribution, consumption, investment and growth, and an increasing instability potential arising from the increasing relevance and dominance of finance. These changes have been broadly summarised as financialisation by several authors. Epstein (2005, p. 3), for example, famously argued in an often quoted passage that 'financialization means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies'. As recently reviewed in papers by Sawyer (2013/2014) or van der Zwan (2014), and shown in books by Guttmann (2016), Hein (2012) and Palley (2013), among others, financialisation or finance-dominated capitalism – I am using the terminology interchangeably – can be analysed from several perspectives: the deregulation of the financial sector and the rise of shadow banking, the ascendance of shareholder dominance at the firm level, the financialisation of everyday life, and the emergence of several macroeconomic regimes under the dominance of finance, among others. Here I will focus on the latter perspective, and I will analyse the macroeconomic regimes under the dominance of finance, before and after the crisis.

As is well known, the recovery from the crises has been rather sluggish in historical comparison in several countries, and this has given rise to a renewed discussion about stagnation tendencies in mature capitalist economies. In the mainstream version of this debate, as represented by Summers's (2014, 2015) 'secular stagnation' hypothesis, distributional and macroeconomic policy or regime issues are ignored or only play a marginal role at best (Hein, 2016).[1] Post-Keynesian approaches, however, have focussed on income distribution, and in particular on the macroeconomic regime and on the stance of macroeconomic policy, when it comes to explaining stagnation tendencies after the crisis (Blecker, 2016; Cynamon and Fazzari, 2015; 2016; Hein, 2016; 2017; Palley, 2016; van Treeck, 2015).

Since we have analysed the effects of financialisation on income distribution before and after the crisis for a set of six developed OECD countries in detail in Hein et al. (2017a; 2017b), I will focus here on the macroeconomic regimes and on macroeconomic policies before and after the crises, building on our results with respect to distribution. This will allow me to show how the re-emergence of stagnation tendencies in modern capitalism can be related to financialisation and its macroeconomic failure leading to the recent crises, and in particular to the macroeconomic responses towards the crisis and the respective regime changes. Following Hein et al. (2017a; 2017b), I will focus on six developed OECD countries in

[1] See the contributions in Teulings and Baldwin (2014a), for example, and for a survey see Teulings and Baldwin (2014b).

this study.[2] Furthermore I will include the core Eurozone, the EA-12, in my analysis, because the transformation of its macroeconomic regime in the course of the euro crisis is a major contributor to current stagnation tendencies and it contains a major threat to global development and stability (Hein, 2017), as will also become clear below. The countries in this study comprise the two liberal Anglo-Saxon economies of the US and the UK, a representative country from the Nordic welfare states, Sweden, three relevant Eurozone countries, France, Germany and Spain, as well as the core Eurozone as a whole. In my analysis I build on what we have found in Dodig et al. (2016) in a similar approach on 15 countries, including the six countries in my analysis. However, here I will extend the time period to the most recent years, focus on the changes in distribution before and after the crisis, try to explicitly establish the link with stagnation tendencies, and more extensively draw the economic policy implications from this analysis.

The paper is organised as follows. In Section 2, I will recapitulate the macroeconomics of finance-dominated capitalism and derive the macroeconomic regimes for this type of capitalism. Section 3 will then apply this regime approach to the six mature capitalist countries and the Eurozone for the period before the crisis, 1999 until 2007, and then to the crisis and post-crisis period, 2008 until 2016. In this section I will also touch upon the stagnation effects of the crisis associated with the regime changes, as well as on the related global macroeconomic risks. Building on these results, Section 4 will then address the economic policy challenges and implications, both in the short run and in the long run, with respect to financial regulation, as well as to distribution and macroeconomic policies and to international policy coordination, in particular. Section 5 will summarise and conclude.

2. The concept of macroeconomic regimes under financialisation

From a macroeconomic perspective, finance-dominated capitalism or financialisaton can be described by four characteristics, as elaborated in Hein (2012; 2014, Chapter 10) and Hein and van Treeck (2010), for example.[3] The country-specific stances of these characteristics can then give rise to different macroeconomic regimes, as I will explain further below.

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 (2015b) 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

[2] I will thus not attempt to include emerging market or East European former transition economies into the analysis, as in Dodig et al. (2016) and Hein and Mundt (2012), because the focus in the current paper is on the role of regime changes for stagnation in mature capitalist economies.

[3] See also the summaries in Dodig et al. (2015), Hein and Dodig (2015) and Hein et al. (2015b).

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. In Hein et al. (2017a; 2017b) the relative importance of these factors has been analysed for the six countries which are included in the current study.

2. Regarding investment in the 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 the 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), Onaran et al. (2011), Davis (2013) and Tori and Onaran (2016; 2017) confirming a depressing effect of increasing shareholder value orientation on investment in capital stock, in particular for the US but also for other economies, like the UK, France and other Western European countries.

3. Regarding consumption, financialisation has generated an increasing potential for wealth-based and debt-financed consumption in some countries, thus creating the potential to compensate for the depressing demand effects of financialisation, which have been 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 was a significant determinant of consumption, particularly in the US, but also in countries like the UK, France, Italy, Japan and Canada (Boone and Girouard, 2002; Ludvigson and Steindl, 1999; Mehra, 2001; Onaran et al., 2011).

Furthermore, Barba and Pivetti (2009), Cynamon and Fazzari (2008; 2013), Guttmann 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. However, Kim (2013; 2016) in two recent studies on the US has found that although new credit to households will boost aggregate demand and output in the short run, the effects of household debt variables on output and growth turn negative in the long run. This indicates contradictory effects of the flow of new credit and the stock of debt on consumption.

4. The liberalisation of international capital markets and capital accounts has allowed for rising and persistent current account imbalances at the global, but also at the regional levels, in particular within the Eurozone, 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).

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, 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), I shall in this contribution distinguish three broad types of regimes: 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 or close to zero financial balances of the private household sectors, which means that major parts of the private household sector have negative saving rates out of current income, are hence running current deficits, financed by increasing their stock of debt and/or reducing their stock of assets. These private household deficits are accelerated by corporate deficits and thus we have deficits of the private domestic sectors as a whole. The external sector has positive financial balances, which means that debt-led private demand boom countries are usually running current account deficits. We have high growth contributions of private domestic demand, financed by credit to a considerable extent, and negative growth contributions of the balance of goods and services, driving the current account into deficit in the medium to long run. 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 also 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 regime is characterised by positive financial balances of the private household sector. Here it is usually the government and, to a certain degree, the corporate sector, running deficits. The external sector is roughly balanced, with only slight deficits or surpluses. The domestic demand-led countries are thus usually running balanced current accounts in the medium run. We have positive growth contributions of domestic demand without a clear dominance of private consumption, and of credit-financed consumption in particular, and slightly negative or positive growth contributions of the balance of goods and services on average over some medium run.

3. The regimes before and after the crisis

Assessing the regimes defined in the previous section I apply a qualitative analysis based on quantitative data. Since I would like to include the core Eurozone as a whole into this analysis, I have the pre-crisis time period from 1999 until 2007, on the one hand, and the crisis and post-crisis period from 2008 until 2016, on the other. Both time periods thus have eight years each, which, however, do not necessarily cover full trade cycles. But the time periods are symmetric regarding period length.

The demand and growth regimes can be distinguished by considering first the financial balances of the main macroeconomic sectors: the private sector, with the private household sector, the financial, and non-financial corporate sectors as sub-sectors; the government sector; and the external sector. Second, the growth contributions of the main demand aggregates are of interest. These are the growth contributions of private consumption, public consumption, as well as private and public investment, which sum up to the growth contribution of domestic demand, and then the growth contribution of the balance of goods and services, i.e. of net exports. On the one hand, this provides some information about the main drivers of growth, and, on the other hand, on how demand is financed. The sectoral financial balances of a country should sum up to zero, apart from statistical discrepancies, because a positive financial balance of one sector needs a respective negative financial balance of another sector – a creditor needs a debtor and vice versa. And the growth contributions of the demand aggregates should sum up to real GDP growth of the respective country.

