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## Distribution, 'financialisation' and the financial and economic crisis: Implications for post-crisis economic policies

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# Distribution, 'financialisation' and the financial and economic crisis – implications for post-crisis economic policies

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Working Paper, No. 09/2011

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# **Distribution, ‘financialisation’ and the financial and economic crisis – implications for post-crisis economic policies\***

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## Abstract

The severity of the financial and economic crisis which started in 2007 cannot be understood without examining the medium- to long-run developments in the world economy since the early 1980s. The following long-run causes for the crisis can be identified: inefficient regulation of financial markets, increasing inequality in the distribution of income, and rising imbalances at the global (and at the Euro area) level. The focus of the paper is on the changes in distribution triggered by ‘finance-dominated capitalism’ embedded in a ‘neo-liberal’ policy stance since the early 1980s. The three dimensions of re-distribution in the course of ‘financialisation’ and ‘neo-liberalism’ are examined: functional distribution, personal distribution and the development of top incomes. Since the development of functional income distribution is considered to be most important, the channels through which ‘financialisation’ and ‘neo-liberalism’ have contributed to the tendency of the labour income share to fall are identified, the effects of re-distribution on aggregate demand and growth are discussed, and the relationship between re-distribution at the expense of labour and regional (Euro area wide) and global current account imbalances are addressed. Finally, economic policy conclusions with respect to a sustainable income- or wage-led recovery strategy embedded in a ‘Keynesian New Deal at the global and the European level’ are drawn.

Keywords: Distribution, financialisation, global imbalances, financial and economic crisis, economic policy strategies

JEL classification: E21, E22, E25, E63, E64, E65

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## 1. Introduction

The world economy is still suffering from the consequences of the Great Recession which started with the collapse of the subprime mortgage market in the US in summer 2007, which gained momentum with the breakdown of Lehman Brothers in September 2008 and which reached another climax with the euro crisis starting in 2010. Under the conditions of deregulated and liberalised international financial markets the financial crisis rapidly spread all over the world and the world economy was hit by a decline in real GDP in 2009 – something not seen for generations. Major regions in the world are only slowly recovering from this decline, in particular the Euro area, the UK and Japan (IMF 2010). By the end of 2010 GDP and employment remained well below the levels which could have been attained on the pre-crisis growth path, and major parts of the world economy are threatened by a serious medium-term risk of deflationary stagnation (Hein/Truger 2010). Therefore, in what follows we consider that the crisis which started in 2007 is not yet resolved.

The severity of the present crisis cannot be understood without examining the medium- to long-run developments in the world economy since the early 1980s. Three major causes for the crisis can be identified: inefficient regulation of financial markets, increasing inequality in the distribution of income and rising imbalances at the global (and at the Euro area) level.<sup>1</sup> These developments have been dominated by the policies aimed at deregulation of labour markets, reduction of government intervention into the market economy and of government demand management, re-distribution of income from (lower) wages to profits and top management salaries, and deregulation and liberalisation of national and international financial markets. In what follows, we will call this broad policy stance ‘neo-liberalism’, describing the policies implemented – to different degrees in different developed capitalist economies – since the early 1980s. ‘Financialisation’ or ‘finance-dominated capitalism’, we use these terms interchangeably, is interrelated and overlaps with ‘neo-liberalism’, but is not identical with it.<sup>2</sup> Epstein (2005: 3) has presented a widely accepted definition, arguing that ‘(...) financialization means the increasing role of financial motives, financial markets,

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<sup>1</sup> On global imbalances and unequal distribution as causes for the present crisis, on top of widely accepted inefficient regulation of the financial sector, see, with different emphasis, Bibow (2008), Hein/Truger (2010, 2011), Horn et al. (2009), Fitoussi/Stiglitz (2009), Sapir (2009), UNCTAD (2009), and Wade (2009). In particular, see the early pre-crisis analysis by van Treeck/Hein/Dünhaupt (2007) focussing on the effects of ‘financialisation’ on distribution, aggregate demand, global imbalances and the following potential for instability. For a review of the changes in world wide financial markets and related imbalances which fed the financial crisis see Guttmann (2009).

<sup>2</sup> See Stockhammer (2010a, 2010b) for a similar distinction and Palma (2009) for a more extensive discussion of the relationship between ‘neo-liberalism’ and the present crisis.

financial actors and financial institutions in the operation of the domestic and international economies’.

From a Post-Keynesian macroeconomic perspective, ‘financialisation’ has affected long-run economic development through the following channels (Hein 2010a, 2010b, Hein/van Treeck 2010a). Regarding investment, ‘financialisation’ has been characterised by increasing shareholder power vis-à-vis management and workers, an increasing rate of return on equity and bonds held by rentiers, and an alignment of management with shareholder interests through short-run performance related pay schemes, bonuses, stock option programmes, and so on. On the one hand, this has imposed short-termism on management and has caused decreasing managements’ animal spirits with respect to real investment in capital stock and long-run growth of the firm. On the other hand, it has drained internal means of finance for real investment purposes from the corporations, through increasing dividend payments and share buybacks in order to boost stock prices and thus shareholder value. These ‘preference’ and ‘internal means of finance’ channels have each had partially negative effects on firms real investment in capital stock and hence on long-run growth of the economy.<sup>3</sup>

Regarding consumption, ‘financialisation’ has generated increasing potential for wealth-based and debt-financed consumption. 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 increasing credit available to low income, low wealth households, in particular. This allowed consumption norms to rise faster than medium income, driven by habit persistence, social visibility of consumption (‘keeping up with the Joneses’), and a kind of ‘consumer arms race’ (Cynamon/Fazzari 2008).<sup>4</sup>

Finally, with regard to distribution, ‘financialisation’ has been viewed to be conducive to a falling labour income share and to increasing inequality of wages and salaries. The focus of the present paper is on the changes in distribution triggered by ‘finance-dominated capitalism’ embedded in the ‘neo-liberal’ policy stance since the early 1980s, on potential causes for this re-distribution, on the effects of re-distribution on aggregate demand, on the role of re-distribution for the global and regional imbalances underlying the present financial

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<sup>3</sup> See the empirical studies by Stockhammer (2004), van Treeck (2008) and Orhangazi (2008).

<sup>4</sup> See Barba/Pivetti (2009), Cynamon/Fazzari (2008), and van Treeck (2009) for extensive discussions of the effects of finance-dominated capitalism on households’ (debt-financed) consumption, with a focus on the US.

and economic crisis, and on the requirements for distribution policies in a post-crisis economic recovery strategy.<sup>5</sup>

Summarised in a nutshell, we will argue that ‘finance-dominated capitalism’ and ‘neo-liberalism’ have caused redistribution at the expense of the labour income share through several channels and have also contributed to increasing inequality in household income. Given that aggregate demand and capital accumulation, and hence growth, in most of the economies examined here have found to be wage-led in recent empirical research, this should have had a depressing effect on economic performance. However, in some countries, in particular in the US, the UK, Spain, Ireland and Greece, the emergence of a debt-led consumption boom, based on the effects of ‘financialisation’ on consumption mentioned above, was able to (partially) compensate for the depressing effects of redistribution at the expense of labour and weak real investment associated with ‘financialisation’ on aggregate demand and hence on growth. Other, export-led mercantilist economies, in particular Germany, Japan, Austria, Belgium, the Netherlands, Sweden (and the catching up China), managed to free-ride on the demand generated by the debt-led consumption boom economies and derived their growth mainly from export-surpluses in the face of relatively weak domestic demand in these countries. This constellation generated highly unbalanced current accounts at global and regional (European) levels, based on increasing household debt-income ratios in the debt-led consumption boom economies, and it collapsed in the course of the Great Recession. Therefore, neither the debt-led consumption boom nor the export-led mercantilist models have shown to be sustainable. A viable recovery strategy will therefore have to be wage- or income-led, and we will argue that it should be embedded in a Keynesian New Deal at the global and the European level which addresses the three main causes for the Great Recession: the inefficient regulation of the financial sector, the increasing inequality of income distribution and the imbalances at global and regional (Euro area) levels.

The paper is organised as follows. In Section 2 we examine the three dimensions of redistribution in the course of ‘financialisation’ and ‘neo-liberalism’ since the early 1980s: functional distribution, personal distribution and the development of top incomes. Section 3 then focuses on the determinants of functional income distribution against the background of a Kaleckian theory of distribution. In particular, we identify the channels through which ‘financialisation’ and ‘neo-liberalism’ may have affected the labour income share

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<sup>5</sup> Interestingly, distribution as a long neglected subject of economic research has recently come into the focus of the research of major international organizations again. See for instance European Commission (2007), IMF (2007a, 2007b), and OECD (2008). Atkinson’s (1997) plea for ‘Bringing income distribution in from the cold’ in his 1996 presidential address to the Royal Economic Society has so far been successful, at least in the long run.



theoretically, and we review empirical evidence for our hypotheses. In Section 4 the effects of re-distribution on aggregate demand and growth are discussed. Here we have to take into account the further partial effects of ‘financialisation’, on investment of the business sector and on consumption of the private household sector, apart from the distributional effects. Section 5 addresses the relationship between re-distribution and regional (Euro area wide) and global current account imbalances, as one of the sources of the severity of the crisis which started in 2007. In Section 6 we draw the economic policy conclusions from our analysis with respect to the role of distribution or incomes policies within an income-led recovery strategy or a ‘Keynesian New Deal at the global and the European level’ designed to overcome the three main sources of the crisis. Section 7 summarises and concludes.

## **2. Trends of re-distribution in the period of ‘neo-liberalism’ and ‘financialisation’ since the early 1980s**

The neo-liberal period since the early 1980s and the emergence of finance-dominated capitalism in major OECD countries have been associated with a massive re-distribution of income. This has several dimensions which will be examined for a set of 14 developed OECD countries, the major Euro area countries, Austria, Belgium, Germany, Greece, Ireland, Italy, Netherlands, Portugal, and Spain, Sweden and the UK as EU countries outside the Euro area, and the US and Japan. Data are mainly from European Commission and OECD sources. That is the reason why China had to be excluded from the analysis of distribution trends, and it will only be included when it comes to the relationship between distribution and global current account imbalances, as will be seen in Section 5 of this paper.

### **2.1 Functional income distribution**

First, we observe that functional income distribution has changed at the expense of labour and in favour of broad capital income in the period of ‘neo-liberalism’ and ‘financialisation’. The labour income share, as a measure taken from the national accounts and corrected for the changes in the composition of employment regarding employees and self-employed,<sup>6</sup> has shown a falling trend in the developed economies considered here since the early 1980s, with cyclical fluctuations due to the well known counter-cyclical properties of the labour income share (Figures 1a-1c). In order to eliminate cyclical fluctuations of the labour income share, we have calculated cyclical averages for the three trade cycles from the early 1980s until 2008

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<sup>6</sup> The labour income share is given by the compensation per employee divided by GDP at factor costs per person employed. The European Commission (2010) from which our data is taken calls this the ‘adjusted wage share’.

(Table 1). On average over the cycle the labour income share has fallen in all countries but Portugal, from the first cycle (early 1980s to the early 1990s) to the third cycle (early 2000s until 2008). The fall has been most substantial in Austria and Ireland with more than 10 percentage points of GDP at factor costs, and in Greece, France, Spain and Japan with more than 5 percentage points of GDP. In Belgium, Germany, Italy, the Netherlands, Sweden, the UK and the US the labour income share has fallen by less than 5 percentage points of GDP at factor costs. The reasons for this long-run development and its relationship with ‘neo-liberalism’ and finance-dominated capitalism will be examined more closely in the next section.

