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# **Financialisation and stagnation – a macroeconomic regime perspective**

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Working Paper, No. 149/2020

Editors:

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## **Financialisation and stagnation – a macroeconomic regime perspective\***

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### Abstract

In this contribution we link the recently re-discovered tendencies towards stagnation with the features of financialisation, which have started to dominate developed capitalist economies in the early 1980s. We review the main macroeconomic channels of transmission of financialisation—namely, the effects on distribution, investment in the capital stock, consumption and on the current and capital accounts. We distinguish three regimes, the debt-led private demand boom, the export-led mercantilist and the domestic demand-led regime and apply this to six countries, Germany, France, Spain, Sweden, the UK and the USA, as well as to the Eurozone, both for the period before (1999-2008) and after (2009-2018) the financial and economic crisis. We show that the dominance of the debt-led private demand boom regime, on the one hand, and the export-led mercantilist regime, on the other hand, has contributed to global current account imbalances before the financial and economic crisis 2007-9, which has demonstrated that these two regimes were unsustainable. For the period after the crisis we find a shift towards export-led mercantilist regimes and a move towards domestic demand-led regimes stabilized by government debt with global current account imbalances persisting. Finally, we elaborate on the challenges of these developments, a highly fragile global constellation with severe problems of aggregate demand generation and a tendency towards stagnation caused by high inequality and weak capital stock growth.

JEL-code: E02, E60, E61, F62, G38

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\* This contribution has been prepared for Dantas, F., Wray, L.R. (eds.), *The Handbook of Stagnation*, Elsevier, forthcoming. It draws on Hein (2018a, 2019) and provides a focussed update of the analysis provided there. For research assistance and help with the editing I would like to thank Ryan Woodgate. Remaining errors are mine, of course.

## 1. Introduction

Financialisation or finance-dominated capitalism – the terminology is used interchangeably in this contribution – as a dominating trend in developed capitalist economies since the 1980s has been analysed from several perspectives: the deregulation of the financial sector and the rise of shadow banking, rising gross indebtedness of the private sector, 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. This has been reviewed in papers by Sawyer (2013/2014) or van der Zwan (2014), and shown in books by Guttman (2016), Hein (2012) and Palley (2013), among others. In this contribution we will analyse how financialisation, which has led to the worldwide financial crisis and the Great Recession 2007-09, has contributed to stagnation tendencies since then. From the post-Keynesian perspective applied here, the analysis of stagnation tendencies requires to focus on income distribution, macroeconomic demand regimes and on the stance of macroeconomic policies (Blecker 2016a, Cynamon and Fazzari 2015, 2016, Hein 2016, 2018b, Palley 2016, van Treeck 2015). Therefore, in this contribution the focus will be on the macroeconomic demand and growth regimes under the dominance of finance, before and after the crisis, and the instability and stagnation tendencies included in the latter, in particular.

The effects of financialisation on income distribution before and after the crisis have been analysed for a set of six developed OECD countries in detail in Hein et al. (2017a, 2017b, 2018): France, Germany, Spain, Sweden, the UK and the US. The focus in this contribution will be on the macroeconomic demand and growth regimes for these six countries,<sup>1</sup> and furthermore for the core Eurozone, the EA-12, because the transformation of its macroeconomic regime in the course of the Eurozone crisis seems to be a major contributor to current stagnation tendencies and it contains a major threat to global development and stability (Hein 2018a). In what follows, we will first introduce the concept of macroeconomic regimes under financialisation. Then we will provide the analysis of the respective regimes – both before and after the crisis. Finally, we will relate the changes in regimes to the emanating tendencies towards instability and stagnation.

## 2. The concept of macroeconomic regimes under financialisation

From a macroeconomic perspective, finance-dominated capitalism or financialisation can be described by four characteristics, as elaborated in detail in Hein (2012, 2014, Chapter 10), for example.

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). It can be argued that finance-dominated capitalism has contributed to the falling labour income share since the early 1980s and to rising inequality mainly through several channels:

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<sup>1</sup> Detailed studies on financialisation and the financial and economic crisis in the countries of our study can be found in the contributions to Hein et al. (2016).

the falling bargaining power of workers and trade unions, rising profit claims imposed in particular by increasingly powerful rentiers (both creditors and shareholders), 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 (Hein 2015, Hein et al. 2017a, 2017b, 2018, Köhler et al. 2019).

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 to 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' each have had partially negative effects on firms' real investment in capital stock, as several econometric studies for different countries have shown (Stockhammer 2004, van Treeck 2008, Orhangazi 2008, Onaran et al. 2011, Davis 2016, 2017, 2018, Tori and Onaran 2017; 2018).