Table 1: Distribution trends for selected OECD countries before and after the financial and economic crisis 2007-9								
			US	**UK**	**Spain**	**Ger-many**	**Swe-den**	**France**
Distribution trends	Adjusted wage share	Before	–	0	–	–	–	–
		After	–	–	–	0	0	+
	Top income share	Before	+	+	+	+	+	+
		After	+	–	–	?	0	0
	Gini coefficients	Before	+	+	0	+	+	0
		After	+	0	+	+	0	–

Notes: + tendency to increase, – tendency to decrease, 0 no tendency, ? no data
Before: early 1990s until the crisis 2007-9, After: after the crisis 2007-9
Source: Hein et al. (2017a, p. 49)

In the pre-crisis period from 1999 until 2007, the US, the UK and Spain were dominated by the debt-led private demand boom regime. In this period these countries were faced with rising inequality, i.e. falling wage shares in the US and Spain, but a constant wage share in the UK, rising top income shares in all three countries and rising Gini coefficients for market and disposable household income in the US and the UK, but constant household or personal income inequality measured by these indices in Spain (Table 1). In the pre-crisis period these countries were characterised by negative financial balances of their domestic private sectors and negative or, in the UK, close to zero financial balances of the private household sectors, in particular (Table 2). The corporate sectors were in deficit, too. The external sectors were the surplus sectors, and the countries following the debt-led private demand boom regime were thus characterised by current account deficits and negative net exports. As typical for this regime, we see high growth contributions of private domestic demand, and of private consumption demand in particular, financed by household deficits and thus rising credit to a considerable degree. Private consumption contributed more than 55 per cent to GDP growth in the case of the UK, and up to close to 80 per cent, in the cases of the US and Spain. The growth contributions of the balance of goods and services were negative and thus reduced GDP growth, most pronouncedly in Spain. The debt-led private demand boom regime countries were thus the world demand engines before the crisis, mainly relying on increasing private debt, and household debt in particular.[4]

[4] For more country specific information on these three debt-led private demand boom economies, see for example Evans (2016) on the US, Lepper et al. (2016) on the UK and Ferreiro et al. (2016) on Spain.

Table 2: Key macroeconomic variables for selected OECD countries and the core Eurozone (EA 12), average annual values for the period 1999-2007							
	USA	**UK**	**Spain**	**Ger-many**	**Swe-den**	**France**	**EA 12**
Financial balances of external sector as a share of nominal GDP, per cent	4.0	2.0	5.6	-2.4	-6.4	-0.7	-0.4
Financial balances of public sector as share of nominal GDP, per cent	-3.0	-1.7	0.2	-2.3	1.1	-2.5	-1.9
Financial balance of private sector as a share of nominal GDP, per cent	-0.9	-0.3	-5.8	4.7	5.3	3.2	2.4
- Financial balance of private household sector as a share of nominal GDP, per cent	-0.8	0.6	-1.0	5.0	2.4	3.4	…
- Financial balance of the corporate sector as a share of nominal GDP, per cent	-0.1	-0.8	-4.0	-0.3	2.8	-0.2	…
Real GDP growth, per cent	2.9	2.9	3.9	1.6	3.4	2.3	2.3
Growth contribution of domestic demand including stocks, percentage points	3.3	3.3	4.8	0.8	2.7	2.6	2.1
- Growth contribution of private consumption, percentage points	2.3	2.3	2.2	0.5	1.4	1.4	1.1
- Growth contribution of public consumption, percentage points	0.3	0.6	0.8	0.1	0.2	0.4	0.4
- Growth contribution of gross fixed capital formation, percentage points	0.7	0.5	1.7	0.2	1.1	0.8	0.7
Growth contribution of the balance of goods and services, percentage points	-0.4	-0.3	-0.9	0.8	0.7	-0.3	0.1
Net exports of goods and services as a share of nominal GDP, per cent	-4.3	-2.4	-3.6	3.6	6.7	0.6	1.6
Note: Growth contributions of private consumption, public consumption and growth fixed capital formation may not sum up to growth contribution of domestic demand, because the latter also includes the change in inventories/stocks. Source: European Commission (2017), my calculations							

The export-led mercantilist regime in the pre-crisis period dominated in Germany and Sweden. Here we also see rising inequality, i.e. falling or, in the case of Sweden roughly constant labour income shares, rising top income shares and increasing Gini coefficients for market and disposable incomes of households (Table 1). For the export-led mercantilist countries, we observe positive financial balances of the domestic sectors as a whole, with significantly positive financial balances of the private sector, and a deficit of the public sector in Germany and a surplus in Sweden (Table 2). The private sector balance in Germany was composed of a significant surplus of private households and a small deficit in the corporate sector, whereas in Sweden both sub-sectors contributed to the private sector surplus. The external sector was in deficit in both countries, and considerably so in Sweden. These countries were thus running current account surpluses and positive balances of goods and services. In both countries the growth contributions of domestic demand were rather small, and in Germany even negative in certain years. Private consumption only accounted for a bit more than 30 percent in the case of Germany and 40 percent in the case of Sweden for GDP growth on average over the period. Growth was mainly driven by positive contributions of the balance of goods and services and hence rising net exports, which contributed about 50 percent in the case of Germany and 20 percent in the case of Sweden to GDP growth. These countries were thus free-riding on dynamic world demand generated by the debt-led private demand boom countries, in particular.[5]

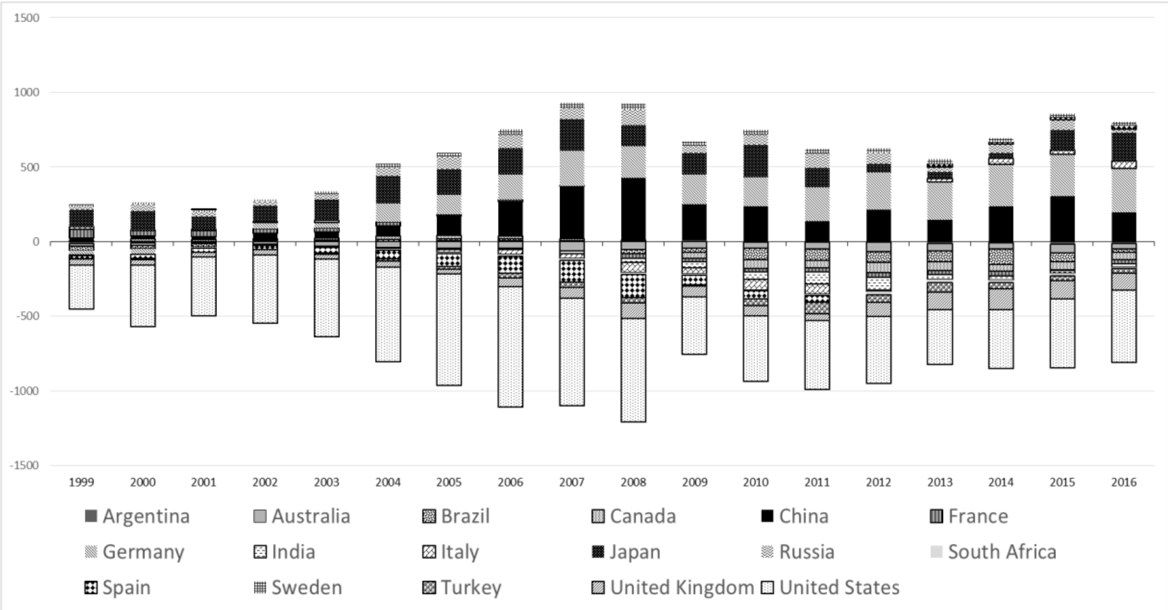
Finally, we have in between the two extremes the domestic demand-led regime, which in the pre-crisis period can be found in France and also in the core Eurozone taken as a whole, the EA-12. Here we also see rising inequality, as reflected in the falling labour income share in the EA-12 (European Commission, 2017) and France, and in France's rising top income shares, despite constant Gini coefficients for market and disposable income (Table 1). The French economy was characterised by positive financial balances of the private household sector and of the private sector as a whole (Table 2). The latter was also true for the core Eurozone. Furthermore, we have slightly negative financial balances of the external sectors, and hence, small current account and net export surpluses for both France and the core Eurozone. Growth was exclusively driven by domestic demand, with relevant contributions by private consumption, however, without drawing on rising household credit, since private household financial balances remained significantly positive.[6] Growth contributions of the balance of goods and services were slightly negative in the case of France, and weakly positive in the case of the core Eurozone.[7]

[5] For more country specific information on these two export-led mercantilist economies, see for example Detzer and Hein (2016) on Germany and Stenfors (2016) on Sweden.