**Figure 1a**

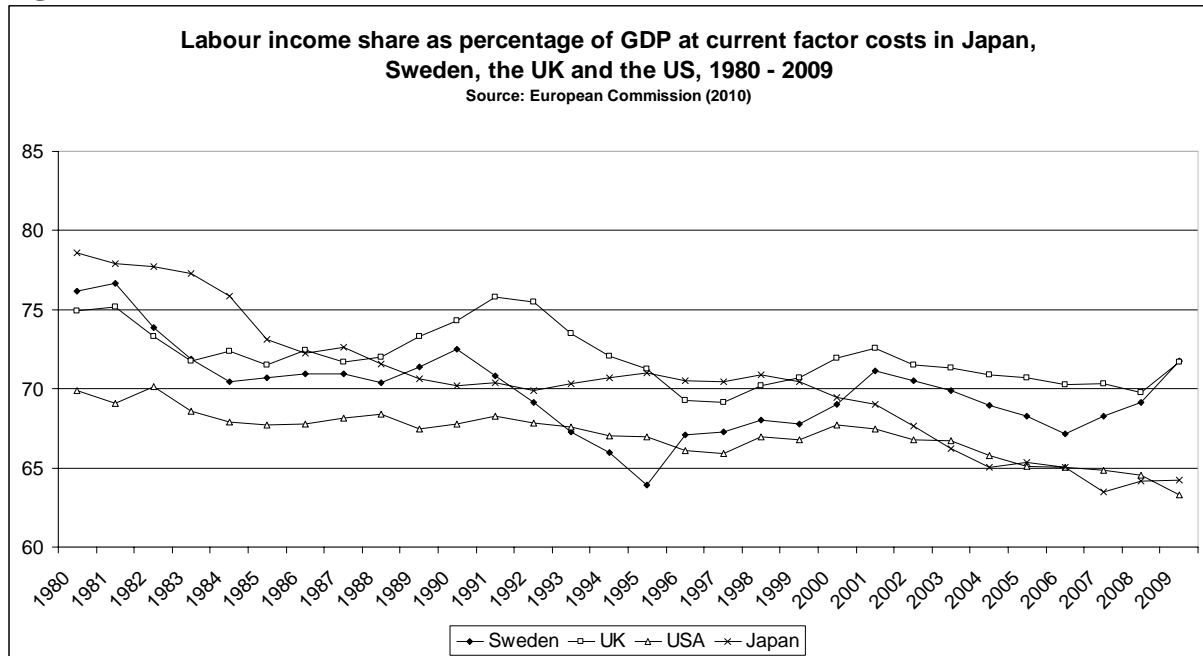


Figure 1b

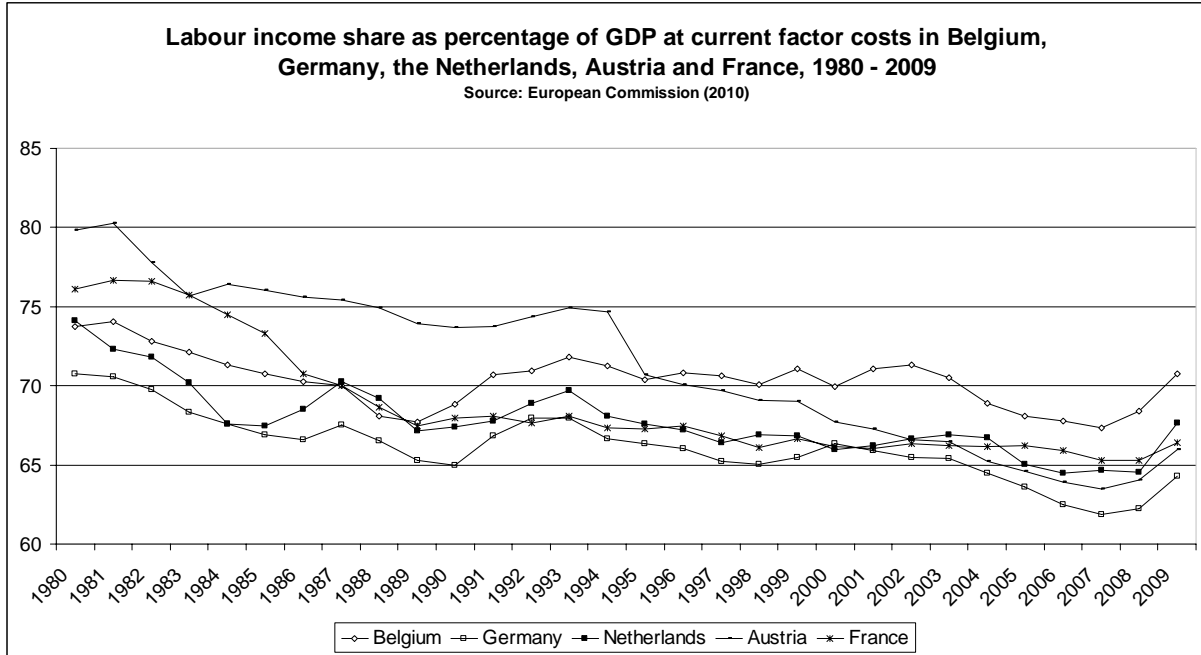
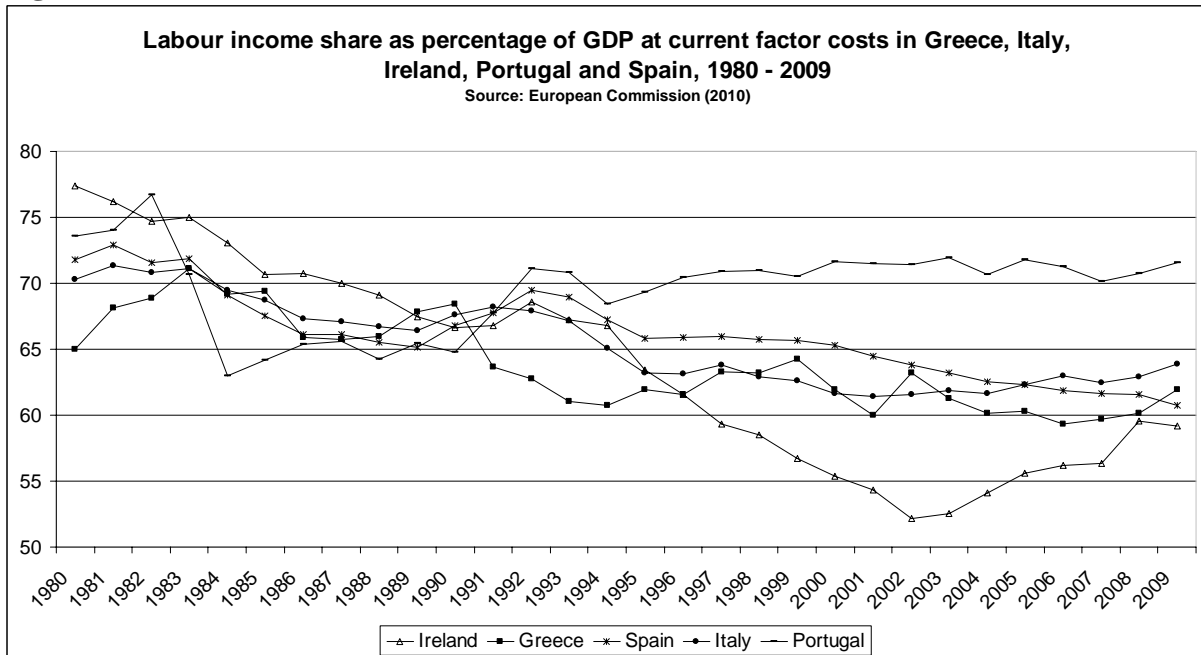


Figure 1c



**Table 1: Labour income share as percentage of GDP at current factor costs, average values over the trade cycle, early 1980s – 2008**

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

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

<sup>a)</sup> adjusted to fit in 3 cycle pattern

Source: European Commission (2010), author's calculations

## 2.2 Personal income distribution

Second, personal income distribution has become more unequal in most of the countries from the mid 1980s until the mid 2000s. Taking the Gini coefficient as an indicator, this is true for the distribution of market income, with France and the Netherlands being exceptions in our data set (Table 2).<sup>7</sup> In some countries this rise in inequality has been considerable: in Germany, Italy, Portugal, the US and Japan the Gini coefficient has risen by 15 per cent or more. If we include re-distribution via taxes and social policies by the state, Belgium, France, Greece, Ireland and Spain have not seen an increase in their Gini coefficients, with considerable declines in Spain, France and Greece. The other countries, however, have also experienced an increasing inequality in disposable income in the period of 'neo-liberalism' and finance-dominated capitalism. This increase was particularly pronounced in Austria, Germany, Italy, Sweden and the US where the after tax Gini coefficient increased by more than 10 per cent. Although tax and social policies have reduced income inequality in all the countries under investigation, in most countries this has not prevented an increase in inequality over time. This is also the conclusion the OECD (2008) has drawn for a broader set of countries and from the application of further measures of income inequality.

<sup>7</sup> OECD (2010) data used here are collected by the OECD from national sources. Data refer to cash income of households and are broken down to individuals. The income attributed to each individual is adjusted for household size, but does not distinguish between adults and children (OECD 2008: 41-47).

**Table 2. Gini coefficient before and after taxes****Gini coefficient before taxes**

Country	mid-70s	mid-80s	around 1990	mid-90s	around 2000	mid-2000s	Change from mid 80s to mid 2000s, in percent
Austria	...	...	...	...	...	0.43	...
Belgium	...	0.45	...	0.47	0.46	0.49	8.89
Germany	...	0.44	0.42	0.46	0.48	0.51	15.91
Netherlands	0.42	0.47	0.47	0.48	0.42	0.42	-10.64
France	...	0.52	0.51	0.48	0.50	0.48	-7.69
Greece	...	...	...	...	...	...	...
Ireland	...	...	...	...	0.43	0.42	...
Italy	...	0.42	0.44	0.51	0.52	0.56	33.33
Portugal	0.46	...	0.44	0.49	0.48	0.54	17.39 <sup>a)</sup>
Spain	...	...	...	...	...	...	...
Sweden	0.39	0.40	0.41	0.44	0.45	0.43	7.50
UK	0.36	0.44	0.46	0.48	0.48	0.46	4.55
US	0.37	0.40	0.42	0.45	0.45	0.46	15.00
Japan	...	0.35	...	0.40	0.43	0.44	25.71

**Gini coefficient after taxes**

Country	mid-70s	mid-80s	around 1990	mid-90s	around 2000	mid-2000s	Change from mid 80s to mid 2000s, in percent
Austria	...	0.24	...	0.24	0.25	0.27	12.50
Belgium	...	0.27	...	0.29	0.29	0.27	0.00
Germany	...	0.26	0.26	0.27	0.27	0.30	15.38
Netherlands	0.25	0.26	0.28	0.28	0.28	0.27	3.85
France	...	0.31	0.30	0.28	0.28	0.28	-9.68
Greece	0.41	0.34	...	0.34	0.34	0.32	-5.88
Ireland	...	0.33	...	0.32	0.30	0.33	0.00
Italy	...	0.31	0.30	0.35	0.34	0.35	12.90
Portugal	0.35	...	0.33	0.36	0.36	0.38	8.57 <sup>a)</sup>
Spain	...	0.37	0.34	0.34	0.34	0.32	-13.51
Sweden	0.21	0.20	0.21	0.21	0.24	0.23	15.00
UK	0.28	0.33	0.37	0.35	0.37	0.34	3.03
US	0.32	0.34	0.35	0.36	0.36	0.38	11.76
Japan	...	0.30	...	0.32	0.34	0.32	6.67

Notes: Data refer to cash income of households and are broken down to individuals. The income attributed to each individual is adjusted for household size, but does not distinguish between adults and children.

a) change from mid 70s to mid 2000s

Source: OECD (2010), author's calculations

This picture regarding personal income distribution, however, remains incomplete, because Gini coefficients or other measures of inequality of personal income distribution are usually based on data from household and consumer surveys which do not include top incomes and thus underestimate the development at the top of the income hierarchy (OECD 2008). Bach/Corneo/Steiner (2009) in a study on income distribution in Germany from 1992-2003

report an increase of the Gini coefficient for gross market incomes from 0.62 in 1992 to 0.65 in 2003, merging household and consumer survey data from the German Socio Economic Panel with data from official income tax statistics, thus creating a data base for the entire income distribution.<sup>8</sup> Their Gini coefficient for Germany including top incomes is thus substantially higher than the one included in the OECD database referred to above.

### 2.3 Top incomes

Third, we have therefore to look at the results of recent studies focussing on the development of top incomes based on tax data in order to obtain a better understanding of distribution effects of ‘neo-liberalism’ and ‘financialisation’ on personal income distribution. However, tax data cannot be used to describe the whole distribution of income, but they are especially useful for long-run analysis of top incomes and the composition of these top incomes (Atkinson/Piketty/Saez 2010a). As the path-breaking analysis by Piketty/Saez (2003, 2006) for the US has shown, the share of top incomes in national income has increased significantly since the early 1980s.<sup>9</sup> Studies based on tax data, which have by now been extended to several other countries and have been reviewed in Atkinson/Piketty/Saez (2010a), focus on the distribution of market income prior to taxation and government re-distribution.

Making use of the data supplied by Atkinson/Piketty/Saez (2010b) we take a look at the developments of the income shares of the top 0.1 percent in 11 countries in Figures 2a-2d.<sup>10</sup> The US and the UK have seen an explosion of the shares of the very top incomes since the early 1980s, which prior to the present crisis have again reached levels of the 1920s in the US and the late 1930s in the UK.<sup>11</sup> In France, Germany, the Netherlands, Spain, Portugal, Italy Ireland, Japan and Sweden, however, the shares of the top 0.1 percent have remained roughly constant or only slightly increased in the neo-liberal period and have not returned to

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<sup>8</sup> According to Bach/Corneo/Steiner (2009), in Germany there has also been a substantial drop of median income relative to mean income, the latter being roughly stable, an increasing income share of the 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> decile, and accordingly a fall in the lower and bottom income deciles.

<sup>9</sup> For studies on the US see also Dew Becker/Gordon (2005), Gordon/Dew Becker (2007), Mohun (2006) and Dumenil/Levy (2004b). The latter provide a more extended interpretation of the results obtained by Piketty/Saez (2003) for the US against the background of ‘financialisation’.

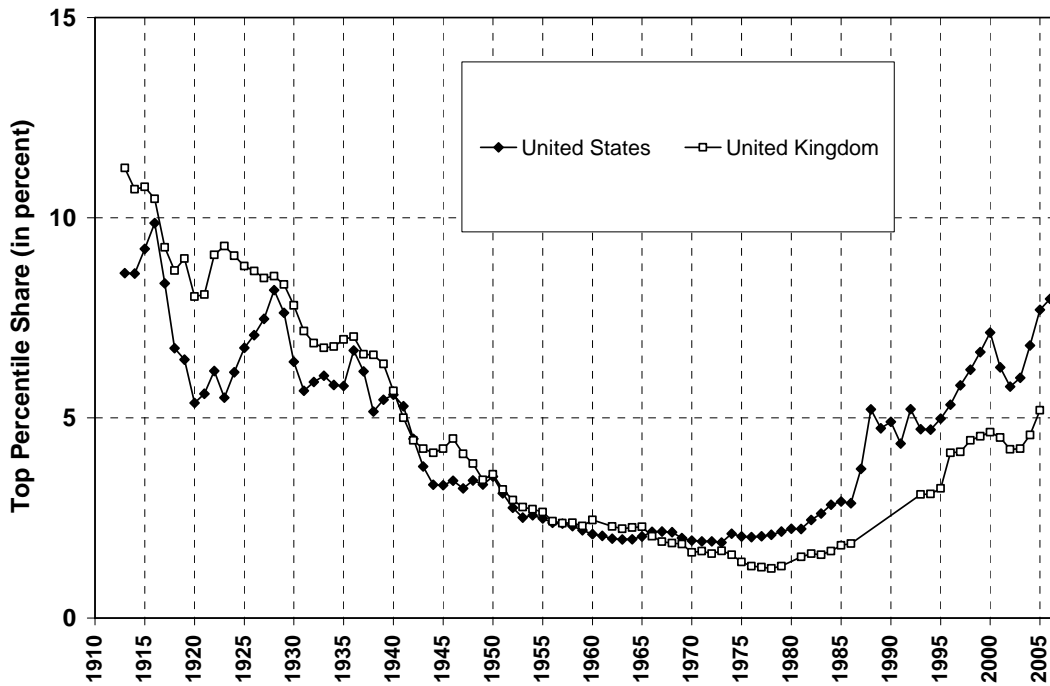
<sup>10</sup> Austria, Belgium and Greece are not in the data set supplied by Atkinson/Piketty/Saez (2010b).

<sup>11</sup> Atkinson/Piketty/Saez (2010a) hold that their results may even underestimate the re-distribution in favour of the very top incomes, because capital income included in progressive income tax base has declined over time: “Indeed, over time, many sources of capital income, such as interest income, or returns on pension funds, have been either taxed separately at flat rates or fully exempted, and hence have disappeared from the tax base. (...) As a result (...) of the development of numerous (...) forms of legally tax-exempt capital income, the share of capital income that is reportable on income tax returns, and hence included in the series presented, has significantly decreased over time. To the extent that such excluded capital income accrues disproportionately to top income groups, this will lead to an underestimation of top income shares. (...) We view this as one of the main shortcomings – probably the main shortcoming – of our data set.” (Atkinson/Piketty/Saez 2010a: 31-32)

the high level prior to World War II.<sup>12</sup> But note that the share of the top 0.1 per cent in Germany is substantially higher than in the other countries and has only been surpassed by the US and the UK since the late 1980s and the mid 1990s, respectively.