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 of income and via 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. Barba and Pivetti (2009), Cynamon 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 USA. As Kim (2013, 2016) has pointed out, 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 Mundt (2012), Horn et al. (2009), Stockhammer (2010, 2012, 2015), UNCTAD (2009) and van Treeck and Sturn (2012).

The country-specific stances of the four macroeconomic features of financialisation can give rise to different macroeconomic demand and growth regimes. The idea of demand and growth regimes used here is built on the demand-driven post-Kaleckian distribution and growth models proposed by Bhaduri and Marglin (1990) and Kurz (1990) which may generate wage- or profit-led regimes. Extended econometric research for several developed capitalist economies and a few emerging market economies has found wage-led medium to long-run regimes for most of the advanced capitalist economies, except for some small very open economies.<sup>2</sup> This is in particular true for the countries in the data set of the current contribution (Onaran and Galanis 2014, Onaran and Obst 2016). Based on these results, the redistribution effects of financialisation should have had a depressive impact on aggregate demand and growth in these economies, further reinforced by the constraining effects of financialisation on real investment. However, through debt-financed private consumption, and partially real estate investment, in some countries, or through rising net exports and current account surpluses in other countries, with the related current account deficits in the counterpart economies, these depressive effects on aggregate demand and growth have been partly compensated or even over-compensated. This has been shown by Hein (2018a) in a stylized Kaleckian model and by Belabed et al. (2018) and Detzer (2018) in simulated stock-flow consistent models.

From this literature it follows that 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. 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), in this contribution three broad types of regimes can be distinguished: 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 reinforced 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. There are 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 long run.

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<sup>2</sup> For a presentation of the post-Kaleckian distribution and growth model in the tradition of Bhaduri and Marglin (1990) and Kurz (1990) and a summary of the econometric estimation results for the model see Hein (2014, chapters 6-7). For a discussion of the debate around the theoretical model and the empirical findings clarifying several misunderstandings, see recently Blecker (2016b) and Stockhammer (2017).

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.

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. 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.

The two extreme regimes, the debt-led private demand boom and the export-led mercantilist regimes, have been made possible by the effects of financialisation on consumption and private expenditures, on the one hand, and by the effects on the current account, on the other hand. In particular, the deficit financed expenditures in the debt-led private demand boom economies, generating current account deficits in these countries, have provided the conditions for the high and rising current account surpluses in the export-led mercantilist countries.

Assessing the regimes a qualitative analysis based on quantitative data will be applied. Since the core Eurozone as a whole will be included in this analysis, the pre-crisis time period from 1999 until 2008 will be considered, on the one hand, and the crisis and post-crisis period from 2009 until 2018, on the other. 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.

### **3. The regimes before the crisis**

In the pre-crisis period from 1999 until 2008, 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 (Table 1). Looking at the financial balances, these countries were characterised by negative financial balances of their domestic private sectors and negative financial balances of the private household sectors in the USA and Spain, in particular (Table 2). The public 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. We see high growth contributions of private

domestic demand and of private consumption demand in particular, financed by household deficits to a considerable degree. Private consumption contributed more than 50 per cent to GDP growth in the case of Spain, and more than 70 per cent in the cases of the USA and the UK. The growth contributions of the balance of goods and services were negative and thus reduced GDP growth, most noticeably 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.

|                            |                     |        | US | UK | Spain | Germany | Sweden | France |
|----------------------------|---------------------|--------|----|----|-------|---------|--------|--------|
| <b>Distribution trends</b> | 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. 164)

The export-led mercantilist regime in the pre-crisis period dominated in Germany and Sweden. Here we also see rising inequality (Table 1). 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 external sector was in deficit in both countries. These countries were thus running current account surpluses and positive net exports. 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 less than 30 percent in the case of Germany and slightly above 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.