[6] For the core Eurozone, the EA-12, data for private household financial balances are only available for a few years, so that I could not calculate the average values for the periods in Table 1 and Table 2. In the years for which data is available, 1999, 2006 to 2012, the private household financial balances were always positive, ranging between 1.4 and 3.8 percent of GDP (European Commission, 2017).

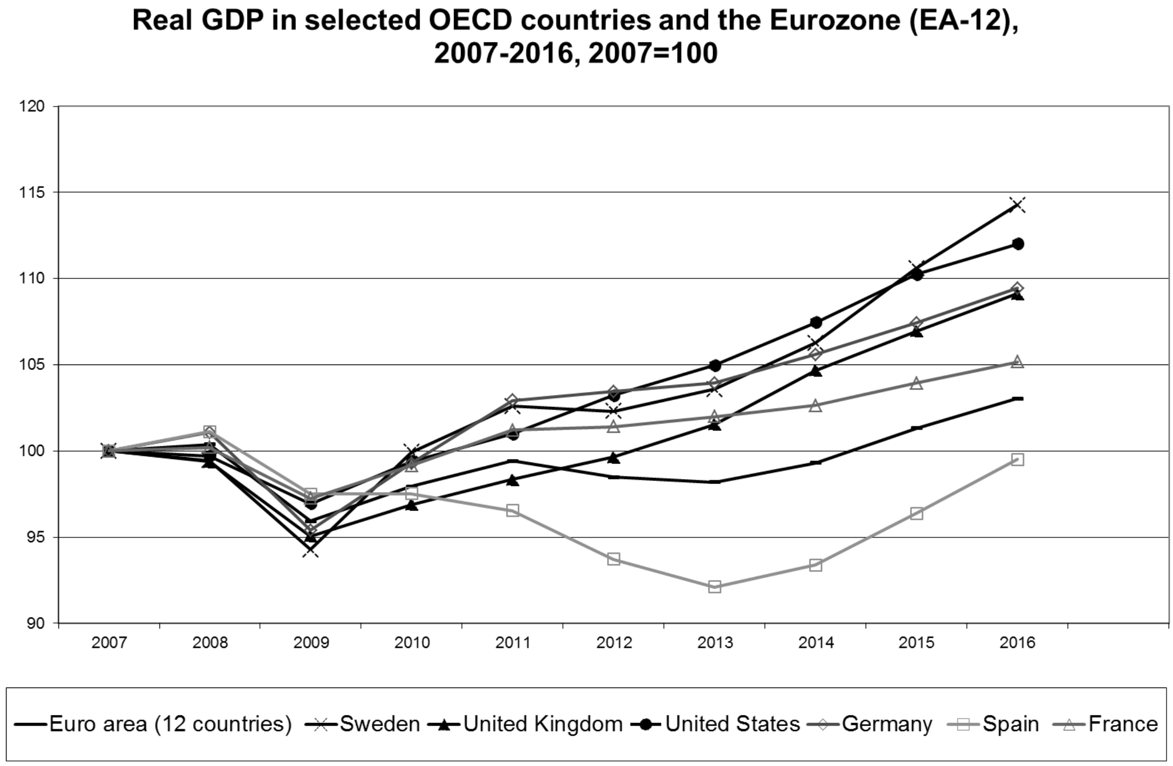
[7] For more country specific information on the domestic demand-led economy of France, see for example Cournilleau and Creel (2016).

Figure 1: Current account balance, major countries, 1999-2016, in billions of US dollars



Source: IMF (2017), my presentation

Figure 2



Source: European Commission (2017), my calculations and presentation

The countries following the two extreme regimes before the crisis, the debt-led private demand boom regime and the export-led mercantilist regime, generated rising current account imbalances in the global economy (Figure 1), but also within the Eurozone (see Hein 2013/14; 2017). Apart from Germany and Sweden, mainly China and Japan, but also Argentina, Canada and Russia were among the surplus countries, and, apart from the US, the UK and Spain, we had Italy, Turkey, South Africa and Australia among the deficit countries.

These global imbalances then led to the severity of the financial crisis and the Great Recession. The crisis started in the main debt-led private demand boom country, the US, and was transmitted to the world economy through the international trade channel and the financial contagion channel. Initially, the export-led mercantilist countries were hit particularly hard through the international trade channel, but then recovered at a relatively quick rate until 2011, whereas the other countries had some more problems (Figure 2). The quick initial recovery of the export-led mercantilist economies was driven by the ongoing dynamic development in countries like China, India and other emerging market economies. Overall, the recovery until 2016, however, has been slow in historical comparison, which has led Summers (2014; 2015) and others to rediscover the 'secular stagnation' hypothesis.[8] As of 2016, the recovery has been the weakest in Spain, France and the core Eurozone, whereas Sweden, the US, the UK and Germany have performed somewhat better. This pattern of weak recovery has been associated with a shift in patterns of macroeconomic regimes, as we will show below, which has contributed to stagnation and has created a highly fragile and challenging global constellation.

With the deep financial and economic crises some major changes in the demand and growth regimes took place, as can be identified looking at the average values for our variables of interest in the period 2008-16 (Table 3) and at annual financial balances of the main macroeconomic sectors in Figures 3-9.[9] In the pre-crisis debt-led private demand boom countries, the US, the UK and Spain, the private sectors, i.e. the private households and partly the corporations, had to deleverage considerably. The financial balances of these sectors thus became positive (Table 3, Figures 3-5), and the growth contributions of private consumption and investment shrank remarkably – in Spain they even became negative on average over the considered period. High public deficits stabilised the economy and allowed for low but positive growth in the US and the UK, with the balances of goods and services slightly contributing in the US. However, the current accounts remained considerably negative and thus the financial balance of the external sectors stayed positive. The US and the UK hence moved from a debt-led private demand boom regime towards a domestic demand-led regime mainly stabilised by public sector deficits; in the UK, however, also the private sector balances have turned negative again in 2016. The willingness to continue to accept high current account deficits in these two countries, albeit with a falling trend in the US, has so far contributed to the stabilisation of global demand in the world economy. Spain has been a different case. Initially in the crisis, high public sector deficits allowed the private sector to generate financial surpluses and to deleverage (Figure 5). However, with the euro crisis since 2010 and the austerity policies implemented, public deficits have been reduced, public and private domestic demand have collapsed and real GDP growth has turned

[8] See the contributions in Teulings and Baldwin (2014a), for example, and for a survey see Teulings and Baldwin (2014b).