**Figure 2a**

**Top 0.1% share in national income: UK and US, 1910-2007**

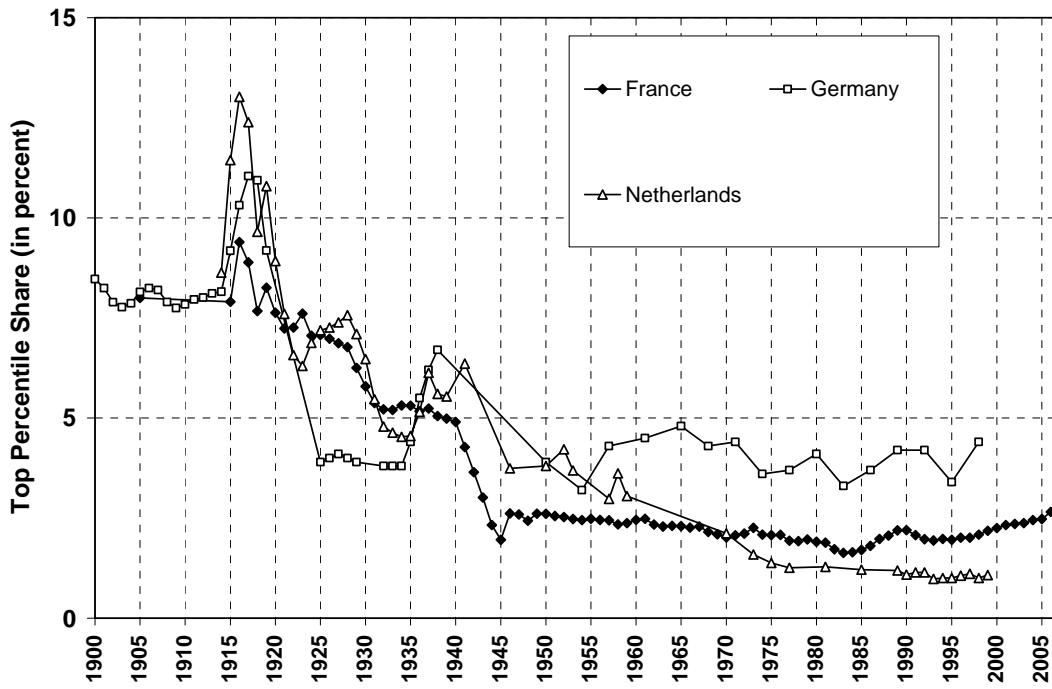


Source: Atkinson/Piketty/Saez (2010b)

<sup>12</sup> A similar pattern can be observed for the shares of the top 1 per cent, as is shown by Atkinson/Piketty/Saez (2010a). And it also holds for the top 0.01 per cent, with the exception of the UK for which there is no data for the period starting in the early 1980s, as can be seen in Figures A1a-A1c in the appendix.

Figure 2b

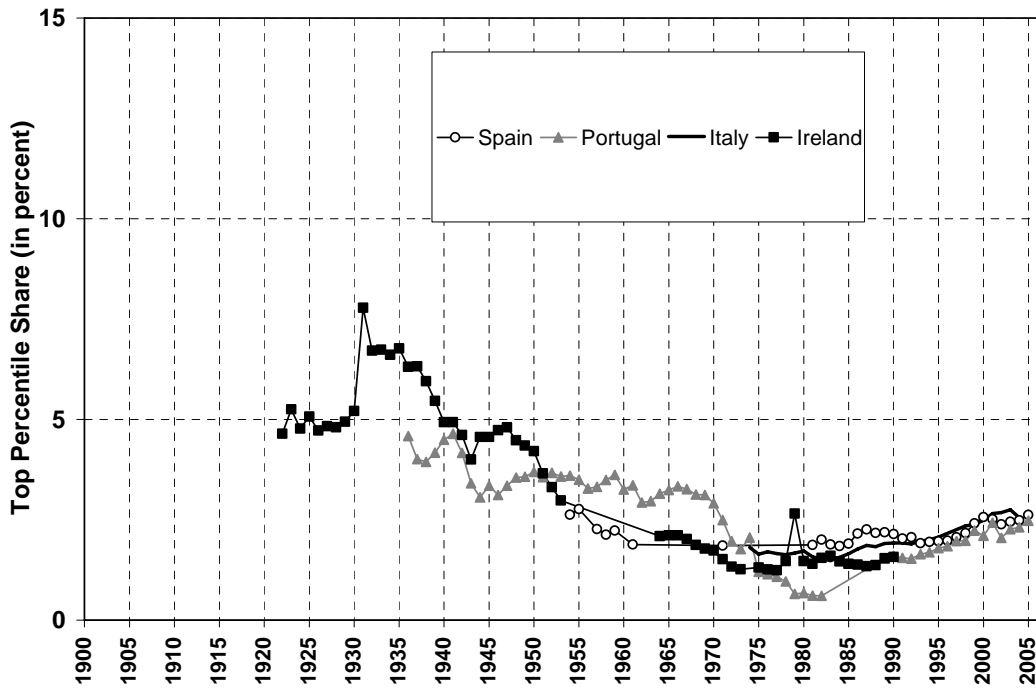
Top 0.1% share in national income: France, Germany, Netherlands, 1900-2006



Source: Atkinson/Piketty/Saez (2010b)

Figure 2c

Top 0.1% share in national income: Ireland, Italy, Portugal, Spain, 1900-2006

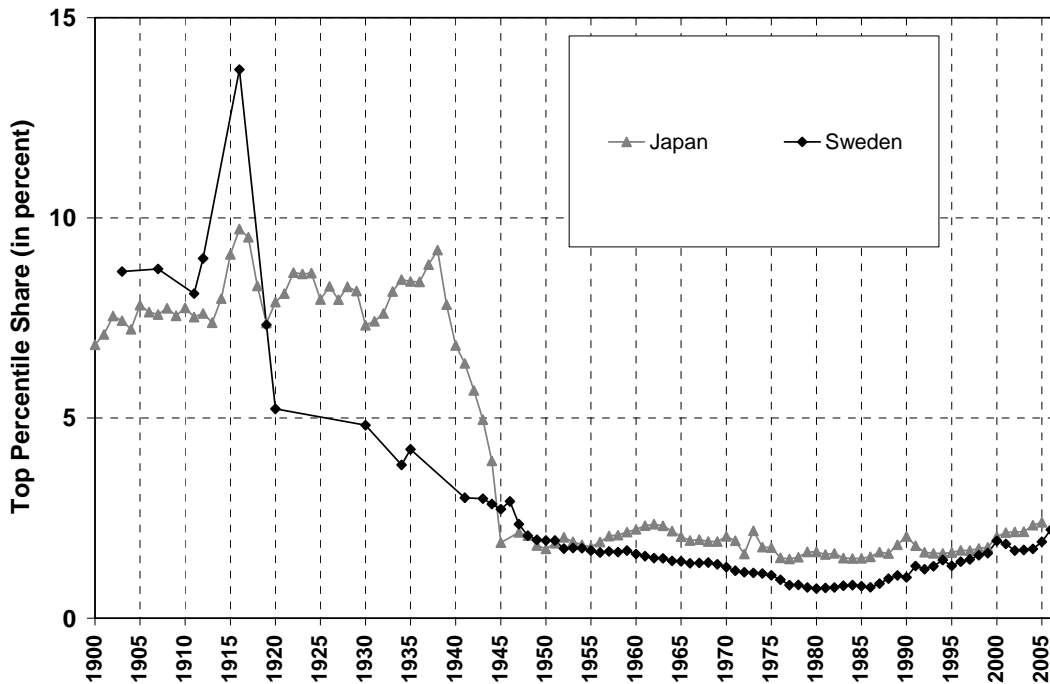


Source: Atkinson/Piketty/Saez (2010b)



Figure 2d

Top 0.1% share in national income: Japan, Sweden, 1900-2006



Source: Atkinson/Piketty/Saez (2010b)

In the data set provided by Atkinson/Piketty/Saez (2010b) for Germany, the top 1 percent, top 0.1 percent and the top 0.01 percent income share does not show any pronounced rising trend until 1998. Bach/Corneo/Steiner (2009), in their study for Germany already referred to above, confirm this result also for the respective values until 2003. However, they find a remarkable growth of the income share accruing to the richest 0.001 percent in the population (about 650 persons), which managed to increase its share of gross market income – excluding capital gains – from 0.55 percent in 1992 to 0.82 percent in 2003.<sup>13</sup>

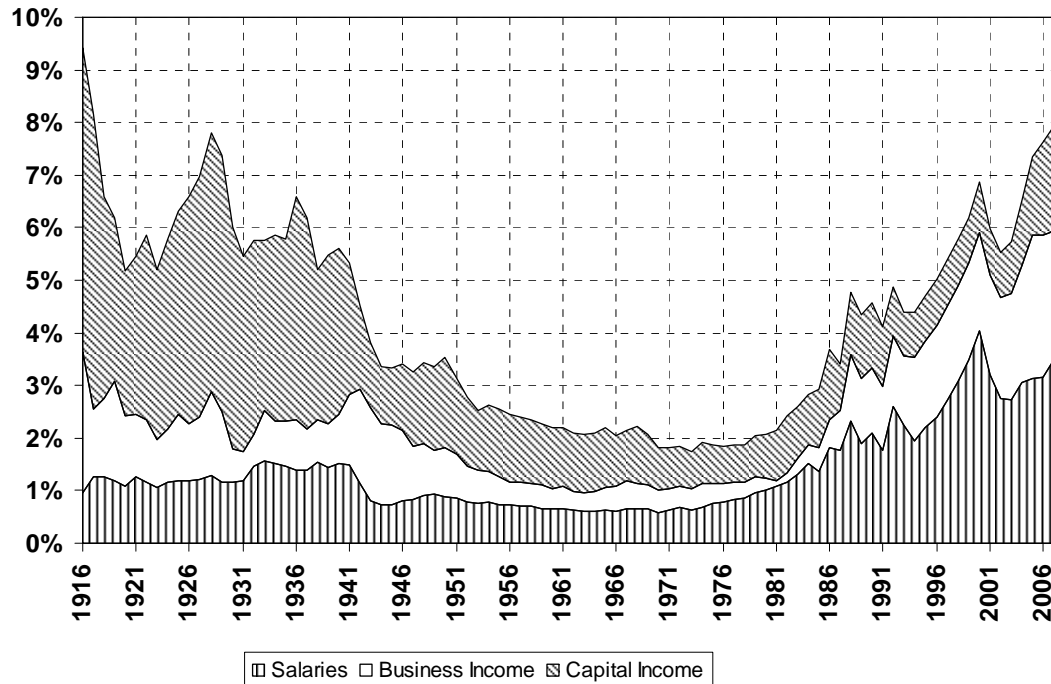
The increase in the income share of the top 0.1 percent in the US is mainly driven by an increase in business income (profits from sole proprietorship, partnerships etc.) and by the increase in top salaries, including wages and salaries, bonuses, exercised stock-options and pensions, whereas the share of capital income (interest, dividends, rents, royalties etc.) in the top 0.1 percent income share has remained roughly constant (Figure 3). Remuneration of top

<sup>13</sup> The increase in the share of the net income of the richest 0.001 persons was even more pronounced. Assigning half of the income of married couples to each spouse, the gross income share increased from 0.3 percent in 1992 to 0.46 percent in 2003. Including social security contributions, income tax and solidarity surcharge, the share of the top 0.001 persons increased from 0.24 percent in 1992 to 0.45 percent in 2003. The richest 0.0001 percent (65 persons) were even more successful. They increased their gross market income share, assigning half of the income of married couples to each spouse, from 0.08 percent in 1992 to 0.2 percent in 2003, and their net income share from 0.07 percent in 1992 to 0.2 percent in 2003.

management ('working rich') has therefore contributed significantly, but not exclusively, to rising inequality in the US from the early 1980s until 2006.<sup>14</sup>

**Figure 3**

**The top 0.1 income share and its compositionn, US, 1916-2007**  
Source: Atkinson/Piketty/Saez (2010b)



Notes: Income is defined as market income excluding capital gains (excludes all government transfers). Salaries include wages and salaries, bonus, exercised stock-options, and pensions. Business income includes profits from sole proprietorships, partnerships, etc.. Capital income includes interest income, dividends, rents, royalties, and fiduciary income.

Source: Atkinson/Piketty/Saez (2010b)

Top management salaries have contributed around 50 percent to the income of the top 1 percent income share in the US since the mid 1970s. In Germany, however, the main income of the top 0.1 per cent income share derives mainly from business activity (64.1 percent in 1992, 58.5 percent in 2003) and capital income (20.9 percent in 1992, 19.2 percent in 2003), with a decreasing trend each (Bach/Corneo/Steiner 2009).<sup>15</sup> Top management salaries have played a minor role. However their share has increased from 15 percent in 1992 to 22.4

<sup>14</sup> Atkinson/Piketty/Saez (2010a) also include realized capital gains into their decomposition of the top 0.1 percent income share in the US. The share of realized capital gains in the top 0.1 income share has also increased since the early 1980s, albeit with considerable pro-cyclical fluctuations.

<sup>15</sup> Bach/Corneo/Steiner (2009) attribute this difference of Germany from the US (and also from France) to the large share of unincorporated firms in Germany, some of them of considerable size. Furthermore, some very rich German families have accumulated their income in private foundations and holdings and report only the distributed income in their personal income tax returns.

percent in 2003.<sup>16</sup> Therefore, the ‘working rich’ phenomenon seems to arise in Germany as well. The same seems to be true for some other countries for which data are available. Atkinson/Piketty/Saez (2010a) mention Italy, the Netherlands, Spain, the UK and Japan. For the Nordic countries, however, notably Sweden, the share of top management salaries in top income shares has decreased in the neo-liberal period, according to their review.

Since top management salaries are part of compensation of employees in the national accounts and are thus included in the wage share considered above, the increase in top management salaries in the period of ‘neo-liberalism’ and ‘financialisation’ has dampened the fall in the measured wage share since the early 1980s. Excluding top management salaries from the wage share would therefore give an even more pronounced fall in the share of ‘ordinary labour’.<sup>17</sup> In the following section we will address the causes for the change in functional income distribution or in factor shares for several reasons. On the one hand, the analysis of factor shares provides the link between incomes at the macroeconomic or the national accounting level and incomes at the level of the household, thus helping to understand the development of inequality in personal distribution, and providing an indicator of the relative powers of different groups, according to Atkinson (2009). On the other hand, the analysis of functional income distribution allows for a straightforward integration of changes in distribution into a macroeconomic framework.

### **3. ‘Financialisation’, ‘neo-liberalism’, and the falling labour income share**

#### **3.1 A Kaleckian approach**

In order to discuss the causes for the falling tendency of the labour income share and the respective rise in the gross profit share (including retained profits, dividends, interest payments, rents, etc.), as well as the long-run effects of ‘neo-liberalism’ and ‘financialisation’ on functional income distribution, we start with a Kaleckian approach (Kalecki 1954: 11-41, 1971: 43-77). According to Kalecki, functional income distribution in the industrial sector of the economy is determined by mark-up pricing of firms in incompletely competitive markets (monopoly, oligopoly, monopolistic competition, etc.). Whereas in the primary sector (agriculture, fishing, mining) with inelastic supply in the short run, changes in demand cause changes in prices, in the industrial sector changes in demand trigger changes in output and

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<sup>16</sup> For the top 0.01 percent and the top 0.001 percent income shares wage incomes are even less important. The share of salaries in total income, however, was increasing from 1992 until 2003, too (Bach/Corneo/Steiner 2009).