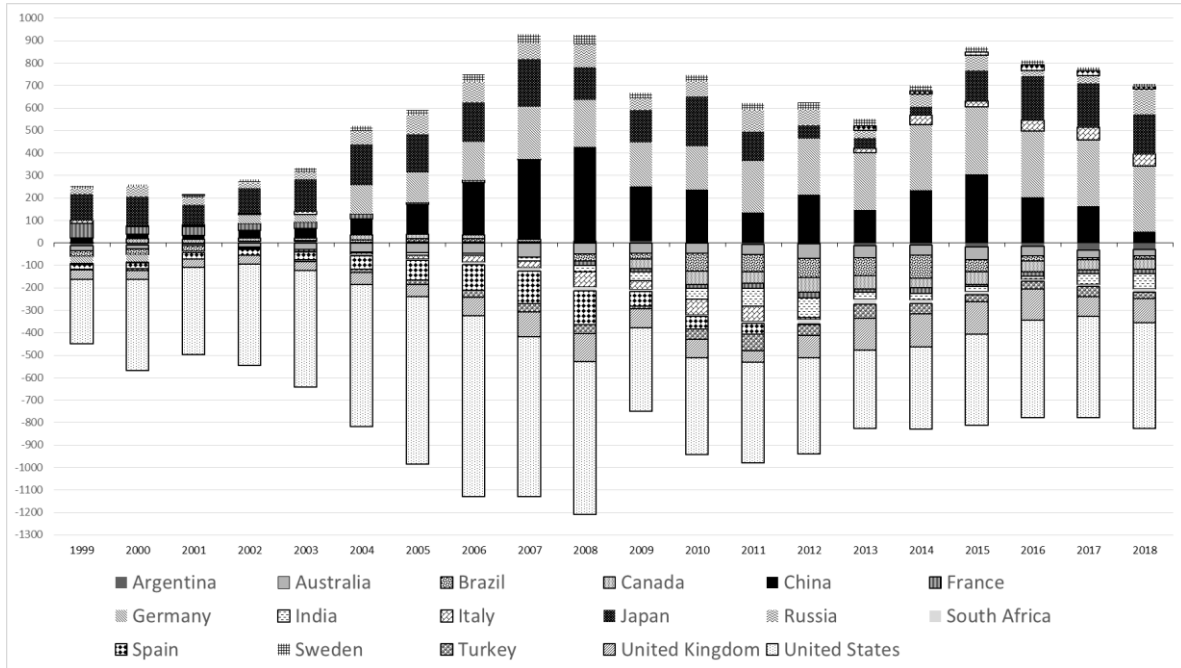
Finally, we have in between the two extremes the domestic demand-led regime, which in the pre-crisis period can be found in France and also in the core Eurozone taken as a whole, the EA-12. Here we also see rising inequality for France (Table 1), and a falling labour income share in the EA-12 (European Commission 2019). There were 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 almost 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. 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.

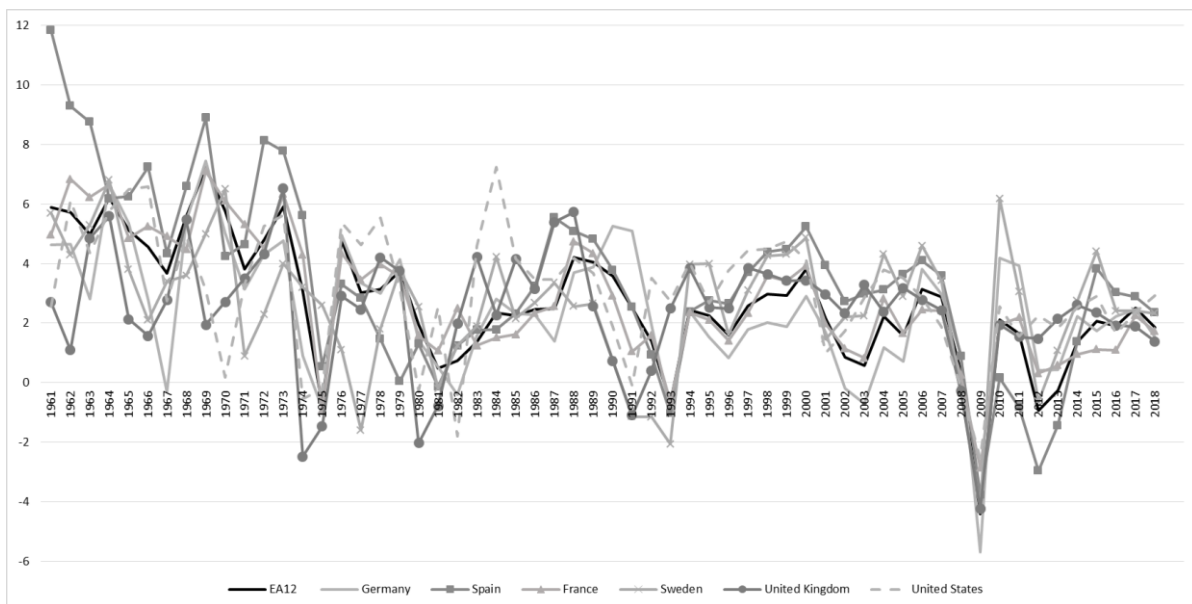
| <b>Table 2: Key macroeconomic variables for selected OECD countries and the core Eurozone (EA 12), average annual values for the period 1999-2008</b> |            |           |              |                |               |               |              |
|---|------------|-----------|--------------|----------------|---------------|---------------|--------------|
|   | <b>USA</b> | <b>UK</b> | <b>Spain</b> | <b>Germany</b> | <b>Sweden</b> | <b>France</b> | <b>EA 12</b> |
| Financial balances of external sector as a share of nominal GDP, per cent   | 4.1        | 2.5       | 5.3          | -2.7           | -5.1          | -0.9          | -0.5         |
| Financial balances of public sector as share of nominal GDP, per cent   | -3.9       | -2.0      | -0.3         | -2.2           | 1.2           | -2.7          | -2.0         |
| Financial balance of private sector as a share of nominal GDP, per cent   | -0.3       | -0.6      | -5.0         | 4.9            | 3.9           | 3.5           | 2.5          |
| - Financial balance of private household sector as a share of nominal GDP, per cent   | -0.2       | 1.9       | -2.5         | 5.0            | 1.1           | 2.6           | 2.1          |
| - Financial balance of the corporate sector as a share of nominal GDP, per cent   | 0.0        | -2.5      | -2.5         | -0.2           | 2.8           | 0.9           | 0.4          |
| Real GDP growth, per cent   | 2.6        | 2.6       | 3.5          | 1.5            | 3.0           | 2.1           | 2.1          |
| Growth contribution of domestic demand including stocks, percentage points  | 2.9        | 2.8       | 4.1          | 0.8            | 2.4           | 2.3           | 1.9          |
| - Growth contribution of private consumption, percentage points   | 2.1        | 1.9       | 2.0          | 0.4            | 1.3           | 1.2           | 1.0          |
| - Growth contribution of public consumption, percentage points  | 0.3        | 0.6       | 0.8          | 0.2            | 0.2           | 0.4           | 0.4          |
| - Growth contribution of gross fixed capital formation, percentage points   | 0.6        | 0.4       | 1.4          | 0.2            | 1.0           | 0.7           | 0.6          |
| Growth contribution of the balance of goods and services, percentage points   | -0.2       | -0.3      | -0.7         | 0.7            | 0.6           | -0.2          | 0.1          |
| Net exports of goods and services as a share of nominal GDP, per cent   | -4.4       | -2.1      | -3.6         | 3.9            | 5.5           | 0.8           | 1.7          |
| Source: European Commission (2019), author's calculations   |            |           |              |                |               |               |              |