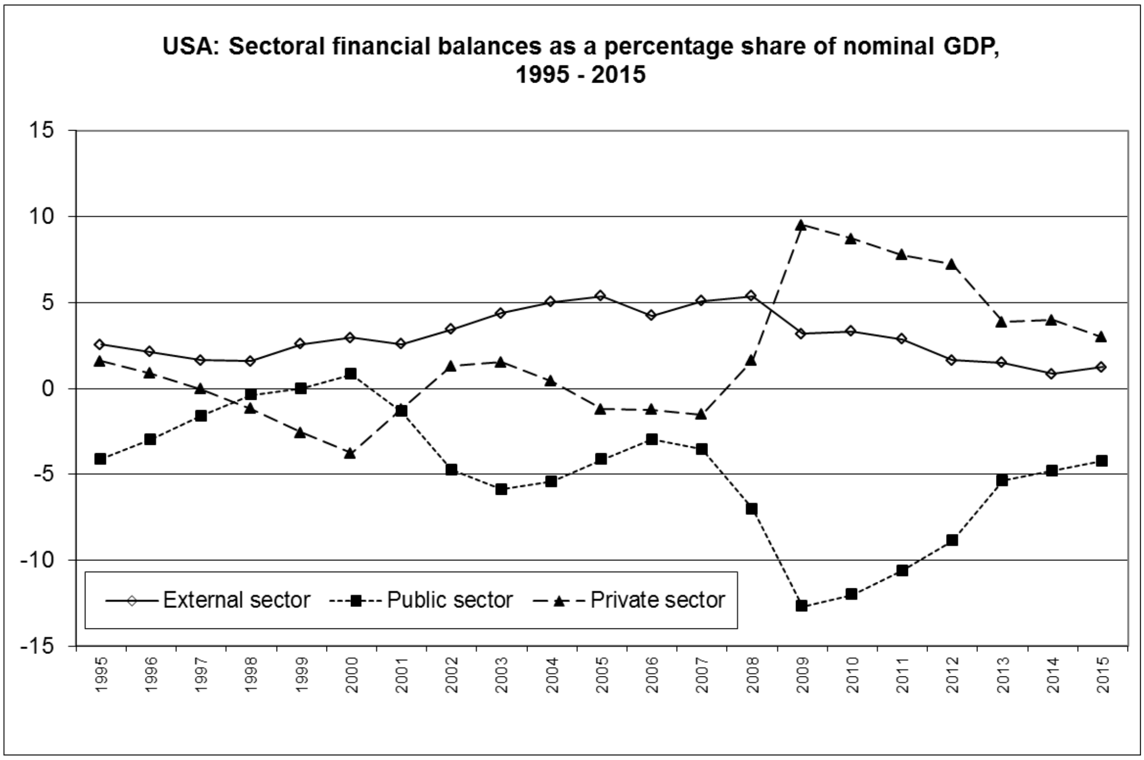
[9] For more country-specific information on the causes of and the responses towards the crisis, see Evans (2016) on the US, Lepper et al. (2016) on the UK, Febrero and Bermejo (2013), Ferreiro et al. (2016) and Ferreiro and Gomez (2015) on Spain, Detzer and Hein (2016) and Hein and Detzer (2015a) on Germany, Stenfors (2016) on Sweden, Cournilleau and Creel (2016) on France, and Carrasco et al. (2016), Hein (2013/14; 2017) and Dodig and Herr (2015) on the Eurozone, for example.

negative. Positive growth contributions only came from the balance of goods and services, through rising exports but also because of falling imports, the current account improved and has, on an annual basis, remained positive since 2013. Spain has thus moved from a debt-led private demand boom economy towards an export-led mercantilist economy. Both in the US and the UK, as well as in Spain, the regime shifts have been associated with a further deterioration of income distribution (Table 1): Labour income shares in all three countries have been falling, Gini coefficients for the household distribution of income before and after taxes have been rising in the US and Spain, and remained constant at very high levels in the UK, and only top income shares have been falling in the UK and Spain, but continued to rise in the US (Hein et al., 2017a; 2017b). These developments have prevented a mass income- or wage-driven recovery in these countries, so that the options have been either drawing on government deficits (US, UK) or on foreign sector deficits (Spain) as stabilisers of demand and growth.

In the export-led mercantilist countries before the crisis, Germany and Sweden, the public sector accepted high financial deficits (Germany) or a strong reduction of surpluses leading to small deficits (Sweden) in the crisis and the years following in order to stabilise the private sector and the macro-economy (Figures 5 and 6). However, these deficits could be passively consolidated, because of the economic recovery, initially driven by net exports. The financial balances of the private sectors have remained positive, in particular for private households, and in Germany the corporations have remained in surplus, too, whereas in Sweden they have incurred a small deficit (Table 3). On average over the period 2008-16, the small economic growth has been driven by domestic demand, with significant contributions of private consumption. The balance of goods and services still contributed to growth in Germany. However, in Sweden the growth contributions even turned slightly negative. This shift towards domestic private demand as a main driver of growth has been made possible by slight improvements in the developments of income distribution in both countries, at least as compared to the previously debt-led private demand boom countries (Table 1): Labour income shares stopped falling, top income shares have not been rising any more, and in Sweden Gini coefficients for pre- and post-tax household incomes have remained constant, whereas in Germany they have continued to rise slightly. However, these countries still show considerable current account and net export surpluses, and thus negative financial balances of the respective external sectors. In Germany these surpluses have exceeded those before the crisis and have shown a rising tendency, whereas in Sweden they have only slightly been lower than before the crisis. Germany has thus continued to follow the export-led mercantilist regime after the crisis. Sweden has turned somewhat less mercantilist, because growth contributions of net exports have become negative and export surpluses have been somewhat reduced, but Sweden has remained export-led.

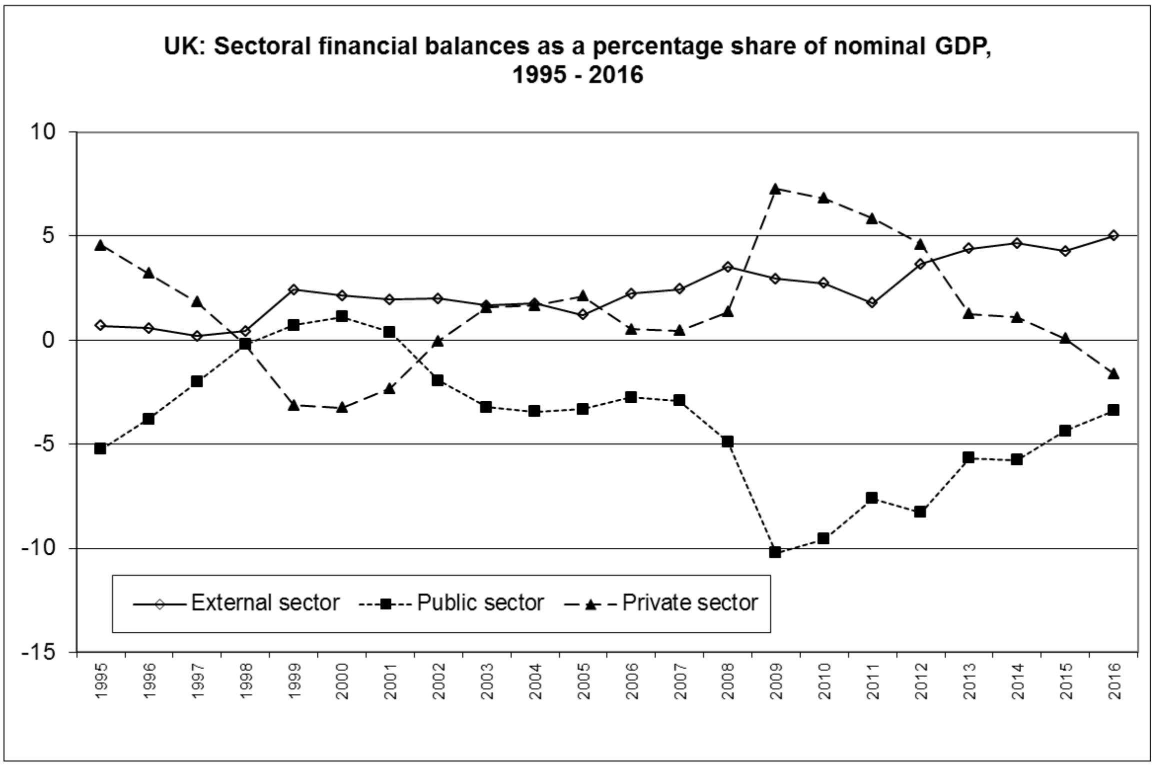
Table 3: Key macroeconomic variables for selected OECD countries and the core Eurozone (EA 12), average annual values for the period 2008-2016							
	USA	**UK**	**Spain**	**Ger-many**	**Swe-den**	**France**	**EA 12**
Financial balances of external sector as a share of nominal GDP, per cent	2.7	3.7	1.7	-6.9	-5.8	2.3	-1.7
Financial balances of public sector as share of nominal GDP, per cent	-7.8	-6.6	-7.5	-0.8	-0.2	-4.7	-3.5
Financial balance of private sector as a share of nominal GDP, per cent	5.2	3.0	5.8	7.7	6.0	2.4	5.2
- Financial balance of private household sector as a share of nominal GDP, per cent	3.4	1.2	1.8	5.1	6.6	3.6	…
- Financial balance of the corporate sector as a share of nominal GDP, per cent	1.8	1.8	4.2	2.5	-0.7	-1.2	…
Real GDP growth, per cent	1.3	1.0	0.0	1.0	1.5	0.6	0.4
Growth contribution of domestic demand including stocks, percentage points	1.1	0.8	-1.2	1.0	1.7	0.8	0.0
- Growth contribution of private consumption, percentage points	1.1	0.5	-0.3	0.6	0.8	0.5	0.2
- Growth contribution of public consumption, percentage points	0.0	0.2	0.1	0.4	0.4	0.3	0.2
- Growth contribution of gross fixed capital formation, percentage points	0.1	0.0	-1.0	0.2	0.4	0.0	-0.2
Growth contribution of the balance of goods and services, percentage points	0.1	0.0	1.2	0.1	-0.2	-0.2	0.3
Net exports of goods and services as a share of nominal GDP, per cent	-3.3	-2.2	0.5	6.1	5.1	-1.9	2.7
Note: Growth contributions of private consumption, public consumption and growth fixed capital formation may not sum up to growth contribution of domestic demand, because the latter also includes the change in inventories/stocks. Source: European Commission (2017), my calculations							