<sup>17</sup> See Buchele/Christiansen (2007) for such an exercise for the US corporate sector. They somewhat arbitrarily identify the share of the top 0.5 percent of wage and salary income as payments to corporate officers on the basis of their ‘proximity to capital’ and exclude these salaries from the wage share. See also Glyn (2009) for a similar approach for the US, Atkinson (2009) for the UK and Dünhaupt (2011) for Germany.

thus the rate of capacity utilisation with prices being more or less rigid. The rate of capacity utilisation therefore becomes endogenous in the Kaleckian models of distribution and growth focussing on industrial economies, both in the short run and in the long run.<sup>18</sup> Since we are dealing with developed capitalist economies where industrial and service sectors dominate we apply Kalecki's approach, because in the labour intensive service sector below full employment supply is variable, too, and prices can be assumed to be set by means of marking up unit costs.

Post-Keynesians have proposed different cost plus pricing procedures: mark-up pricing, full cost or normal cost pricing and target rate of return pricing.<sup>19</sup> For the sake of simplicity, we start with Kalecki's (1954: 11-41, 1971: 43-77) mark-up pricing approach. What follows is not meant to present a detailed and exact analysis of pricing procedures in certain periods of development of modern capitalism, but rather to identify channels of influence of 'financialisation' on pricing and distribution in a stylized way. We are interested in the potential medium- to long-run effects of 'financialisation' on distribution, but not on the causes of short-run, cyclical fluctuations of functional income distribution. With Kalecki we assume that firms mark up marginal costs which are roughly constant up to full capacity output given by the available capital stock. This implies that the mark-up is applied to constant average variable costs. Unit variable costs are composed of unit direct labour costs and unit material costs. For the latter we assume that raw materials and semi-finished goods are mainly imported from abroad in order to include international trade.

In this approach, the mark-up has to cover overhead costs, i.e. depreciation of fixed capital and in particular salaries of overhead labour, on the one hand, and firms' gross profits, i.e. interest and dividend payments as well as retained profits, on the other hand. As will be seen below, this approach is thus well suited to take the explosion of top management salaries observed in the US and other countries into account.<sup>20</sup> With a given mark-up and constant unit variable costs up to full capacity output, gross and also retained unit profits will vary pro-cyclically, because unit overhead costs will move counter-cyclically, i.e. will fall (rise) with fixed overhead costs spreading over increasing (decreasing) output.<sup>21</sup>

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<sup>18</sup> See Hein/Lavoie/van Treeck (2011a, 2011b) for a discussion of the related problems.

<sup>19</sup> See Lavoie (1992: 129-148) for a discussion of Post-Keynesian pricing theory. He shows that there is no fundamental difference between mark-up pricing, full cost pricing and target rate of return pricing. See also Lee (2002) for a short overview.

<sup>20</sup> See Lavoie (2009) for another Kaleckian approach starting from target rate of return pricing and including overhead labour.

<sup>21</sup> Overhead labour salaries are thus an important contribution to the observed pro-cyclical movement of the wage share as calculated from the national accounts. See Lavoie (2009) for an explicit treatment in a target rate of return model with overhead labour.

For a vertically integrated domestic industrial or service sector  $j$ , which uses fixed capital, labour and imported raw materials and semi-finished goods as inputs, we get the following pricing equation:

$$p_j = (1 + m_j) \left( \frac{w}{y} + p_f e \mu \right)_j, \quad m_j > 0, \quad (1)$$

with  $p_j$  denoting the output price in sector  $j$ ,  $m_j$  the mark-up in sector  $j$ ,  $w$  the nominal wage rate,  $y$  labour productivity,  $p_f$  the unit price of imported material or semi-finished products in foreign currency,  $e$  the exchange rate, and  $\mu$  imported materials or semi-finished inputs per unit of output. Since the relationship between unit material costs and unit labour costs ( $z_j$ ) is given by:

$$z_j = \left( \frac{p_f e \mu}{\frac{w}{y}} \right)_j, \quad (2)$$

the price equation can also be written as:

$$p_j = (1 + m_j) \left[ \frac{w}{y} \left( 1 + \frac{p_f e \mu}{\frac{w}{y}} \right) \right]_j = (1 + m_j) \left[ \frac{w}{y} (1 + z_j) \right]_j. \quad (3)$$

The gross profit share ( $h_j$ ), including overhead costs and thus also management salaries, in gross value added of sector  $j$  is given by:

$$h_j = \frac{\Pi_j}{(\Pi + W)_j} = \frac{1}{\frac{1}{(1+z_j)_j m_j} + 1} = \frac{(1+z_j)_j m_j}{(1+z_j)_j m_j + 1}, \quad (4)$$

with  $\Pi$  denoting gross profits including overhead costs and  $W$  representing wages for direct labour. For the corresponding share of wages for direct labour in gross value added ( $\omega_j = 1 - h_j$ ) we obtain:

$$\omega_j = \frac{W_j}{(\Pi + W)_j} = \frac{1}{(1+z_j)_j m_j + 1}. \quad (5)$$

The gross profit share ( $h$ ) including overhead costs for the economy as a whole is given by the weighted average of the sectoral profit shares, the wage share of direct labour ( $\omega = 1-h$ ) for the economy by the weighted average of the sectoral wage shares:<sup>22</sup>

$$h = \frac{\Pi}{(\Pi + W)} = \frac{1}{\frac{1}{(1+z)^m} + 1} = \frac{(1+z)^m}{(1+z)^m + 1}, \quad (6)$$

$$\omega = \frac{W}{(\Pi + W)} = \frac{1}{(1+z)^m + 1}. \quad (7)$$

Functional income distribution is thus determined by the mark-up in pricing of firms, by the relationship of unit material costs to unit labour costs, and by the sectoral composition of the economy. With constant technical conditions of production (constant  $y$  and  $\mu$ ), an increasing gross profit share including overhead costs (a decreasing wage share of direct labour) can either be caused by rising mark ups, a falling nominal wage rate, rising prices of imported materials or semi-finished goods in foreign currency, a depreciation of the domestic currency (thus a rising exchange rate), and/or a change in the sectoral composition of the economy in favour of high profit share sectors.

Before discussing the potential channels of influence of ‘financialisation’ and ‘neoliberalism’ on functional income distribution, the determinants of the mark-up have to be examined more closely. According to Kalecki (1954: 17-18, 1971: 49-52) the mark-up, what he calls the ‘degree of monopoly’, has several determinants.

First, the mark-up is positively related to the degree of concentration within the respective industry or sector. A high degree of concentration within an industry makes price leadership by the most important firms, tacit agreements or more or less formal cartels more likely. Second, the mark-up is negatively related to the relevance of price competition relative to other forms of competition (product differentiation, marketing, etc.). We summarise these two determinants as the ‘degree of price competition among firms in the goods market’. These determinants of the mark-up have been highlighted, in particular, in the work of Steindl

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<sup>22</sup> Sectoral profit shares (and thus wage shares) will differ according to the sectoral differentials in the determinants of functional distribution discussed below. Even if actual or target profit rates are equalized across sectors and there are hence no restrictions to free competition between sectors (in the classical sense, not in the neoclassical sense of perfect competition), this implies that sectoral profit shares will have to differ nonetheless due to the differences in the technical structure of production among sectors (Lavoie 1992, pp. 144-148, Semmler 1984).

(1976) and Baran/Sweezy (1966) focussing on the tendencies towards ‘monopoly capital’.<sup>23</sup> They have been integrated into the modern Kaleckian/Steindlian distribution and growth models starting with the works by Rowthorn (1981) and Dutt (1984).

Third, Kalecki claims that the power of trade unions has an adverse effect on the mark-up. In a kind of strategic game, firms anticipate that strong trade unions will demand higher wages if the mark-up and hence profits exceed ‘reasonable’ or ‘conventional’ levels, so that the high mark-up can only be sustained at the expense of ever rising prices and finally a loss of competitiveness of the firm.<sup>24</sup> This will induce firms to constrain the mark-up in the first place. Starting with Rowthorn (1977), in the Post-Keynesian literature the effect of trade union bargaining power has been integrated into conflict claims inflation models, in which workers/trade unions and firms have conflicting and potentially inconsistent income claims generating inflation, on the one hand, and determining income distribution, on the other hand (see for instance Lavoie 1992: 372-421, Hein/Stockhammer 2010).

Fourth, Kalecki argues that overhead costs may affect the degree of monopoly and hence the mark-up. Since a rise in overhead costs squeezes gross profits, “there may arise a tacit agreement among the firms of an industry to ‘protect’ profits, and consequently to increase prices in relation to unit prime costs” (Kalecki 1954: 17).<sup>25</sup> Lavoie (2009) recently discussed the effects of shifting managerial staff costs to prices in a Kaleckian distribution and growth model. From the perspective of the firm, interest payments on debt are also part of overhead costs, and thus the idea of an interest rate or interest payments elastic mark-up has been introduced into Kaleckian models of distribution and growth (Lavoie 1993, Hein 2006, 2007, 2008, chapter 13).<sup>26</sup> A permanent increase in interest rates (or interest payments) would thus induce firms on average to increase the mark-up in order to survive. Recently, this idea has been further extended arguing that from the perspective of the management of the firm also dividend payments are a kind of overhead obligations. A permanent increase of dividend

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<sup>23</sup> Also Sylos-Labini’s (1969) idea of entry-preventing-pricing is related to price competition among firms in the goods market as a determinant for the mark-up. Sylos-Labini (1969) argues that with fixed costs digression the large incumbent firm within a sector will set prices and hence mark-ups such that entry by smaller firms with a lower level of output and thus higher unit total costs will be deterred.

<sup>24</sup> See also Kalecki’s (1971: 156-164) chapter on ‘Class struggle and the distribution of income’ where he argues that trade-union power “manifests itself in the scale of wage rises demanded and achieved” (Kalecki 1971: 162). Part of this will be shifted to prices and hence to consumers, another part will be absorbed by a lower mark-up.

<sup>25</sup> However, Kalecki (1954: 18) adds: “The degree of overheads may, but need not necessarily, increase as a result of a rise in overheads relative to prime costs.”

<sup>26</sup> Lavoie (1992: 135-136) argues: “What is important to remember when using straightforward mark-up models is that the mark-up depends on overhead elements, such as overhead labour salaries, and on fixed or quasi-fixed interest costs.” This approach has been inspired by the treatment of interest payments as part of the costs of the firm in the neo-Ricardian monetary theory of distribution (Panico 1985, Pivetti 1985, 1991) which pick up Sraffa’s (1960: 33) idea of closing the degree of freedom of a system of prices of production by the interest rate.

payments could therefore induce management to recover this drain of funds for real investment or other purposes by means of increasing the mark-up, i.e. raising prices or forcing down unit labour costs if market conditions and relative bargaining power of firms and labour unions allow for (Hein 2010a, 2010b, Hein/van Treeck 2010a, 2010b).

Making the mark-up elastic with respect to different types of overheads and gross profit claims means that firms need to have a notion of normal or long-run average levels of output or rates of utilisation of capacity given by the capital stock, because unit overhead costs decrease with output. The mark-up approach becomes thus equivalent to a target rate of return approach (Lavoie 1992: 135), and the mark-up in equation (1) can be understood as being determined by a target rate of return at long-run average levels of output or rates of capacity utilisation. In the early target rate of return approaches by Eichner (1976), Harcourt/Kenyon (1976) and Wood (1975) it was assumed that the mark-up set by the firm is determined by the required internal means of finance for real investment purposes – under the conditions of incomplete credit markets characterised by asymmetric information, which do not allow borrowing without own means of finance, according to Kalecki's (1937) 'principle of increasing risk'. Therefore, in these approaches it was growth expectations of firms which determine the target rate of return and thus the mark-up. Recently, this approach has been extended by allowing for different target rates of returns by different stakeholder groups within a firm. Lavoie (2002) presented a model of target rate of return pricing with different target rates of workers and firms, generating conflict inflation and an endogenous normal rate of capacity utilisation. Dallery/van Treeck (2011) have included shareholders and their target rate of return into the model and have derived different outcomes depending on the relative powers of each group. Their model allows for the analysis of the effects of various features of 'financialisation', in particular the effects of the dominance of shareholders over other groups imposing their target rate of return, or 'financial norm' (Boyer 2000), on the firm as a whole. Taking these recent extensions into account, the mark-up in equation (1) can be seen as reflecting the target rate of return as an outcome of distribution struggle within the firm, at a long-run average rate of capacity utilisation being itself an endogenous outcome of the distribution struggle, on the one hand, and interacting with aggregate demand in the goods market, on the other hand.

Having so far identified the main channels of influence on the labour income share of direct labour, respectively on the gross profit share including management salaries, we shall now discuss the potential effects of 'financialisation' and 'neo-liberalism' on functional income distribution via the potential channels identified above. We consider the three



determinants of the mark-up: the degree of price competition in the goods market, the bargaining power and activity of trade unions in the labour market, and the overhead costs and gross profit targets. Furthermore, we consider the prices of imported raw materials and semi-finished goods (in relation to direct labour costs) and the sectoral composition of the domestic economy. From the enormous recent literature on ‘financialisation’,<sup>27</sup> we can derive the following seven ‘stylized facts’ which may have exerted a direct impact on income distribution, if we follow the Kaleckian approach: increasing shareholder value orientation and increasing short-termism of management; rising dividend payments; increasing interest rates and interest payments in particular in the 1980s; increasing top management salaries; increasing relevance of financial as compared to real investment and hence of the financial sector relative to the non-financial sector; hostile takeovers, mergers and acquisition; and liberalisation and globalisation of international finance and trade. We have added two further developments since the early 1980s which might have affected functional income distribution, and which are part of ‘neo-liberalism’: deregulation of the labour market and downsizing of the share of government activity in real GDP, of government intervention in the private sector of the economy, and of government aggregate demand management. In Table 3 we summarise the potential effects of these developments on the gross profit share including top management salaries via the channels proposed by the Kaleckian theory of distribution.

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<sup>27</sup> See for example, Dumenil/Levy (2004a), Krippner (2005), Orhangazi (2008), Palley (2008), and the contributions in Epstein (2005) for a detailed treatment of the development of ‘financialisation’ in the US and other countries, van Treeck (2009a) and van Treeck/Hein/Dünhaupt (2007) for a comparison of the macroeconomics of ‘financialisation’ in the US and Germany, and Stockhammer (2008) for the development in Europe.