**Figure 1: Current account balances, major countries, 1999-2018, in billions of US dollars**



Source: IMF (2019), author's presentation

**Figure 2: Growth rate of real GDP (at 2015 prices), selected countries, 1961 – 2018, in per cent**



Source: European Commission (2019), author's calculations

The countries following the two extreme regimes before the crisis, the debt-led private demand boom regime and the export-led mercantilist regime, contributed to generating rising current account imbalances in the global economy (Figure 1), but also within the Eurozone

(see Hein 2013/14). These global imbalances then led to the severity of the financial crisis and the Great Recession. As is well known, the crisis started in the main debt-led private demand boom country, the USA, and was transmitted to the world economy through the international trade channel and the financial contagion channel. Although the crisis did not turn towards a Great Depression, as in the 1930s, the recovery has been slow in historical comparison (Figure 2), with a ‘double dip’ recession in Spain, Sweden and the Eurozone as whole between 2011 and 2013. This weak recovery has triggered a renewed debate on ‘secular stagnation’ (Summers 2014, 2015).<sup>3</sup> As will be shown below, the recovery period has been associated with a shift in the patterns of macroeconomic regimes, which has contributed to stagnation and has created a highly fragile and challenging global economic situation.

#### **4. Changes in the regimes in the course of and after the crisis**

In the pre-crisis debt-led private demand boom countries, the USA, the UK and Spain, the private sectors, i.e. the private households and partly the corporations, had to deleverage considerably. On average over the period 2009-2018, the financial balances of these sectors thus became positive (with the exception of the corporate sector in the UK) and the growth contributions of private consumption and investment shrank remarkably – in Spain they even became negative. High public deficits stabilised the economy and allowed for low but positive growth in the USA and the UK, which moved from a debt-led private demand boom regime towards a domestic demand-led regime stabilised by public sector deficits. Persistently high external sector surpluses and thus current account deficits in these two countries 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. However, with the Eurozone crisis since 2010 and the austerity policies implemented, public deficits have been reduced, public and private domestic demand collapsed and real GDP growth turned negative and has only recovered recently. Positive growth contributions came from the balance of goods and services, through rising exports and falling imports, such that the current account improved and has, on an annual basis, remained positive since 2012. Spain has thus moved from a debt-led private demand boom economy towards an export-led mercantilist economy.

Both in the USA and the UK, as well as in Spain, the regime shifts were 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 USA 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, whereas they continued to rise in the USA (Hein et al., 2017a; 2017b, 2018). 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 (USA, UK) or on foreign sector deficits (Spain) as stabilisers of demand and growth.