Figure 3



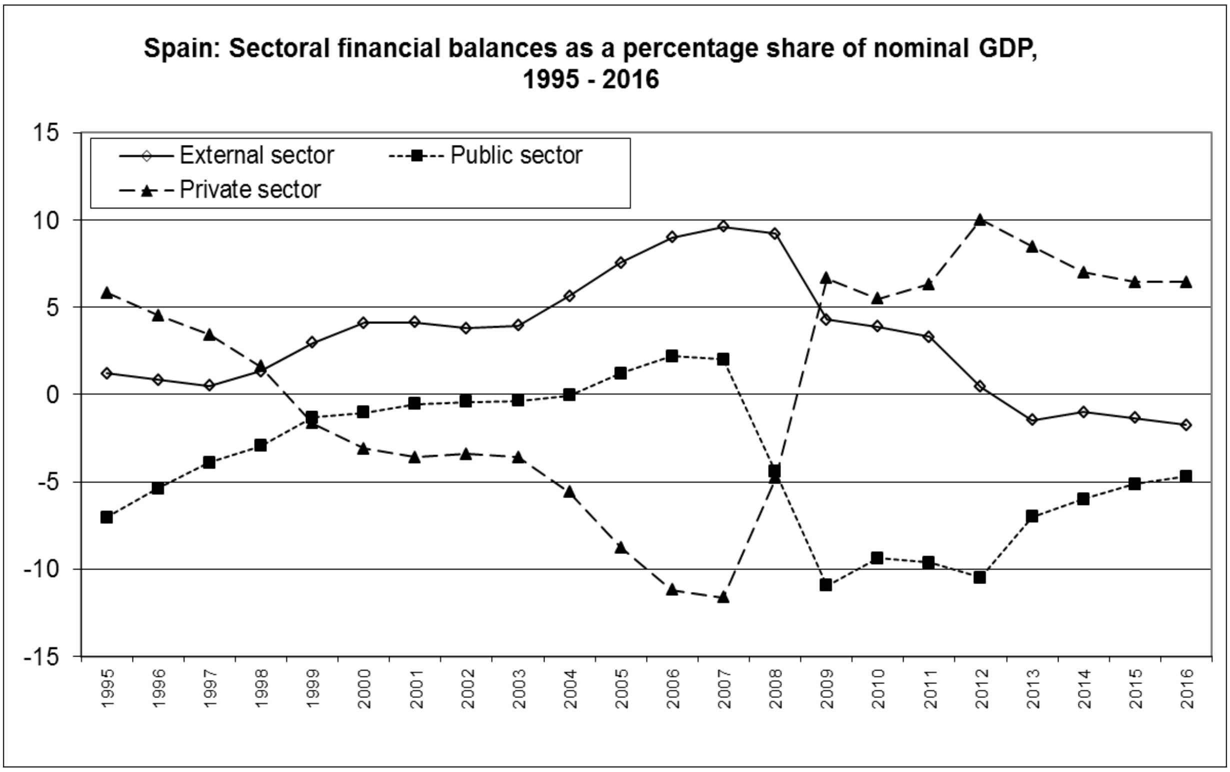
Source: European Commission (2017), my calculations and presentation

Figure 4



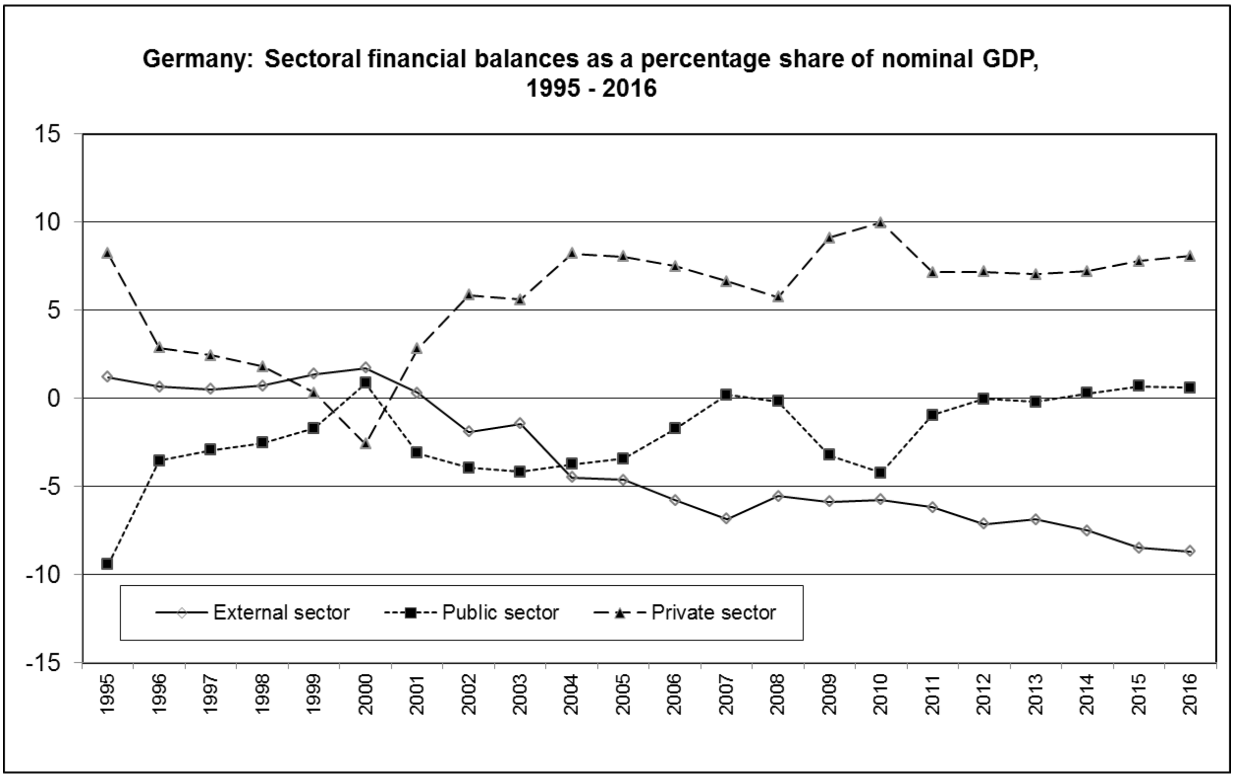
Source: European Commission (2017), my calculations and presentation