**Table 3: ‘Financialisation’ and the gross profit share – a Kaleckian perspective**

Determinants of the gross profit share (including (top) management salaries)

Stylized facts of ‘financialisation’ (1.-7.) and ‘neo-liberalism’ (8.-9.)	Mark-up				
	1. Degree of price competition in the goods market	2. Bargaining power and activity of trade union	3. Overhead costs and gross profit targets	4. Price of imported raw materials and semi-finished products	5. Sectoral composition of the domestic economy
1. Increasing shareholder value orientation and short-termism of management	...	+	+	...	...
2. Rising dividend payments	...	...	+	...	...
3. Increasing interest rates or interest payments	...	...	+	...	...
4. Increasing top management salaries	...	...	+	...	...
5. Increasing relevance of financial to non-financial sector (investment)	...	+	...	...	+
6. Mergers and acquisitions	+	...	...	...	...
7. Liberalisation and globalisation of international finance and trade	–	+	...	+/-	+/-
8. Deregulation of the labour market	...	+	...	...	...
9. Downsizing of government	...	+	...	...	+

Notes: + positive effect on the gross profit share, – negative effect on the gross profit share, ... no direct effect on the gross profit share

### 3.2 Evidence

The degree of price competition in the goods market has been affected in an ambiguous way so that the overall effect remains unclear, a priori. Hostile takeovers, mergers and acquisitions may have increased industrial concentration and, ceteris paribus, allowed for higher mark-ups, whereas liberalisation and globalisation of international trade and finance obviously increase the degree of price competition and thus impose a downward pressure on the mark-up. The overall effect thus remains unclear. A similar result holds for the prices of imported raw materials and semi-finished goods (relative to wage costs) as a determinant of the profit share. They may be affected by globalisation and liberalisation of international trade and finance, but in an ambiguous way. Whereas prices of labour intensive reproducible semi-finished goods have a tendency to decline due to increased international competition and relocation of production towards low wage regions, prices of non-reproducible raw materials, in particular energy, have a tendency to rise due to the industrialisation of China and India and the respective increase in world demand, in particular. The overall effect is again unclear. In what follows, we will therefore focus on the other three channels in Table 3 and we will treat them in reverse order.

The sectoral composition of the economy is affected by an increasing share of the financial sector in value added as compared to the non-financial sector, on the one hand, and by downsizing government activity in GDP, on the other hand. The effect of the latter is obvious, because in the national accounts the government sector is a ‘non-profit’ sector; government owned corporations are part of the corporate sector. And even if we include top management salaries into the profit share, this will only have a minor effect for the government sector as compared to the private sectors of the economy in which these salaries usually exceed those in the public sector. Therefore, downsizing government will, ceteris paribus, reduce the economy wide wage share and increase the profit share. An increasing share of value added of financial corporations relative to the non-financial corporations will push up the economy wide gross profit share, too, if the sectoral wage share in the financial sector falls short of that in the non-financial sector. In a decomposition study for Germany (1980-2008) and the US (1970-2008), Dünhaupt (2010) shows that in these two countries this is the case: In the US, the wage share according to the national accounts, thus including top management salaries, has been fluctuating around slightly less than 75 per cent in the non-financial corporate sector and around 65 per cent in the financial corporate sector, each without a clear tendency to fall. It has been the increase in share of the financial sector in value added of the corporate sector which has caused the wage share in the US corporate

sector to fall. In Germany, where the share of the financial sector in value added of the corporate sector has only slightly increased in the 2000s, the wage share in the financial sector has been fluctuating around 70 percent without any long-run downward or upward tendency. By contrast the wage share in the non-financial sector having been around 77 per cent until the mid 1990s has shown a considerable downward tendency since then and has fallen to the level of the financial corporate sector. Therefore, in Germany the fall in the wage share in the corporate sector has been dominated by the falling wage share in the non-financial corporations, with the sectoral shift towards the financial sector contributing since the early 2000s.

With regard to overhead costs and gross profit targets, in the previous section of this paper we have already discussed increasing top management salaries, showing how significant this development has been in the US, but recently also in other countries including Germany. Excluding top management salaries from the wage share taken from the national accounts would therefore make the latter fall even more, i.e. there is at least a correlation of a rising share of top management salaries in GDP and a falling tendency of the share of direct labour. In this section we shall now focus on interest and dividend payments. Studying the development of the profit rate of non-financial corporations in France and the US (1960-2001), Dumenil/Levy (2005) have found that the rise in this profit rate since the early 1980s has been mainly due to the rise in net real interest payments. Excluding these payments from profits, the profit rate of the non-financial corporate sector has remained constant in France and has increased only slightly in the US.<sup>28</sup> Therefore, rising interest payments have had to be paid for by a reduction in the labour income share and it has thus been mainly the rentiers class which has benefited from re-distribution at the expense of labour. In a more general study on 29 OECD countries (1960-2000) focussing on the development of the share of rentiers' income in GDP, Epstein/Power (2003) confirm the results by Dumenil/Levy. They show that the share of rentiers' income in GDP increased at the expense of the wage share in most countries during the 1980s, remaining on the high level through the 1990s. In their study, rentiers' income is defined as the sum of profits of the financial sector plus interest income of the non-financial sector and households. Since nominal interest payments also compensate for capital losses due to inflation, Epstein/Jayadev (2005) have extended the analysis for 15 OECD countries (1960-2000), correcting the share of rentiers' income in GDP for inflation. Applying this method, they mainly confirm the earlier results by Epstein/Power

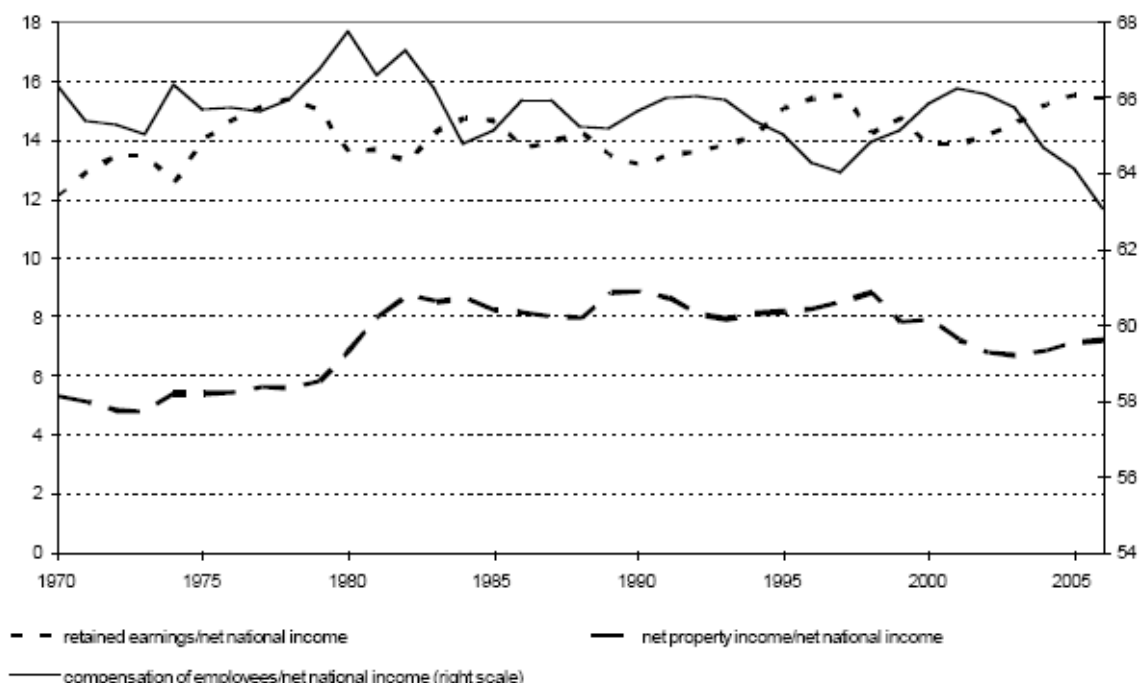
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<sup>28</sup> The profit-rate of the financial sector in the US, however, has increased significantly since the early 1980s exceeding the profit rate of the non-financial sector by a considerable amount since then (Dumenil/Levy, 2004a).

(2003). These studies, however, only partially cover the distributive effects of ‘financialisation’, because they do not include dividend payments of non-financial corporations to private households in their definition of rentiers’ income.

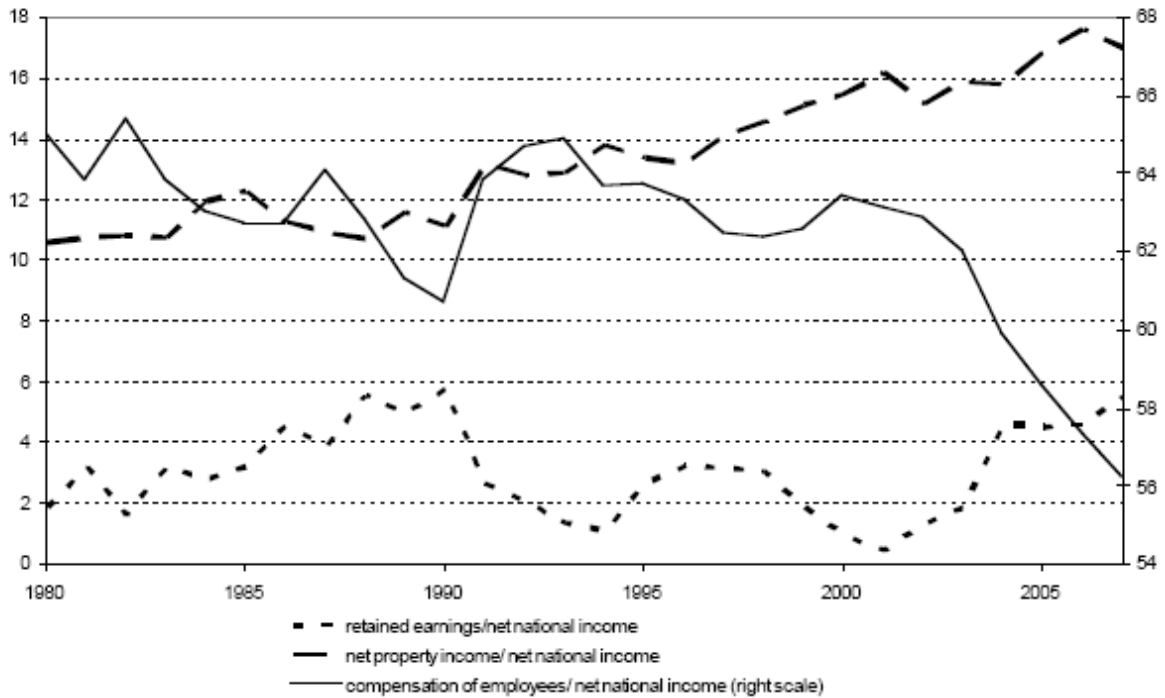
Dünhaupt (2010) has therefore redefined rentiers’ income as net property income of private households, including thus net interest and net dividends received, and she has examined the development of the rentiers’ share in net national income and of its components for Germany (1980-2008) and the US (1970-2008). For the US she finds an increase in the rentiers’ share in the early 1980s, which then remains roughly constant over the next 2.5 decades, and a corresponding decline in the wage share, whereas the share of retained earnings shows no marked trend (Figure 4a). The decomposition of the rentiers’ share reveals that the spike in the early 1980s was mainly driven by net interest income and that since the late 1980s net dividend income has increased its share tremendously. In Germany, the rentiers’ share has increased continuously since the early 1990s with a corresponding fall in the wage share, whereas the share of retained earnings shows marked fluctuations but no trend (Figure 4b). The increase in the rentiers share has almost exclusively been driven by an increase in the share of dividend income.

**Figure 4a: Income shares in the US, 1970-2006**



Source: OECD National Accounts; author’s calculation.

Source: Dünhaupt (2010: 21)

**Figure 4b: Income shares Germany, 1980-2008**

Source: Federal Statistical Office, Germany; author's calculation.

Source: Dünhaupt (2010: 23)

Econometric evidence on the effects of rentiers' income claims on the wage share or the gross profit share is rather limited and is focussed on the effects of interest rates or interest payments. Marterbauer/Walterskirchen (2002) have estimated the determinants of the adjusted wage share for the overall economy in Austria, Germany, Denmark, Finland, Ireland, Italy, the Netherlands, and Sweden from 1970-2000. They find significant effects with the expected sign almost uniformly for each of the countries for GDP growth indicating the effect of the trade cycle, the unemployment rate representing trade union bargaining power, and inflation capturing the effect of changes in prices of imported raw materials and semi-finished products. For Austria they also include the real long-term interest rate which is taken to reflect rentiers' income claims. Although the variable shows the expected sign it is not statistically significant.

Argitis/Pitelis (2001) obtained for the non-financial corporate sector in the US and the UK in the period 1965-1997 that the nominal interest rate negatively affects the share of industrial profits in gross value added of the non-financial corporate sector in both countries. Further determinants of the share of industrial profits are nominal wages and the bargaining power of labour unions, measured by unemployment and strike intensity. Therefore,

according to these results, a rise in the interest rate does not seem to affect the mark-up and thus does not harm the wage share directly, but rather seems to compress industrial profits. However, if rising interest rates are accompanied by weakened bargaining power of labour unions and lower wage demands, re-distribution will take place at the expense of labour income, according to the results by Argitis/Pitelis.

Marterbauer/Walterskirchen (2002) and Argitis/Pitelis (2001) have thus found no significant direct impact of overhead costs associated with ‘financialisation’ on the wage share or the gross profit share. However, they have only introduced real or nominal interest rates into their regressions and have not controlled for indebtedness of the business or corporate sector.<sup>29</sup> Hein/Schoder (2011) have therefore included net interest payments of the non-financial business sector in relation to the nominal capital stock of this sector into their estimations of a profit share function for the total economy for Germany and the US from 1960-2007.<sup>30</sup> The following control variables have been applied: the unemployment rate indicating the relative powers of workers and firms in the distribution struggle, consumer price inflation indicating exogenous price shocks, and the growth rate of real net domestic income as an indicator for demand affecting the short-run room of manoeuvre of firms for price setting. They find a highly significant and strong effect of net interest costs on the profit share thus confirming the notion of an interest payments elastic mark-up affecting distribution between capital and labour.<sup>31</sup> Unemployment has a positive effect on the profit share in the US, but no effect in Germany. Inflation shocks affect the profit share negatively in both countries. Hence, on average, trade unions were strong enough to compensate for inflation induced losses in the real wage position of workers. Aggregate demand had a short-run positive but long-run negative impact on the profit share in both countries.

Taken together, there seems to be some statistical evidence that rising overhead costs and rising profit claims of shareholders correlate with a falling wage share. Econometrically, however, it seems to be difficult to disentangle these effects and further studies on these issues seem to be required. Hein/Schoder (2011) is the only recent study to our knowledge which finds statistically significant direct effects of a ‘financialisation’ related overhead variable, net interest payments of non-financial business relative to the capital stock, on the

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<sup>29</sup> Hein/Ochsen (2003) also report that they have not found any significant effect of the interest rate in their estimations of a profit share functions for France, Germany, the UK and the US from the early 1960s to the mid 1990s.

<sup>30</sup> The profit share is the net operating surplus of the total economy adjusted for the labour income of the self-employed related to the net value added.

<sup>31</sup> In the US, a 1 percentage point increase in net interest payments in relation to the net nominal capital stock raises the profit share by 2.44 percentage points. In Germany the corresponding effect is 2.16 percentage points.

profit share. The studies referred to so far, however, all find significant effects of the last channel of influence of ‘financialisation’ on the profit share to be reviewed: bargaining power and activity of trade unions.