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<sup>3</sup> For an assessment of this debate from a post-Keynesian perspective see Hein (2016, 2020).

| <b>Table 3: Key macroeconomic variables for selected OECD countries and the core Eurozone (EA 12), average annual values for the period 2009-2018</b> |            |           |              |                |               |               |              |
|---|------------|-----------|--------------|----------------|---------------|---------------|--------------|
|   | <b>USA</b> | <b>UK</b> | <b>Spain</b> | <b>Germany</b> | <b>Sweden</b> | <b>France</b> | <b>EA 12</b> |
| Financial balances of external sector as a share of nominal GDP, per cent   | 2.0        | 4.0       | -0.7         | -7.1           | -4.1          | 0.8           | -2.5         |
| Financial balances of public sector as share of nominal GDP, per cent   | -7.8       | -5.9      | -6.9         | -0.3           | -0.2          | -4.5          | -3.1         |
| Financial balance of private sector as a share of nominal GDP, per cent   | 5.8        | 1.9       | 7.7          | 7.4            | 4.3           | 3.7           | 5.6          |
| - Financial balance of private household sector as a share of nominal GDP, per cent   | 4.1        | 3.2       | 0.9          | 5.3            | 5.0           | 3.2           | 2.8          |
| - Financial balance of the corporate sector as a share of nominal GDP, per cent   | 1.7        | -1.4      | 6.8          | 2.1            | -0.7          | 0.4           | 2.8          |
| Real GDP growth, per cent   | 1.8        | 1.3       | 0.5          | 1.3            | 2.0           | 0.9           | 0.8          |
| Growth contribution of domestic demand including stocks, percentage points  | 1.9        | 1.4       | -0.4         | 1.3            | 2.1           | 1.0           | 0.5          |
| - Growth contribution of private consumption, percentage points   | 1.4        | 1.0       | 0.0          | 0.7            | 1.0           | 0.5           | 0.3          |
| - 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   | 0.4        | 0.2       | -0.5         | 0.3            | 0.5           | 0.1           | 0.0          |
| Growth contribution of the balance of goods and services, percentage points   | -0.1       | -0.2      | 0.9          | 0.0            | -0.1          | 0.0           | 0.3          |
| Net exports of goods and services as a share of nominal GDP, per cent   | -3.1       | -1.4      | 2.1          | 6.2            | 4.0           | -1.1          | 3.3          |
| Source: European Commission (2019), author's calculations   |            |           |              |                |               |               |              |

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. However, these deficits could be passively consolidated, because of the economic recovery, initially driven by net exports. The financial balances of the private sectors remained positive, in particular for private households (Table 3). On average over the period 2009-18, growth was exclusively driven by domestic demand, with significant contributions of private consumption. This shift has been made possible by stopping the trend towards rising inequality (Table 1): Labour income shares stopped falling, top income shares were not rising any more, and in Sweden Gini coefficients for pre- and post-tax household incomes remained constant, whereas in Germany they 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 considerably, whereas in Sweden they are only slightly below what they were before the crisis. Germany and Sweden thus continued to be export-led.

The domestic demand-led regime in France has not changed significantly in the crisis and the following years. Financial surpluses of private households were mopped up by corporations, but even more so by the public sector (Table 3). Due to the stabilisation requirements, public sector deficits increased relative to the period before the crisis. The balance of the external sector, which had become slightly positive already before the crisis has remained so, so that France on average over the second period was running a small 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 was driven by domestic demand, and mainly by private and public consumption. The former was facilitated by a decline in inequality in the period after the crisis (Table 1). France is the only country in the current 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 different. Although labour income shares for the EA-12 remained roughly constant after the crisis (European Commission, 2019), albeit with wide variations among member countries (Hein, 2018b), 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 over time due to austerity policies, the foreign sector balances turned negative, and the Eurozone has started to run increasing current account and net export surpluses of more than 3 per cent of GDP. Meagre growth since the crisis has been driven by net exports to a large degree. Of course, the major reason for these developments has been the austerity policies which have been implemented since the start of the Eurozone crisis in 2010, in particular in the crisis countries, Greece, Portugal, Ireland, Portugal and Spain (Hein, 2013/14; 2018b). 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.