Figure 5



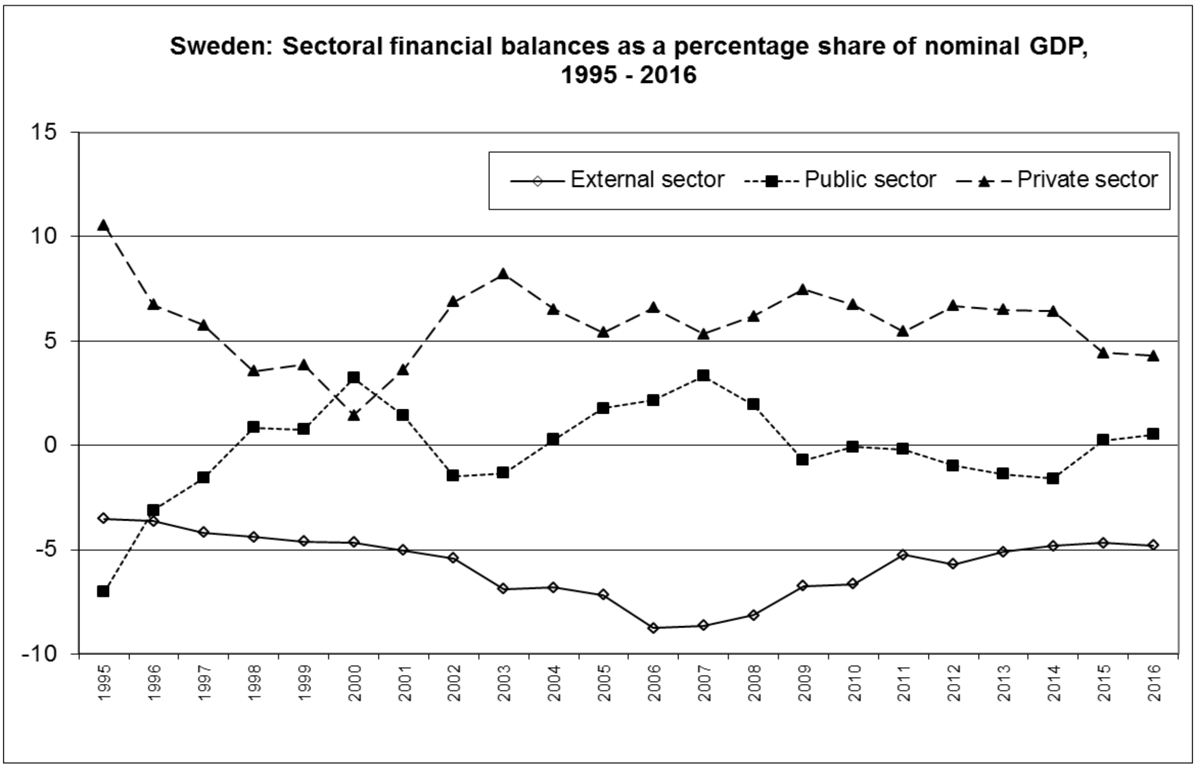
Source: European Commission (2017), my calculations and presentation

Figure 6



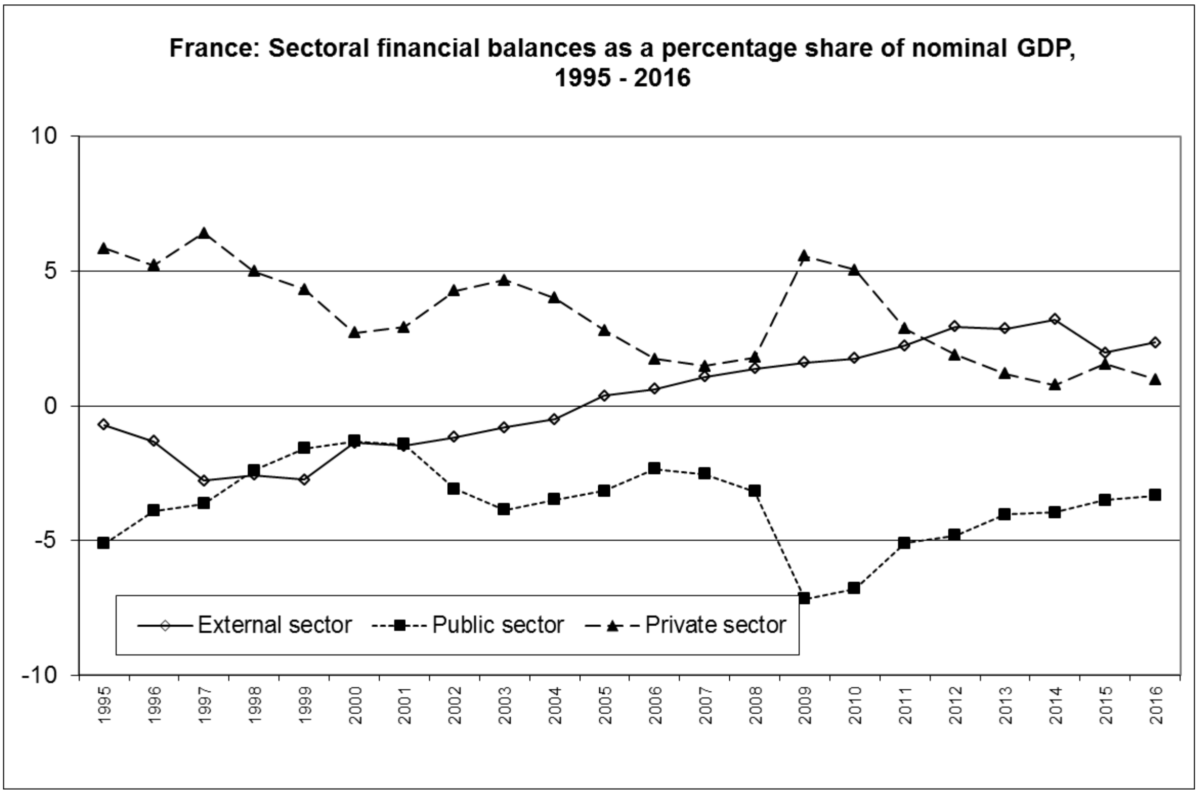
Source: European Commission (2017), my calculations and presentation

Figure 7



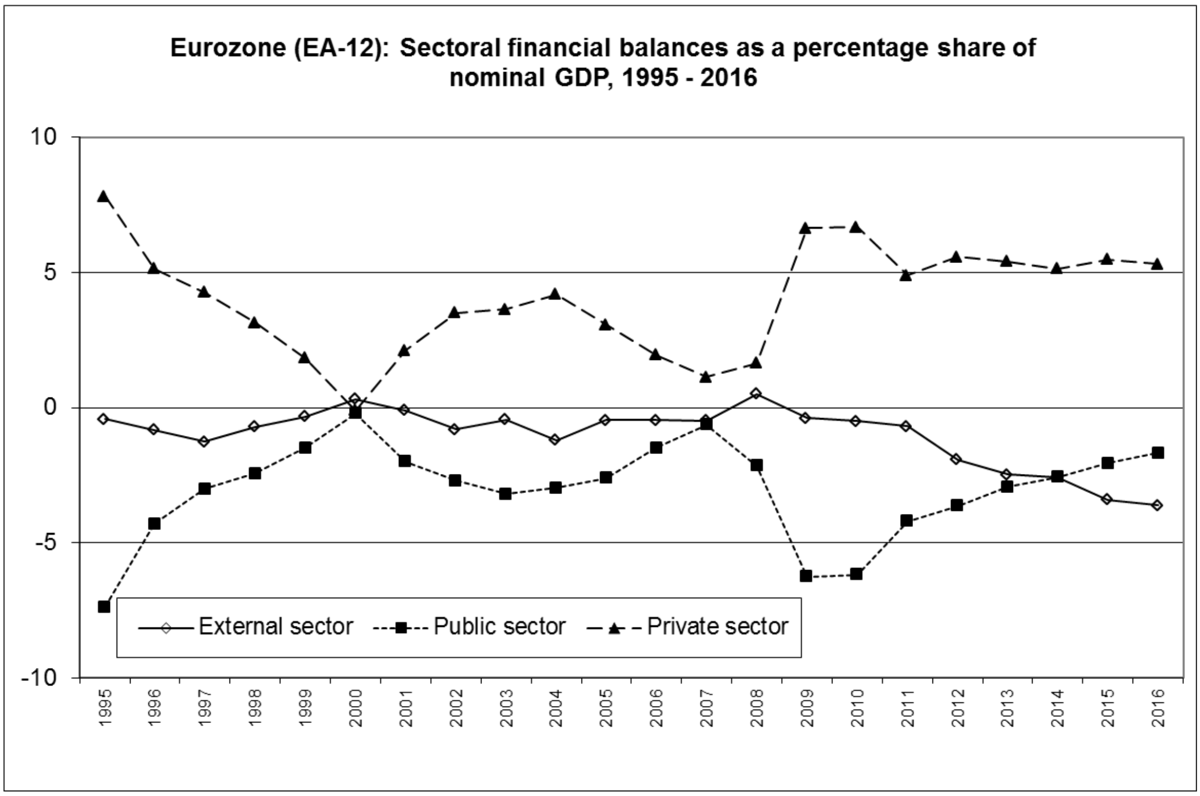
Source: European Commission (2017), my calculations and presentation