Trade union bargaining power and activity can be assumed to have been affected by the following features of ‘financialisation’ and the ‘neo-liberal’ period since the early 1980s. First, shareholder value orientation and increasing short-termism of management has weakened trade unions by replacing the ‘retain and invest’ strategy of the Fordist era with a ‘downsize and distribute’ strategy (Lazonick/O’Sullivan 2000) aiming at high share prices. Second, the increasing relevance of the financial as compared to the non-financial sector can be supposed to have weakened trade unions, because they have been traditionally stronger in the non-financial sector in many countries, particularly in the industrial sector of the private economy and in the public sector. Similar effects could therefore be found when downsizing the government sector. Related to this, the abandonment of Keynesian demand management policies aimed at low unemployment and their replacement with Monetarist supply side policies aimed at low inflation, drastically increased unemployment in the early 1980s. Furthermore, deregulation of the labour markets since the early 1980s has been especially aimed at undermining the bargaining power of trade unions, since this has been assumed to be an important factor for the NAIRU in mainstream theory and politics (Stockhammer 2004a: chapter 3). Liberalisation and globalisation of international trade and international finance has increased competition among workers through the ‘threat effect’ of firms to outsource and relocate production. Since trade unions are still predominantly organised at the national levels, outsourcing and relocation threats have also contributed to weakened trade union bargaining power.

Recent panel estimations by the IMF (2007a) for 18 OECD countries from 1983-2002, and by the European Commission (2007) for 13 OECD countries from 1983-2002 have found that skill biased technological change is the most important variable affecting the labour income share, taking ICT use and/or capital labour ratios as proxies. Globalisation, proxied by relative export and import prices, offshoring, immigration, and/or openness, also contributes; but labour market institutions – representing trade union bargaining power – have little importance for functional income distribution, taking the tax wedge, unemployment benefits, union density, minimum wages, and employment protection legislation as indicators. From the Kaleckian perspective applied in this paper it is not clear why skill biased technical change should affect the overall wage share or labour income share as derived from the national accounts in the negative – we would rather expect a higher degree of wage dispersion



if the recent type of technical change, demanding a higher degree of qualification and education, improved the bargaining position for high skilled labour but weakened the position of the low-skilled.<sup>32</sup>

Stockhammer (2009) has checked the robustness of the results of the European Commission (2007) and the IMF (2007a) for a sample of 15 countries (13 EU countries, Japan, and the US), 1982 – 2003, finding that they are not robust at all and suffer from serious econometric problems.<sup>33</sup> According to his results, the effect of technological change, indicated by ICT services and capital-labour ratios, often turns statistically insignificant. Globalisation, however, has a robust effect. Extending the econometric model and estimating 5 years non-overlapping averages gives statistically significant, strongly negative effects of the globalisation of trade, measured by the relationship of imports plus exports to GDP, and of financial globalisation, indicated by foreign assets and liabilities as a ratio of GDP, on the labour income share. Union density has a positive effect on the labour income share in non-Ghent countries. Therefore, Stockhammer (2009: 53) concludes:

“Overall our findings support the view that income distribution has changed due to globalization in production and finance, (and) changes in the bargaining power between capital and labor rather than through technological change.”<sup>34</sup>

Summing up our review on the effects of ‘financialisation’ and ‘neo-liberalism’ on functional income distribution within the Kaleckian framework, we can conclude that there is some evidence that ‘financialisation’ and ‘neo-liberalism’ have contributed to the falling labour income share since the early 1980s through three main channels. First, the shift in the sectoral composition of the economy from the public sector and the non-financial business sector with high labour income shares towards the financial business sector with a lower labour income share has contributed to the fall in the labour income share for the economy as a whole. Second, the increase in management salaries as a part of overhead costs together with rising profit claims of the rentiers, i.e. rising interest and dividend payments of the corporate sector, have been associated with a falling labour income share. Third, ‘financialisation’ and ‘neo-liberalism’ have weakened trade union bargaining power through several channels: increasing shareholder value orientation of management, the sectoral shifts

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<sup>32</sup> It is therefore less surprising that, examining the determinants of personal income dispersion, the IMF (2007b) finds that skill biased technical change, together with financial deepening have increased income inequality.

<sup>33</sup> See also Stockhammer (2009) for a brief review of further studies on non-OECD countries.

<sup>34</sup> Buchele/Christiansen (2007) confirm a similar result for the US. They find for the labour share in value added of the corporate sector of the US, 1950-2005, that it is negatively affected by the change in capacity utilisation in manufacturing, capturing the cyclical effect of demand on distribution, and most importantly by the unemployment rate and by the degree of openness, measured by the ratio of imports to GDP. The latter two variables are considered to affect the labour share through their effects on the bargaining power of trade unions.

away from the public sector and the non-financial business sector with stronger labour unions in many countries to the financial sector with weaker unions, deregulation of the labour market, and liberalisation and globalisation of international trade and finance. In the next section we shall discuss the macroeconomic effects of the changes in distribution identified so far.

#### **4. Re-distribution, aggregate demand and growth under ‘finance-dominated capitalism’**

##### **4.1 Re-distribution, aggregate demand and growth**

As the recent studies based on the Bhaduri/Marglin (1990) version of the Kaleckian distribution and growth model have shown, in the medium to long run domestic demand in most of the developed capitalist economies tends to be wage-led. There has been observed a strong effect of re-distribution on consumption demand, due to considerably higher propensities to consume out of wage income than out of profit income, and only weak or statistically insignificant effects of unit labour costs or unit profits on investment. The latter is found to be mostly driven by aggregate demand or capacity utilisation, i.e. by the accelerator term in the investment function. Including the external sector, foreign trade and globalisation effects, aggregate demand remains wage-led in most of the countries (Table 4), although re-distribution at the expense of labour in many studies has a significantly positive effect on net exports. In some small open economies this effect may turn aggregate demand profit-led. Overall, these findings imply that, *ceteris paribus*, falling labour income shares triggered by ‘financialisation’ and ‘neo-liberalism’ should have had a partially depressing effect on aggregate demand in most of the countries examined in this study, in particular in the large and medium-sized, less open economies. The effect on GDP growth should have the same sign, given that a mixed regime of wage-led demand and profit-led growth would require an empirically unlikely constellation of parameters.<sup>35</sup>

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<sup>35</sup> In the Bhaduri/Marglin (1990) model the nature of the growth regime does not have to be identical to the nature of the demand regime. One may get wage-led demand, but profit-led growth, as formally shown in Lavoie (1992: 332-340). Such a mixed regime requires a low effect of capacity utilisation and a medium effect of unit profits or unit wage costs in the investment function. Empirically, this is hardly found. Usually the estimations yield strong and statistically highly significant effects of the accelerator term on investment and weak and statistically hardly significant effects of unit profits or the profit share.



Taking a look at average real GDP growth for the three trade cycles from the early 1980s to the recent crisis, we find that growth has risen in the second cycle as compared to the first in the majority of countries considered here: Austria, Belgium, the Netherlands, Greece, Ireland, Spain, Sweden, the US and the catching-up China (Table 5). In Germany, France, Italy, Portugal, the UK and Japan, however, average real GDP growth in the cycle of the 1990s is already below that of the cycle of the 1980s.

If we assume for the empirical assessment that the estimated demand regime of an economy also indicates the nature of the growth regime, rising GDP growth in the face of a falling labour income share from the first to the second cycle (Table 1) does not contradict the findings of (some of) the econometric studies for Austria and the Netherlands, which found their long-run demand regimes to be profit-led. However, for the US and Spain this finding is not in line with those studies which estimated these countries to be wage-led. Since in Germany, France, Italy and the UK lower GDP growth is associated with a lower labour income share, this observation is well in line with those studies which have found the long-run demand regimes in these four countries to be wage-led. For Japan, however, a lower labour income share and lower GDP growth are not in line with the studies which have estimated this country to be profit-led. For Belgium, Greece, Ireland, Portugal, Sweden, and China we have no indication about the nature of their long-run demand and hence growth regime from econometric studies.

**Table 5: Real GDP growth, average values over the trade cycle, early 1980s – 2008, in percent**

	1. Early 1980s – early 1990s	2. Early 1990s – early 2000s	3. Early 2000s – 2008	Change (3. – 1.), percentage points
Austria	2.25	2.51	2.13	-0.12
Belgium	1.96	2.37	1.84	-0.13
Germany	2.75	1.50	1.44	-1.31
Netherlands	2.55	3.28	1.96	-0.60
France	2.21	2.15	1.64	-0.57
Greece <sup>a)</sup>	0.91	2.66	3.89	2.99
Ireland	3.78	6.99	3.92	0.13
Italy	2.33	1.59	0.73	-1.60
Portugal	4.21	2.63	0.82	-3.39
Spain	2.75	3.15	3.02	0.27
Sweden	1.64	2.82	2.42	0.78
UK	2.73	2.54	2.28	-0.45
US	3.33	3.44	2.16	-1.17
Japan <sup>a)</sup>	4.30	0.97	1.22	-3.08
China	9.97	9.99	10.42	0.45

Notes: The beginning of a trade cycle is given by a local minimum of annual real GDP growth in the respective country.

<sup>a)</sup> adjusted to fit in 3 cycle pattern

Source: European Commission (2010) for all countries but China, IMF (2010) for China, author's calculations

In the third cycle of the 2000s, GDP growth has not only fallen below the average growth rate of the second cycle of the 1990s, but also below average growth of the first cycle of the 1980s in most of the countries. Only in Ireland, Greece, Spain, Sweden, and of course in catching-up China, did GDP growth in the cycle of the 2000s exceed the average growth rate of the cycle of the 1980s – in the face of lower labour income shares in the third as compared to the first cycle. Interestingly, however, Greece and Spain (together with France) had managed to reduce inequality in personal distribution of disposal income by the mid 2000s (Table 2). And only in Greece and China did GDP growth in the cycle of the 2000s exceed the growth rate of the previous cycle of the 1990s.

For Spain this observation is not in line with the estimated wage-led nature of the demand regime in this country, assuming again that the nature of the demand regime also indicates the nature of the growth regime. In Austria, Belgium, Germany, the Netherlands, France, Italy, Portugal, the UK, the US and Japan, real GDP growth in the third cycle is well below growth in the first cycle. Since this is associated with a lower labour income in all the countries but Portugal (Table 1), this observation does not contradict the estimated wage-led nature of aggregate demand in most of the studies for Germany, France, Italy, the UK, the US and also the Netherlands. For Austria and Japan, however, this observation poses a problem to the presumed profit-led nature of long-run demand in the econometric studies on these countries.

By and large, the observations presented so far imply that ‘financialisation’ and ‘neo-liberalism’ imply downward pressure on lower wage incomes and the labour income share through various channels and this has a long-run depressing effect on aggregate demand and real GDP growth in those countries which are wage-led. However, this is not to argue that the development of functional income distribution is the only determinant of aggregate demand and real GDP growth. As the examples of the presumably wage-led economies US and Spain in the cycle of the 1990s and of Spain in the cycle of the 2000s show, there are other forces at work which may compensate or over-compensate the effects of changes in functional income distribution on aggregate demand and growth. For the presumably profit-led economies of Austria and Japan a similar explanation is required.

There are at least two sets of potential forces which may affect aggregate demand and GDP growth, apart from changes in income distribution: First, there are other – potentially contradicting – partial effects of ‘financialisation’ on consumption and investment behaviour, and second, there are the effects of macroeconomic policies, government demand management, and the overall macroeconomic policy regime. For a lack of space, we shall

focus on the first set of forces here.<sup>36</sup> First, we discuss the partial effects of ‘financialisation’ on investment of the business sector, then follows a discussion of the partial effects on consumption of the private household sector.

#### **4.2 ‘Financialisation’, investment and consumption**

Regarding the effects of ‘financialisation’ on investment decisions of the corporate sector, Post-Keynesians, such as Crotty (1990) or Stockhammer (2005-6), have highlighted the importance of the ‘owner-manager conflict’ inherent to large corporations. This conflict arises from a ‘growth-profit trade-off’ at the firm level, implying that higher growth of the firm is associated with a lower rate of profit: At a certain rate of expansion, management will have difficulties in handling the expansion process (the Penrose effect); internal expansion may be costly because of rising advertising, product innovation and research and development costs; and external expansion and diversification into further markets, in particular foreign markets, may be limited by management’s lack of knowledge about new markets and products. Under these conditions a high degree of shareholder value orientation of management is then likely to be associated with a high preference for short-term profitability and with a low propensity to invest in real capital stock and hence expansion of the firm. Due to diversified portfolios, “stockholders typically have only a fleeting relation with any particular enterprise”, as Crotty (1990: 534) has argued, and care much more about the current profitability than the long-term expansion and survival of a particular firm. In fact, with ‘financialisation’, various mechanisms have been designed, on the one hand, to impose restrictions on managements’ ability to seek expansion, and, on the other hand, to change managements’ preferences themselves and align them with shareholders’ profit maximisation objective. Managements’ desire for growth is contained through, in particular, higher dividend payouts demanded by shareholders, a weaker ability of firms to obtain new equity finance through stock issues (which tend to decrease share prices), a larger dependence on leverage, and an increased threat of hostile takeovers in a liberalised market for corporate control. Simultaneously, financial market-oriented remuneration schemes have been developed to align managements’ preferences to shareholders’ objectives. As an overall result, it has been argued that the traditional managerial policy of ‘retain and invest’ has been replaced by the shareholder-oriented strategy of ‘downsize and distribute’ (Lazonick/O’Sullivan, 2000), as already mentioned above.

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<sup>36</sup> See Hein/Truger (2007a, 2007b, 2007c, 2009) for studies on macroeconomic policy regimes in different countries, with a focus on Germany, the Euro area, and the US, and their effects on aggregate demand and GDP growth.

With higher shareholder value orientation, firms' investment in capital stock is thus affected in two ways: 1. Shareholders impose higher distribution of profits on firms, i.e. a higher dividend payout ratio and hence a lower retention ratio and/or a lower contribution of new equity issues to the financing of investment, or even share buybacks. Therefore, internal means of finance for real investment are reduced, and the ability to invest is consequently constrained ('internal means of finance channel'). 2. Managers' preference for growth and expansion of the firm by means of investment in capital stock is weakened as a result of remuneration schemes based on short-term profitability and financial market results. The preference for growth and hence the willingness to invest in capital stock is therefore suffering, too ('preference channel').