## **5. Challenges: Imbalances, instability and stagnation**

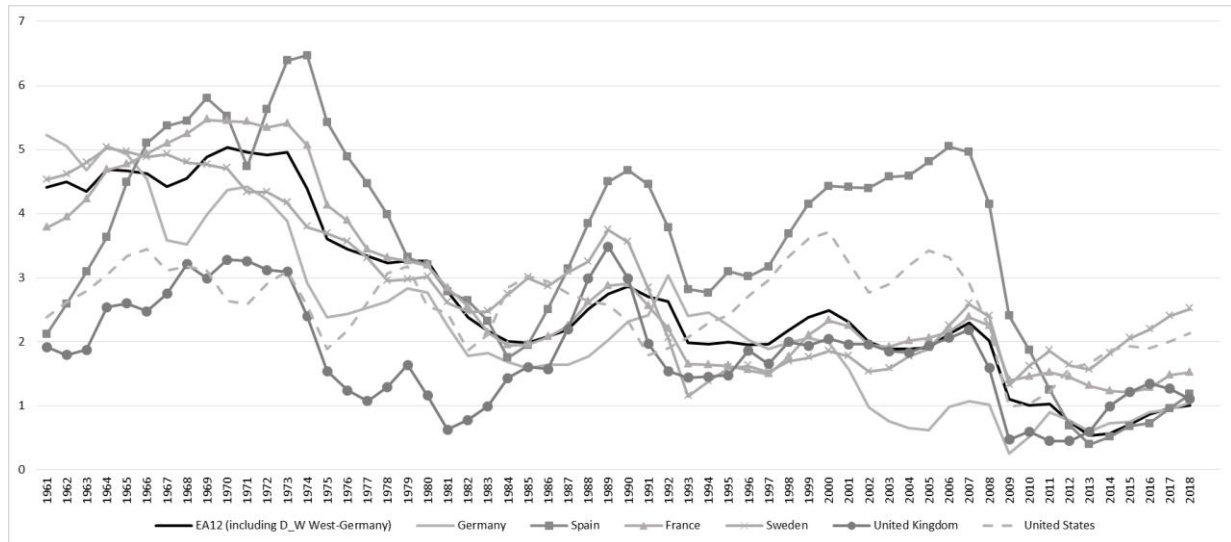
From a global perspective, current account imbalances have been slightly reduced in and after the crisis, if compared to the years before the crises. However, they are still much more pronounced than in the early 2000s (Figure 1). The high current account surpluses by the export-led mercantilist countries – Germany, Spain, the Eurozone as a whole, and Sweden in the current 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 USA, the UK and France in the current 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 situation are obvious. If ever more economies, like currently the whole Eurozone, move towards an export-led mercantilist regime, 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. Stagnation tendencies are then the inescapable consequences of this failure of demand generation at the global level.

Since global demand stabilisation has relied 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, further risks and dangers have 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, as currently observed in the case of the USA.

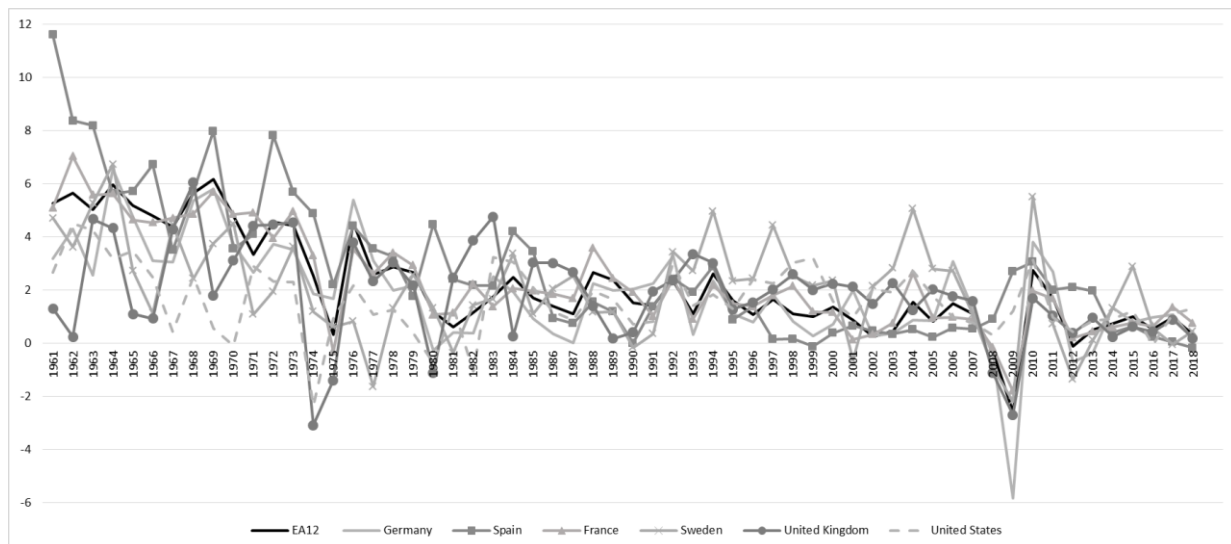
Apart from these short- to medium-run problems, there arises a long-run stagnation problem associated with weak investment and capital stock growth. Due to the effects of financialisation on investment, as outlined in Section 2, growth contributions of investment have already been weak before the crisis (Table 2) and have turned even lower in the crisis and post-crisis period (Table 3). Basically, this is true for all three regimes. In a long-run perspective, capital stock growth has seen a downwards trend, only interrupted by the new economy boom in the second half of the 1990s (and by the Eurozone boom in Spain in the early 2010s), with particularly low growth rates in the period after the recent crisis (Figure 3). This has led or at least contributed to falling growth rates of labour productivity, which also turned particularly low after the crisis (Figure 4).