Figure 8



Source: European Commission (2017), my calculations and presentation

Figure 9



Source: European Commission (2017), my calculations and presentation

The domestic demand-led regime in France has not changed significantly in the crisis and the following years. Financial surpluses of private households have been mopped up by corporations, but even more so by the public sector (Table 3). Due to the stabilisation requirements, public sector deficits have increased relative to the cycle before the crisis. The balance of the external sector, which had become positive already before the crisis (Figure 8) has been rising, so that France on average over the second period has been running a current account and a net exports deficit. Public deficits in France have thus been stabilising global demand for goods and services, too. Growth in France has been driven by domestic demand, and mainly by private and public consumption. The former has been facilitated by a decline in inequality in the period after the crisis (Table 1). France is the only country in our data set, in which the labour income share has been rising, the Gini coefficients for pre- and post-tax incomes of households have been falling and top income shares have at least remained constant in the period after the crisis. The development in the core Eurozone, which had also been domestic demand-led before the crisis, however, has been completely different. Although labour income shares for the EA-12 remained roughly constant after the crisis (European Commission, 2017), albeit with wide variations among member countries (Hein, 2017), the Eurozone has turned towards an export-led mercantilist regime after the crisis (Table 3). With considerable private sector financial surpluses due to deleveraging and shrinking public sector deficits due to austerity policies, the foreign sector balances turned negative, and the Eurozone has started to run increasing current account and net export surpluses (Figure 9); the current account surplus amounted to 3.6 per cent of GDP in 2016. The meagre growth since the crisis has been driven by net exports almost exclusively. Of course, the major reason for these developments has been the austerity policies which have been implemented since the start of the euro crisis in 2010, in particular in the crisis countries, Greece, Portugal, Ireland, Portugal and Spain (Hein, 2013/14; 2017). A major economic and currency area in the world economy has thus become a drag on global demand, free riding on world demand generated elsewhere.

From a global perspective, current account imbalances have been slightly reduced in and after the crisis, if compared to the years before the crises. However, they are still much more pronounced than in the early 2000s (Figure 1). The high current account surpluses by the export-led mercantilist countries – Germany, Spain, the Eurozone as a whole, and Sweden in our study, but also China, Japan, Italy and Russia – are matched by current account deficits of domestic demand-led economies with high public sector deficits – in particular the US, the UK and France in our study, and furthermore emerging market and commodity producing countries like Argentina, Australia, Brazil, Canada, India, South Africa and Turkey. The risks of such a global constellation are obvious. If ever more economies, like currently the whole Eurozone driven by austerity and deflationary stagnation policies, move towards an export-led mercantilist strategy, the world economy will face an aggregation problem. It will become increasingly difficult to generate the related current account deficits in other regions of the world. Dominating tendencies towards stagnation are then the inescapable consequences. And to the degree that global demand stabilisation has to rely on public sector financial deficits in the mature domestic demand-led economies, as well as on public and private sector deficits in emerging market economies, there are severe risks and dangers built up. 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 country's own currency and is backed by the respective central bank. Second, capital inflows into emerging market economies may be unstable and face 'sudden stops' because of changes in expectations and/or over-indebtedness in foreign currency of these countries. And third, there are the risks of politically induced protection measures in order to reduce current account and net export deficits, which are considered to be too high.

4. Economic policy implications

As a requirement for short-run stabilisation of such a constellation, economic policymaking 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 in their own currency. For the Eurozone, as the main current drag of global demand, this would mean the unconditional backing of government debt of member countries by the European Central Bank, as suggested by De Grauwe (2013), Hein (2017) and Hein and Detzer (2015b; 2015c), on the one hand, and the use of fiscal deficits in the short and in the long run to stabilise aggregate demand, without relying on external sector deficits and hence current account surpluses. Second, to the degree that current account surpluses of slowly growing mature economies, and current account deficits of catching-up economies are unavoidable, stable long-term financing of these current account deficits would have to be provided in order to avoid unsustainable booms, 'sudden stops' and capital flight.[10]

In the long run, however, the underlying structure of the current constellation still dominated by financialisation would have to be tackled.[11] This should have four dimensions:

- Re-regulation and downsizing of the financial sector,
- Re-distribution of income (and wealth) from top to bottom and from capital to labour,
- Re-orientation of macroeconomic policies towards stabilising domestic demand at non-inflationary full employment levels,
- Re-creation of international monetary and economic policy coordination.

Here is not the place to provide comprehensive programmes, and I can only list a few relevant elements and guidelines. The re-regulation of the financial system requires a host of measures which should aim at orienting the financial sector towards financing *real* economic activity, namely real investment and real GDP growth. This has at least three dimensions. First, measures which increase transparency in financial markets should be introduced, in order to reduce the problems of uncertainty, asymmetric information, moral hazard, and fraud, which are inherent to and were widely observed in this sector, in particular. These measures include the standardisation and supervision of financial products in order to increase transparency in the market. Off-balance sheet operations should be abolished and national and international regulation and encompassing international supervision of all financial intermediaries (banks, insurances, hedge funds, private equity funds, etc.) should be introduced. Since rating can be considered a public good, independent public rating agencies will have to be introduced replacing the private ones. Diversity in the banking sector should be increased in order to reinforce resilience. Therefore, public and cooperative banks supplying credit to households and small firms at the local and regional level should be strengthened. Financial institutions with systemic relevance should be in public ownership, because stability of these institutions can also be considered as a public good. Second, re-regulation should generate incentives for economic actors in the financial and non-financial sectors to focus on long-run growth rather than short-run profits. This includes the reduction of securitisation in order to prevent 'originate and distribute' strategies which were at the root of the US subprime mortgage crisis. Banks should be induced to do what banks are supposed to do, i.e. evaluate potential borrowers and their investment projects, grant credit and supervise the fulfilment of payment commitments by the debtors. For the

[10] See Hein and Detzer (2015b; 2015c) for an outline of how this stable recycling could be facilitated in the Eurozone.

[11] For similar ideas and more extensive elaborations see for example the 'wage-' or 'mass income-led' recovery strategies proposed by the ILO (2012), Lavoie and Stockhammer (2013a; 2013b) and Stockhammer and Onaran (2012; 2013), among others, as well as the more encompassing notion of a 'Global Keynesian New Deal' by Hein (2012, Chapter 7), Hein and Mundt (2012) and Hein and Truger (2012/13). See also, with different terminologies but similar contents, the suggestions by Palley (2012, Chapter 9; 2013, Chapter 12) and UNCTAD (2009), among others. Also the previously determined advocates of a wage-led recovery strategy after the crisis for the Eurozone and the global economy have now acknowledged that the effects of – and maybe the conditions for – such an exclusive strategy have been overrated, and they are now recommending a mixed strategy of expansionary wage and fiscal policies (Onaran, 2016; Obst et al., 2017).

financial and non-financial corporate sector, share buybacks in order to drive share prices up should be reduced or even abolished. Short-termism of managers in the corporate sector should be minimized by means of reducing stock option programmes and by extending minimum holding periods. Generally, co-determination on the firm level and improved rights of other stakeholders in the firm should be strengthened in order to overcome short-termism and to increase the importance of investment in long-term projects improving productivity and developing new products. Third, measures directed at containing systemic instability, like credit controls, asset-based reserved-requirements and counter-cyclical capital requirements for all financial intermediaries should be introduced, and a general financial transactions tax in order to slow down activity in the financial sector should be implemented.