Econometric evidence in favour of the hypothesis that 'financialisation' has caused a slowdown in investment and capital accumulation has been presented by several authors. Stockhammer (2004b) takes the share of interest and dividends in profits of non-financial businesses as an indicator for the dominance of short-term profits in firms' or in managements' preferences. Short-term financial investment is hence preferred over long-term real investment in capital stock and the share of dividends and interest in profits should therefore be negatively associated with real investment. Using annual data for the business sector and applying time series estimations for France (1978-1997), Germany (1963-1990), the UK (1970-1996), and the US (1963-1997), Stockhammer finds evidence in favour of his hypothesis for France, the US and maybe also the UK, but not for Germany. Van Treeck (2008) introduces interest and dividend payments, each in relation to the capital stock, into the estimation of the determinants of the rate of capital accumulation in the non-financial corporate sector of the US (1965-2004) using annual data for his time series estimations. He finds that dividend and interest payments each have a statistically significant negative effect on capital accumulation, indicating the finance constraint given by internal means of finance. The value of the negative coefficient on dividend payments also exceeds the one on interest payments which is interpreted as evidence for shareholder value orientation of management: Dividend payments thus do not only negatively affect investment via internal means of finance but also via managements' preferences. Orhangazi (2008) has used firm-level data on non-financial firms in the US (1972-2003) with a focus on the manufacturing sector in a dynamic panel-estimation approach. He finds that financial profits have a negative impact on real investment for large firms, indicating short-termism in favour of short-term financial profits and at the expense of long-term profits from investment in capital stock. For small firms, however, the effect of financial profits (the sum of interest and equity income in net

earnings) on real investment is positive, because financial profits seem to ease the financing constraint for these firms. The effect of financial payments (interest expense, cash dividends, purchase of firms' own stock) on investment is negative for the whole panel. Onaran/Stockhammer/Grafl (2011) in their study for the US (1962-2007) find a positive effect of the non-rentier profit share on real gross private domestic investment, but a negative effect of the rentier profit share (net dividends and net interest payments of domestic industry as a share of nominal GDP), which severely dampens a positive impact of unit gross profits on investment through the 'internal means of finance' channel.

A second aspect of 'financialisation' is the effect of financial and housing wealth on private household indebtedness and consumption. Several case studies have examined this phenomenon for the US, in particular.<sup>37</sup> 'Financialisation' in this respect has been characterised by easier access to credit for private households and thus increasing debt-income ratios. On the one hand, stock market and then house price booms increased (notional) wealth and thus collateral for consumer credit and mortgage financed consumption. On the other hand, 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 increasing credit available to low income, low wealth households. This allowed consumption norms to rise faster than medium income, driven by habit persistence, social visibility of consumption ('keeping up with the Joneses'), new innovative products, and a kind of 'consumer arms race' (Cynamon/Fazzari 2008).

Econometric studies have shown that (financial and housing) wealth is a statistically significant determinant of consumption – not only in the US. For the US, Ludvigson/Steindel (1999) and Mehra (2001) have estimated marginal propensities to consume out of wealth between 3 per cent and 7 per cent, applying time series econometrics to different periods. Onaran/Stockhammer/Grafl (2011) carefully distinguishing between propensities to consume out of wages, non-rentier profits, rentier profits, financial wealth and housing wealth find smaller values for the US (1962-2007): The propensity to consume out of net financial wealth is estimated to be 0.7 per cent whereas the estimate for the propensity to consume out of gross housing wealth is 2 per cent. They also find a higher propensity to consume out of rentiers profits (net interest and net dividend payments of the industrial sector) than out of total profits. Boone/Girouard (2002) find marginal propensities to consume out of wealth between 2 per cent and 4 per cent for the US, the UK, France, Italy and Japan (1980-1999), with a

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<sup>37</sup> See, in particular, Barba/Pivetti (2009), Cynamon/Fazzari (2008), van Treeck/Hein/Dünhaupt (2007), and van Treeck (2009a).



higher value only for Canada. Applying dynamic panel regression for 14 OECD countries (1979-1999), Dreger/Slacalek (2007) obtain that the marginal propensity to consume out of financial and housing wealth in capital-market based countries has been 3.7 per cent, whereas in bank-based countries it has only been 0.7 per cent.

With respect to consumption demand, household debt, based on (notional) financial or housing wealth may thus become a substitute for higher wages:

“Household debt thus appears to be capable of providing the solution to the fundamental contradiction between the necessity of high and rising levels of consumption, for the growth of the system’s actual output, and a framework of antagonistic conditions of distribution, which keeps within limits the real income of the vast majority of the society.” (Barba/Pivetti 2009: 127)<sup>38</sup>

An increase in household gross debt-disposable income ratios based on increasing financial wealth (stock market boom) and on increasing housing wealth (housing price boom) as in the US, can also be observed for other countries (Table 6, Figure 5a). In particular Ireland, Spain, the UK, the Netherlands and Sweden have seen a considerable increase in household gross debt-income ratios based on increases in net wealth and rising residential property prices. In Italy and France, however, gross debt-disposable income ratios have only increased slightly despite considerable hikes in net wealth-income ratios and in residential property prices. Germany and Japan have neither seen drastic increases in net wealth-income ratios nor in residential property prices (Figure 5b and Klär/Slacalek 2006: 542 for Japan), and therefore also no significant increases in gross debt-income ratios. Also in Austria, Portugal and China residential property prices have not shown any marked increase until 2009.

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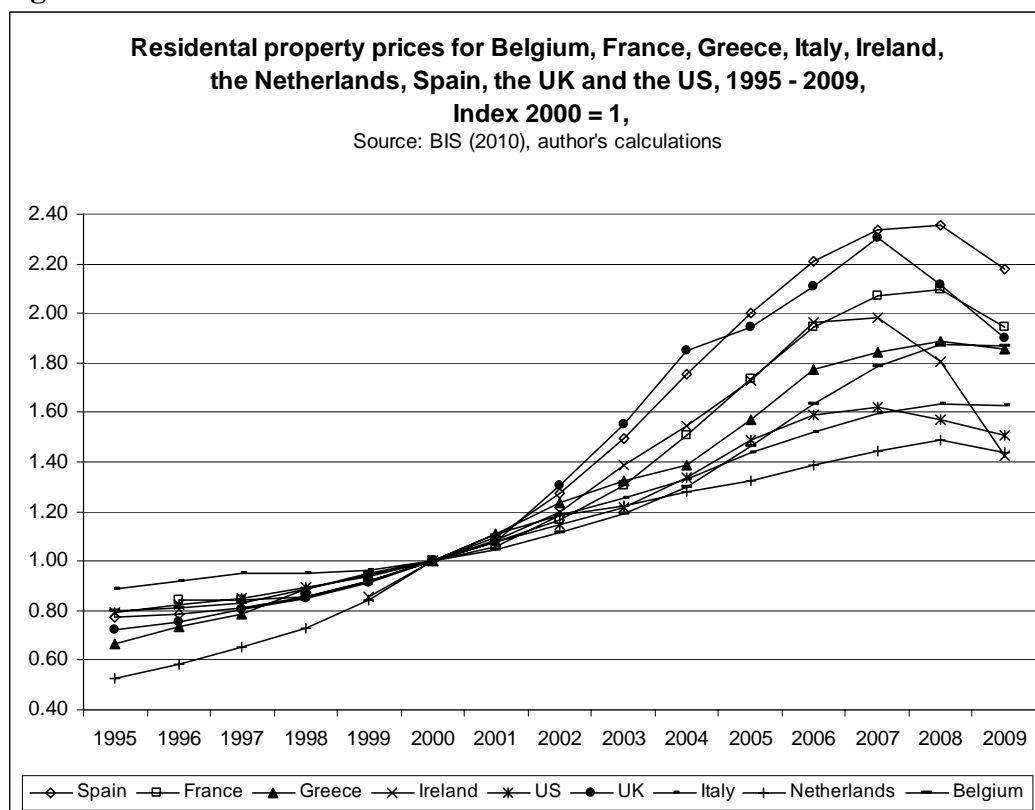
<sup>38</sup> Increasing household debt and fixed payments commitments may also have fed back negatively on labour income and the labour income share, according to Barba/Pivetti (2009). Interest payments of the wage earners are a reduction of their consumption wage, and the burden of debt also pushes them to work harder and accept any conditions of work to be able to pay back debt and not to lose their homes.

**Table 6: Household debt and net wealth, per cent of annual disposable income**

	Debt			Net wealth		
	1995	2000	2005	1995	2000	2005
Austria	...	...	...	...	...	...
Belgium	...	...	...	...	...	...
Germany	97	111	107	541	575	578 <sup>a)</sup>
Netherlands	113	175	246	369	528	515
France	66	78	89	461	547	752
Greece	...	...	...	...	...	...
Ireland	...	82	141	...	618	775
Italy	32	46	59	702	820	936 <sup>a)</sup>
Portugal	...	...	...	...	...	...
Spain	59	83	107 <sup>a)</sup>	540	646	935 <sup>a)</sup>
Sweden	90	107	134	262	387	436
UK	106	118	159	569	750	790
US	93	107	135	510	575	573
Japan	130	136	132 <sup>a)</sup>	736	750	725 <sup>a)</sup>
China	...	...	...	...	...	...

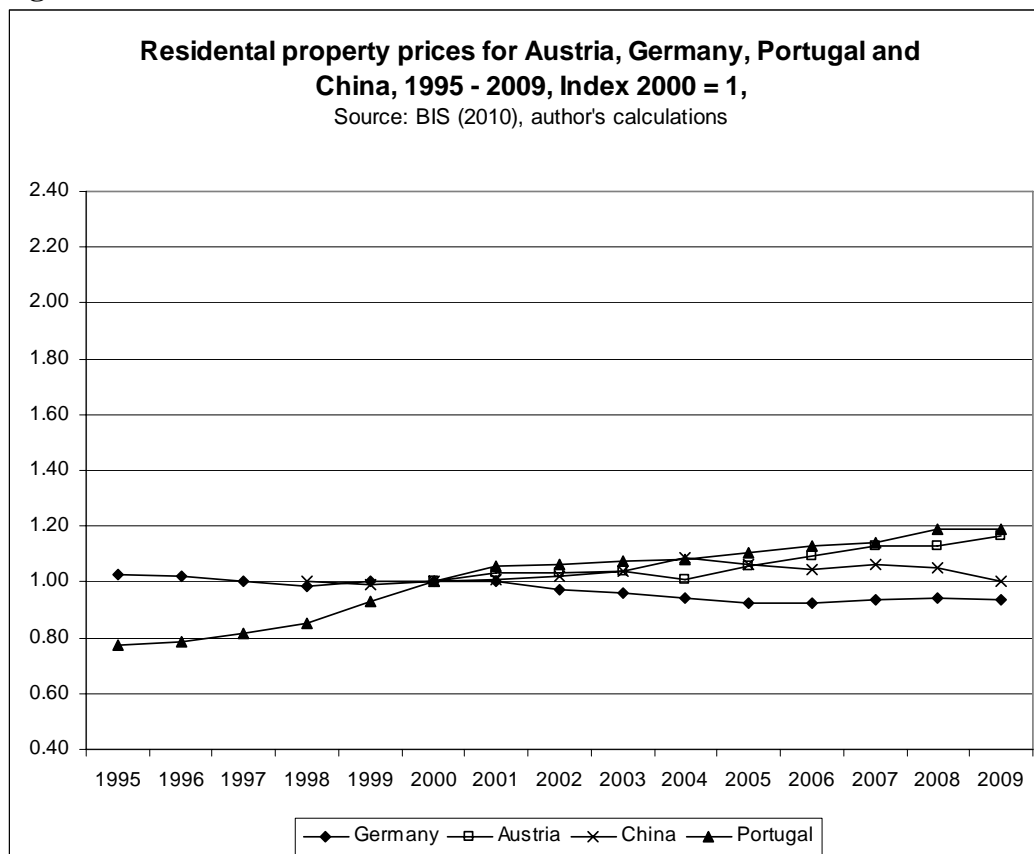
Notes: <sup>a)</sup> for 2004 instead of 2005. Debt refers to total liabilities outstanding at the end of the period. Net wealth is defined as non-financial and financial assets minus liabilities. Data is from national statistics.

Source: Girourard et al. (2007: 9)

**Figure 5a**

Note: Data relate to residential property prices for existing dwellings of all types in the whole country. For the US: existing single-family houses in the whole country.

Figure 5b



Note: Data relate to residential property prices for existing dwellings of all types in the whole country

Wealth-based and debt-financed increases in consumption may (partially) compensate for the contractive effects, which ‘financialisation’ (and ‘neo-liberalism’) exert on aggregate demand and growth via depressed real investment and income re-distribution at the expense of (low) labour incomes. In the theoretical literature on the macroeconomic effects of ‘financialisation’ in Post-Keynesian distribution and growth models, the conditions for different regimes have been specified.<sup>39</sup> In a ‘finance-led growth’ regime (Boyer 2000), ‘financialisation’ and increasing shareholder value orientation have an overall positive impact on aggregate demand, capital accumulation and growth. The condition for this is a very high propensity to consume out of rentiers’ income and/or a very strong wealth effect on consumption, implying a strong effect of credit-financed consumption. This compensates for the loss of consumption caused by the re-distribution at the expense of labour. In turn, it also stimulates investment via the accelerator mechanism and over-compensates the direct negative effect of shareholder value orientation on real investment. In a ‘profits without investment’ regime (Cordonnier 2006), rising shareholder power and rising interest or dividend payments of firms to rentiers are associated with a rising profit rate and with a rising rate of capacity utilisation, but with a

<sup>39</sup> See Hein/van Treeck (2010a) for an overview and Godley/Lavoie (2007: 378-444), Hein (2010a, 2010b), Lavoie (2008), Skott/Ryoo (2008a, 2008b), and van Treeck (2009b) for specific ‘stock-flow-consistent’ models.

falling rate of capital accumulation. Due to a high propensity to consume out of rentiers' income and/or out of wealth, again implying rising importance of credit-financed consumption, re-distribution in favour of rentiers is able to compensate for the loss of consumption demand caused by a falling labour income share. But it is insufficient to stimulate capital accumulation in the face of increasing shareholder value orientation of management and the decrease of firms' internal means of finance associated with high dividend payments or share buybacks. Finally, a 'contractive' regime may arise, in which rising shareholder power, and rising interest and dividend payments to rentiers have a restrictive effect on the rates of capacity utilisation, profit and capital accumulation. Due to a low rentiers' propensity to consume and low wealth effects and hence little importance of credit-based consumption, rising rentiers' income and consumption are unable to compensate for the reduction in consumption demand caused by re-distribution at the expense of labour in this regime. And managements' shareholder value orientation together with the loss of internal means of finance also causes a slowdown in capital accumulation.

In Hein (2010a, 2010b) we have shown that only the 'finance-led growth' regime yields a stable medium-run financial structure of the firm sector, whereas the 'profits without investment' and the 'contractive' regimes will be prone to medium-run instability and a macroeconomic 'paradox of outside finance', akin to Steindl's (1976: 113-122) 'paradox of debt', in which rising shareholder power will trigger a medium-run unstable process of falling rates of capital accumulation and rising outside finance-capital ratios of the firm sector. Empirically, the 'profits without investment' regime of weak investment in the face of prospering profits seems to have dominated the development in the US since the early 1980s, only interrupted by the new economy boom in the second half of the 1990s when investment soared as well, as has been analysed by van Treeck (2008, 2009b) and van Treeck/Hein/Dünhaupt (2007).