**Figure 3: Growth rate of the real net capital stock (at 2015 prices), selected countries, 1961 – 2018, in per cent**



Source: European Commission (2019), author's calculations

**Figure 4: Growth rate of real GDP (at 2015 prices) per person employed, selected countries, 1961 – 2018, in per cent**



Source: European Commission (2019), author's calculations

Theoretically, the interaction between distribution, capital accumulation and productivity growth can be shown by extending a basic post-Kaleckian distribution and growth model in the tradition of Bhaduri and Marglin (1990) and Kurz (1990), already referred to above. According to the open economy version of the post-Kaleckian model, including government deficit spending, the goods market equilibrium rate of capital accumulation and growth—

assuming for now that technical progress and hence productivity growth is exogenous—is determined as follows (Hein 2014, Chapters 7-8):

$$(1) \quad g_{IS} = g_{IS}(\alpha, h, s_w, s_{\Pi}, d, e^r, g_{IS}^f, \hat{y}),$$

$$\frac{\partial g_{IS}}{\partial \alpha} > 0, \frac{\partial g_{IS}}{\partial h} < 0, \frac{\partial g_{IS}}{\partial s_w} < 0, \frac{\partial g_{IS}}{\partial s_{\Pi}} < 0, \frac{\partial g_{IS}}{\partial d} > 0, \frac{\partial g_{IS}}{\partial e^r} > 0, \frac{\partial g_{IS}}{\partial g_{IS}^f} > 0, \frac{\partial g_{IS}}{\partial \hat{y}} > 0$$

Animal spirits of firms and/or autonomous expenditures ( $\alpha$ ) have a positive effect on equilibrium accumulation and growth ( $g_{IS}$ ). The effect of the profit share ( $h$ ) is theoretically ambiguous, and wage- or profit-led regimes have been derived. However, empirical research has shown that the countries in our data set have been wage-led (Onaran and Galanis 2014, Onaran and Obst 2016). Therefore, we have a negative effect of the profit share on equilibrium growth. The propensities to save out of wages ( $s_w$ ) and out of profits ( $s_{\Pi}$ ) have negative effects, i.e. we have the validity of the paradox of thrift. The government deficit expenditure rate ( $d$ ) has a positive effect. The real exchange rate ( $e^r$ ) and equilibrium foreign growth ( $g_{IS}^f$ ) positively affect (net) exports and thus domestic growth. Furthermore, the goods market equilibrium rate of capital accumulation is positively affected by productivity growth ( $\hat{y}$ ), because of capital embodied technological change, in particular. Firms have to invest in new capital stock in order to benefit from technological inventions.

In order to endogenise productivity growth, we can rely on Kaldor's (1957, 1961) technical progress function and/or on Kaldor's (1966) 'Verdoorn's Law'. Labour productivity growth can thus be assumed to be positively affected by capital stock growth due to capital-embodied technological change, and/or by demand growth due to dynamic returns to scale. Furthermore, following Marx (1867) we can integrate a wage-push variable into the productivity growth function of the model. Higher real wage rates or a higher wage shares induce capitalists to speed up the implementation of labour augmenting technological progress in order to protect the profit share. Therefore, equation (2) is obtained for long-run productivity growth:

$$(2) \quad \hat{y} = \hat{y}(g_{IS}, h, z_i),$$

$$\frac{\partial \hat{y}}{\partial g_{IS}} > 0, \frac{\partial \hat{y}}{\partial h} < 0, \frac{\partial \hat{y}}{\partial z_i} > 0$$

Productivity growth is thus positively affected by the goods market equilibrium rate of capital accumulation and negatively by the profit share, with  $z_i$  representing a set of further institutional factors determining productivity growth, like government technology policies, the education system, etc.