Apart from stabilising and orienting the financial sector towards financing real economic activity, re-regulating finance should contribute to the re-distribution of income and wealth from top to bottom and from capital to labour, and thus also positively feedback on aggregate demand and growth through the following channels: First, since these measures imply a downsized financial sector they will contribute to an increasing labour income share through the change in the sectoral composition of the economy, to the extent that the financial sectors have a lower wage share than the non-financial sectors of the economy. Second, reducing top management salaries and profit claims of financial wealth holders will allow for lower mark-ups in price setting of firms and thus higher labour income shares. Third, refocusing management's orientation towards long-run expansion of the firm will increase bargaining power of workers and trade unions and therefore have a dampening effect on profit claims.[12] Furthermore, institutions for coordinated collective bargaining would have to be re-created to provide the conditions for wage bargaining to be focussed on macroeconomic outcomes and to implement stabilising nominal wage growth. Nominal wages should grow at a rate given by the sum of long-run national labour productivity growth plus the inflation target. Institutional pre-conditions seem to be strong trade unions and employer associations, as well as government interventions, if required, through wage bargaining in the public sector, legal extensions of bargaining results in the private sectors and through legal minimum wages, for example. Apart from stabilising primary functional distribution of income, the inequality of personal disposable income distribution would have to be tackled through progressive income and wealth taxes and through social transfers.

The re-orientation of macroeconomic policies – in particular in current account surplus countries – should aim at improving domestic demand, employment and hence also imports into these countries. First, interest rate policies of the central bank should abstain from attempting to fine tune unemployment in the short run and inflation in the long run. Central banks should instead target low real interest rates in order to promote real economic activity. A slightly positive real rate of interest, below the rate of productivity growth, seems to be a reasonable target. Rentiers' real financial wealth will be protected

[12] According to our analysis, this has partially happened in those countries, in which the trend towards re-distribution at the expense of labour and rising inequality has been stopped or even reversed after the crisis, i.e. in France, Germany and Sweden (Hein et al., 2017a; 2017b.)

against inflation, but overhead costs for firms will be reduced, allowing for a shift of income distribution in favour of labour with stimulating effects on aggregate demand. Further on, central banks must act as a lender of last resort in periods of liquidity crisis, not only for the banking system but also for the government. The latter provides the conditions for fiscal policies to fulfil its stabilising role.

Fiscal policies should take over full responsibility for real stabilisation, full employment and a more equal distribution of disposable income. Progressive income tax policies, relevant wealth, property and inheritance taxes, and re-distributive social policies would improve the conditions for a global income-led recovery. If required by surpluses in private sector financial balances, medium- to long-run government deficits should maintain aggregate demand at high levels thus allowing for high non-inflationary employment. In particular in current account surplus countries with private sector financial surpluses, governments will have to run budget deficits in order to stabilise aggregate demand at the national level, on the one hand, and in order to contribute to rebalancing the current accounts at the international level, on the other hand. Also in the long run, fiscal policies will therefore have a major role to play in rebalancing current accounts at the global and the regional (Eurozone) levels. Unfavourable regressive distribution effects of public debt can be avoided by central bank policies targeting low interest rates, as recommended above, and/or by appropriate taxation of capital income. Short-run aggregate demand shocks should be countered by automatic stabilisers and by discretionary counter-cyclical fiscal policies.

Incomes and wage policies should take over responsibility for nominal stabilisation, i.e. stabilising inflation at some target rate which contributes to maintaining a balanced current account, to the extent that exports and imports are sufficiently price-elastic. In order to contribute to rebalancing the current accounts, nominal wage growth in the current account surplus countries will have to exceed the benchmark of national long-run productivity growth plus the inflation target for an interim period.

The re-creation of international monetary and economic policy coordination would have to make sure that export-led mercantilist strategies no longer pay off. This implies that targets for current account balances have to be included into international policy coordination at the regional and the global level. At the global level the return to a cooperative world financial order and a system with managed but adjustable exchange rates, symmetric adjustment obligations for current account deficit and surplus countries, and regulated international capital flows seem to be required in order to avoid the imbalances that have contributed to the crisis and to preclude export-led mercantilist policies by major economies. Keynes's (1942) proposal for an International Clearing Union is an obvious blueprint to be further developed for this purpose.

5. Summary and conclusions

In this paper I have addressed the macroeconomic regime changes in mature capitalist economies, which have taken place in the course of and after the financial and economic crisis of 2007-9 and which have contributed to the current stagnation tendencies. For this purpose, in Section 2, I have recapitulated the concept of macroeconomic regimes under the conditions of financialisation and have outlined the characteristics of the main regimes, the debt-led private demand boom regime, the export-led mercantilist regime and the domestic demand-led regime.

Section 3 has then applied this regime approach to six mature capitalist countries, i.e. the two liberal Anglo-Saxon economies of the US and the UK, a representative country from the Nordic welfare states, Sweden, three core Eurozone countries, France, Germany and Spain, as well as the core Eurozone (EA-12) as a whole. I have first analysed the regimes in the period before the crisis, from 1999 until 2007, and confirmed that the US, the UK and Spain can be characterised as debt-led private demand boom, Germany and Sweden as export-led mercantilist and France and the core Eurozone as domestic demand-led economies. For the crisis and post-crisis period, 2008 until 2016, I have then found major changes in regimes: Whereas Germany and Sweden have stayed export-led mercantilist, with Sweden only weakly so, Spain and the core Eurozone as a whole, under the conditions of the euro crisis and applied austerity policies, have turned export-led mercantilist, too. And the US and the UK have joined France as domestic demand-led economies, but since the crisis mainly stabilised by government deficits.

I have argued that this change in regimes has contributed to stagnation tendencies in mature economies and to current global macroeconomic risks. If ever more economies, like presently the whole Eurozone, move towards an export-led, mercantilist strategy, the world economy faces an aggregation problem, since it will become increasingly difficult to generate the related current account deficits in other regions of the world. And to the degree that global demand stabilisation has to rely on public sector financial deficits in the mature domestic demand-led economies, there are the risks that high government deficits and debt may be reversed for political reasons (debt ceilings, debt brakes), although there may be no risks of over-indebtedness of governments. Furthermore, to the degree that global demand stabilisation is based on public and private sector deficits in emerging market economies, there are the risks that capital inflows into emerging market economies may be unstable and face 'sudden stops' because of changes in expectations and/or over-indebtedness in foreign currency of these countries. Last but not least, there are the risks of politically induced protection measures in order to reduce current account and net export deficits, which are considered to be too high.

Finally, I have outlined the economic policy conclusions from this analysis in Section 4. I have argued that in the short run, 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, which implies major changes for the macroeconomic policy institutions and approach in the Eurozone, in particular. Second, to the degree that current account surpluses of slowly growing mature economies, and current account deficits of catching-up economies are unavoidable, stable long-term financing of these current account deficits would have to be provided in order to avoid unsustainable booms, 'sudden stops' and capital flight. For the long run, I have then outlined more fundamental reforms in the areas of re-regulation and downsizing of the financial sector, re-distribution of income (and wealth) from top to bottom and from capital to labour, re-orientation of macroeconomic policies towards stabilising domestic demand at non-inflationary full employment levels, and re-creation of international monetary and economic policy coordination. These reforms are meant to contribute to a mass income-led and balanced global recovery strategy, overcoming the current tendencies towards stagnation in mature capitalist economies in particular.

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Imprint

Editors:

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ISSN 1869-6406

Printed by
HWR Berlin

Berlin June 2017