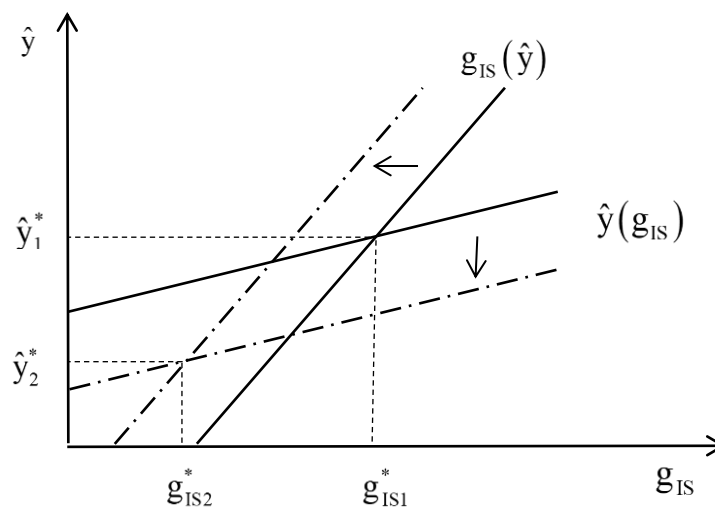
Equations (1) and (2) describe a demand-determined endogenous growth model, and Figure 5 presents the long-run equilibrium values for capital accumulation ( $g_{IS1}^*$ ) and



productivity growth ( $\hat{y}_1^*$ ), and thus the endogenous potential or ‘natural’ growth rate.<sup>4</sup> Any fall in the goods market equilibrium rate of capital accumulation, as the ones we have seen for both the debt-led private demand boom and the export-led mercantilist regimes, thus causes a leftward shift in the  $g_{IS}$ -curve, which lowers the long-run equilibrium rates of capital accumulation and productivity growth, hence weakens potential growth, and stagnation emerges.

Finally, Figure 5 also shows the effect of a rise in the profit share on long-run potential growth. In this case, both curves get shifted and the long-run growth equilibrium falls from  $g_{IS1}^*, \hat{y}_1^*$  to  $g_{IS2}^*, \hat{y}_2^*$ . Redistribution at the expense of wages is thus detrimental to long-run capital accumulation, productivity growth and thus to potential growth, although there may be short- to medium-run compensatory factors, i.e. rising deficit spending of private households, the government or of the foreign sector. These, however, may be difficult to sustain, as we have seen.

**Figure 5: A Kalecki-Kaldor-Marx endogenous growth model**



Summing up, post-crisis stagnation tendencies can be explained by those factors generating low equilibrium capital stock growth: depressed animal spirits of management of non-financial corporations, high propensities to save out of the different types of income, insufficient government deficit rates and expenditures on R&D, in particular in the export-led mercantilist countries, as well as high profit shares and high inequality. High and rising profit shares have an independent depressing effect on innovation activities of firms and on productivity growth; the latter being depressed by low capital accumulation, too. Stagnation is thus no inescapable fate, but it is, to a large degree, the result of distributional and economic policies – of ‘stagnation policies’, as Steindl (1979) has analysed (Hein 2016, 2018b).

<sup>4</sup> For analytical treatments see Hein (2014, Chapter 8, 2018b).

## 6. Conclusions

In this contribution we have tried to link the recently re-discovered tendencies towards stagnation with the features of financialisation, which have started to dominate developed capitalist economies in the early 1980s. We have first reviewed the main macroeconomic channels of transmission of financialisation—namely, the effects on distribution, investment in the capital stock, consumption and on the current and capital accounts. Based on these, we have introduced the concept of macroeconomic regimes under financialisation, and we have distinguished three regimes, the debt-led private demand boom, the export-led mercantilist and the domestic demand-led regime. This typology has then been applied to six countries, Germany, France, Spain, Sweden, the UK and the USA, as well as to the Eurozone, both for the period before (1999-2008) and after (2009-2018) the financial and economic crisis. We have shown that the dominance of the debt-led private demand boom regime, on the one hand, and the export-led mercantilist regime, on the other hand, have contributed to global current account imbalances before the financial and economic crisis 2007-9, which has demonstrated that these two regimes were unsustainable. For the period after the crisis we have found a shift towards export-led mercantilist regimes and a move towards domestic demand-led regimes stabilized by government debt with global current account imbalances persisting. Finally, we have elaborated on the challenges of these developments, a highly fragile global constellation with severe problems of aggregate demand generation and a tendency towards stagnation caused by high inequality and weak capital stock growth. We have singled out the underlying causes, from which we concluded that stagnation is no inescapable fate, but that it is, to a large degree, the result of ‘stagnation policies’ (Steindl 1979).

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## Imprint

### Editors:

Sigrid Betzelt, Eckhard Hein (lead editor), Martina Metzger, Martina Sproll, Christina Teipen, Markus Wissen, Jennifer Pédussel Wu, Reingard Zimmer

ISSN 1869-6406

Printed by  
HWR Berlin

Berlin September 2020