'Finance-led growth' and 'profits without investment' regimes have to rely on soaring consumption demand in the face of weak labour income growth and thus on increasing household debt associated with a considerable wealth effect on consumption. Consumption booms based on increasing household debt-income ratios, however, may suffer from internal contradictions. Long-run sustainability of household debt, i.e. a long-run constant debt-income ratio depends on the growth of income and on the rate of interest, as do government debt-GDP ratios.<sup>40</sup> However, the conditions for sustainability of private debt are stricter than for public debt, because usually the rate of interest for private households is higher than the

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<sup>40</sup> See Barba/Pivetti (2009) for a derivation of the conditions.

one for the government, private households cannot tax their creditors, and the individual household usually has to pay back debt before obtaining new credit. Furthermore, there is a collective action problem for private households as compared to the government. Whereas governments can apply expansionary policies in order to increase GDP growth and thus contribute to stabilising government debt-GDP ratios, there is no collective actor on part of private households who could follow such a strategy.

The contradictive macroeconomic effects of household indebtedness for consumption purposes have already been included by Palley (1994) into a multiplier-accelerator business cycle model: An increase in household debt initially stimulates aggregate demand transferring purchasing power from lending high income households with a low marginal propensity to consume to borrowing low income households with a high propensity to consume. But interest payments on debt subsequently become a burden on aggregate demand, because purchasing power is re-distributed into the opposite direction. This model is then extended to include Minskyan ‘tranquility’ effects and to examine interactions of financial fragility and tranquillity. However, this business cycle model in level variables does neither treat the development of stock-flow (debt-income) or stock-stock (debt-capital) ratios, nor are changes in income distribution or in the propensities to invest in real capital stock examined.

Bhaduri/Laski/Riese (2006) have explicitly focused on the wealth-effect on consumption in their model, implying that increases in financial wealth stimulate households’ willingness to consume. However, stock market wealth (and also housing wealth) is purely ‘virtual wealth’ and increasing consumption is hence associated with increasing indebtedness of private households. Therefore, a wealth-based credit boom may be maintained over a considerable period of time. Finally, however, the expansive effects of consumer borrowing may be overwhelmed in the long run by rising interest obligations, which reduce households’ creditworthiness and eventually require higher saving. A debt-led consumption boom will then turn into a debt-burdened recession. Although the authors consider the debt-income ratio of households as a major determinant of creditworthiness and hence access to new borrowing, the dynamics of this ratio are not traced in the medium or long runs of their model. Distributional and investment effects of ‘finance-dominated capitalism’ on household indebtedness and growth are also missing in the medium- to long-run dynamics of the model. The same is true for Bhaduri’s (2010, 2011) extensions of this approach, which attempt to show how a debt-financed consumption boom supported by rising asset prices ultimately leads to a credit crunch and debt deflation, and how the tendency towards Ponzi finance increases the fragility of the financial sector.

Dutt (2005, 2006a) has analysed the effects of easier access to consumer credit associated with deregulation of the financial sector within a Steindlian model of growth and income distribution, making use of a similar mechanism as Palley (1994). Credit-based consumption of workers, facilitated by the deregulation of the financial system allowing home equity lending, adjustable consumer loans and securitisation, stimulates effective demand and growth in the short run. However, in the long run, contractive effects arise because interest payments mean re-distribution of income from workers to capitalists who have a lower propensity to consume. These effects may overwhelm the expansionary effects so that higher workers' debt has long-run contractionary effects on capital accumulation and growth under certain conditions. However, with a low rate of interest, high levels of autonomous investment and a low profit share, the long-run effects of workers' debt may remain expansionary, according to Dutt.

Summing up so far, there seems to be solid evidence that 'financialisation', increasing shareholder power, and financial deregulation and liberalisation have had a depressing effect on private investment in capital stock, but that in some countries the effects on private consumption have turned quite favourable despite the redistribution at the expense of (low) labour incomes. However, consumption booms based on notional wealth effects and increasing indebtedness of private households seem to have generated increasing financial fragility and 'financial instability' in these countries, to use the terminology introduced by Minsky (1975, 1977, 1986). The late Hyman Minsky (1995: 92) summarized his 'financial instability hypothesis' as follows:

“Over a timespan without financial panic and a deep depression, the financial structure changes so that financial layering increases and the proportion of what I called speculative and Ponzi financial postures increase. The above can be called the first postulate of the Financial Instability hypothesis. The second postulate is that the increase in layering and the shift in the structure of payment commitments progressively increase the vulnerability of the financial system to a debt deflation process, which can usher in a deep depression business cycle.”

However, different from Minsky's approach, financial fragility underlying the recent crisis was mainly caused by increasing household debt-income ratios against the background of re-distribution in the course of a consumption boom, and not by rising debt-capital ratios of the business sector in an investment boom.<sup>41</sup> Discussing whether Minsky's 'financial

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<sup>41</sup> On the contrary, in our theoretical models we have shown that the financial structure of the business sector in 'profits without investment regimes' as observed in the US and other countries in the period of 'financialisation' is rather prone to the macroeconomic 'paradox of outside finance' or to the 'paradox of debt', i.e. rising outside

instability hypothesis' can be fully applied to the present crisis, or to what extent it is relevant,<sup>42</sup> is however well beyond the scope of present paper. In the next section we shall rather show that 'financial fragility' in the period of finance-dominated capitalism, and in particular during the cycle prior to the present crisis, did not only develop at the national levels of particular economies in the course of debt-led consumption booms, but that it was also transformed to the international or global level through the concomitant imbalances in the current accounts of the countries involved.

## 5. Re-distribution, global and regional imbalances

Against the background of rising inequality in personal income distribution and falling labour income shares associated with 'financialisation' and 'neo-liberalism' since the early 1980s, two 'models of capitalism under "financialisation"' have developed,<sup>43</sup> which are complementary and which have fed rising current account imbalances in the world economy, but also at regional levels, in particular in the Euro area.<sup>44</sup> On the one hand, we have the 'debt-led consumption boom' model generating a 'profits without investment' regime, as discussed in the previous section. On the other hand, there has developed a necessary counterpart at the global (and also at the Euro area) level, the 'export-led mercantilist' model, which may also give rise to a 'profits without investment' regime. Whereas in the former it is debt-financed consumption demand which allows for the realisation of rising profits, in the latter it is export surpluses which have to take care of the realisation of profits in the face of weak investment.<sup>45</sup> As the global and intra-EMU current account imbalances have exploded in particular since the early 2000s (Figures 6a and 6b), in the course of recovery from the burst of the new economy boom of the late 1990s, we take cyclical average data for the trade cycle of the early 2000s to distinguish these models and allocate the countries examined in this paper to them.

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finance-capital-ratios or rising debt-capital ratios of the business sector accompanied by falling rates of capital accumulation (Hein 2010a, 2010b).

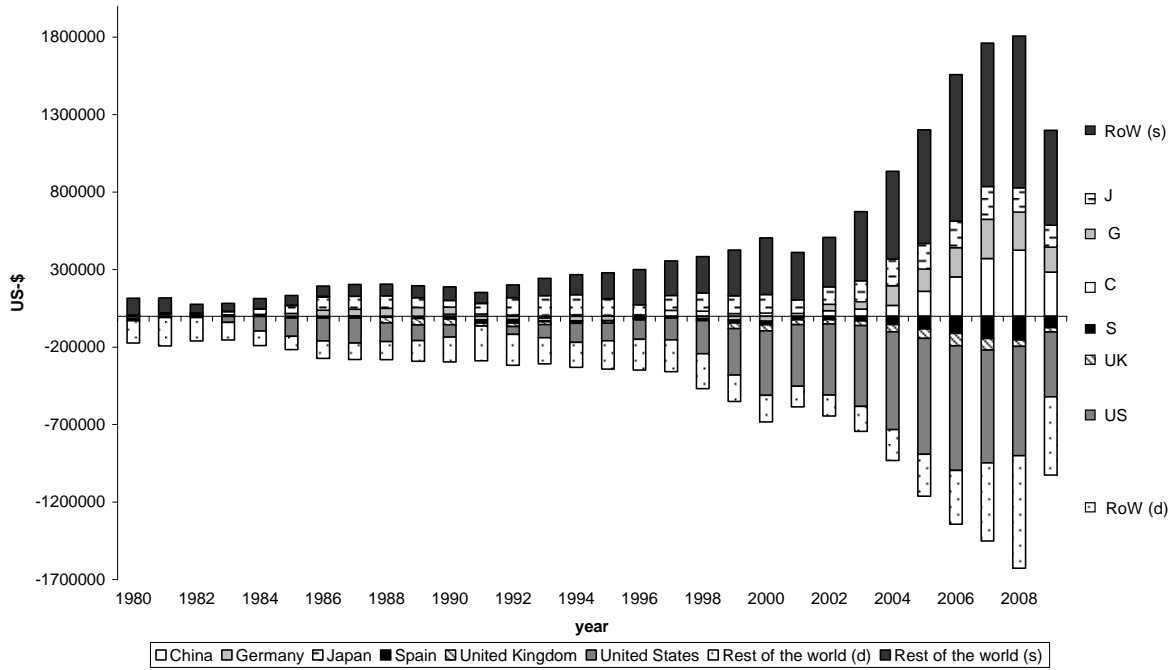
<sup>42</sup> For a Minskyan explanation of the current crisis see, for example, Carvalho (2009), Dymski (2011), Whalen (2008), and Wray (2009).

<sup>43</sup> For similar analysis see van Treeck/Hein/Dünhaupt (2007), Bibow (2008), Fitoussi/Stiglitz (2009), Horn et al. (2009), Sapir (2009), UNCTAD (2009), van Treeck (2009a), Wade (2009), Hein/Truger (2010, 2011), and Stockhammer (2010a, 2010b).

<sup>44</sup> The current account of the Euro area has been roughly balanced on average over the cycle from the early 2000s to 2008 (European Commission 2010), so that current account surplus member countries have their deficit counterparts within the Euro area.

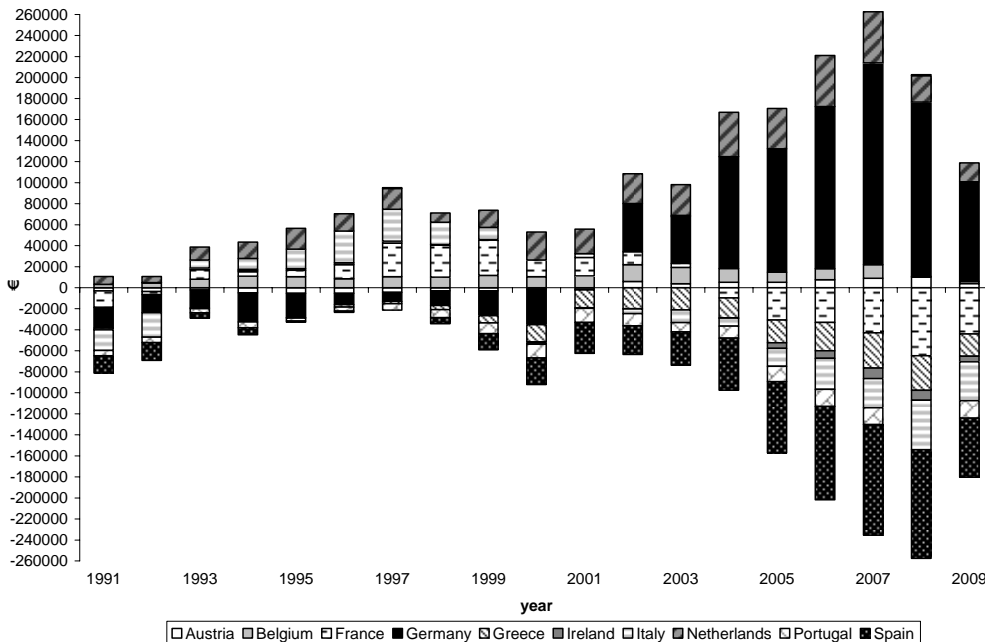
<sup>45</sup> Note that from national accounting we obtain: Gross profits net of taxes = Gross investment + Export surplus + Government budget deficit – Worker's saving + Capitalists' consumption (Kalecki 1971: 82).

**Figure 6a: Current account balances, 1980 – 2009, in millions US-\$**



Source: IMF (2010), authors' calculations.

**Figure 6b: Current account in millions ECU/euro, selected Euro area countries, 1991 – 2009**



Source: European Commission (2010), authors' calculations.

In the cycle of the early 2000s, the ‘debt-led consumption boom’ model can be found in Greece, Ireland, Spain, the UK and the US (Table 7a). All these economies have seen considerable increases in residential property prices and/or in wealth-income ratios in the



cycle of the early 2000s (Figure 5a, Table 6). This was conducive to soaring consumption demand and hence considerable growth contributions of private consumption and domestic demand. Relatively high real GDP growth as compared to the other countries in our data set, but increasing household debt and thus negative financial balances of the private household sector were the consequences.<sup>46</sup> With the exception of the UK, this has also translated into negative balances of the private sector as a whole – with the corporate sector being in surplus in all countries of this group except Spain. The public sector contributed to the negative domestic financial balance in all the countries, but to a different degree – considerably in Greece, the UK and the US, but only marginally in Ireland and Spain. Since aggregate domestic expenditures exceeded national income, these countries had to run current account deficits, i.e. the financial balances of the external sector were positive for each of the countries pursuing the ‘debt-led consumption boom’ model. In particular Greece, Spain and the US had to rely strongly on the inflow of foreign financial resources. Strong domestic demand growth in the ‘debt-led consumption boom countries’ translated into negative growth contributions of the balance of goods and services in all of these countries but Ireland, where the growth contribution of external demand was positive.<sup>47</sup> For the Euro area countries in this group, above average unit labour cost growth and inflation accompanied by nominal appreciation of the euro, and thus a loss of competitiveness of domestic producers (positive rates of change in the effective exchange rate) may have contributed to the deficits in the balance of goods and services and in the current account. However, the US and the UK managed to improve competitiveness in the course of the cycle of the 2000s, but their current accounts further deteriorated compared to the previous cycle, i.e. the financial balances of the external sector increased respectively.<sup>48</sup> The ‘debt-led consumption boom’ economies thus were the world demand engines of the cycle from the early 2000s to 2008.

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<sup>46</sup> For the developments of the financial balances of the three main sectors, private sector, public sector and external sector, over time in the ‘debt-led consumption boom’ economies see Figures A2a-e in the appendix.

<sup>47</sup> In the case of Ireland, the current account deficit (and the positive financial balance of the external sector) was not due to a deficit in external trade but rather a deficit in the cross-border flows of primary incomes. Although the balance of goods of services in Ireland was positive, we have not included it into the ‘export-led mercantilist’ group of countries discussed below, because Ireland, as the other ‘debt-led consumption boom’ countries showed a negative financial balance of the private sector and of the domestic sectors as a whole. Surpluses in the balance of goods and services were thus required in order to meet the payment commitments associated with the negative balance of primary incomes and to avoid an even larger deficit in the current account.

<sup>48</sup> This may be an indication that changes in the balances of goods of services and in the current accounts are dominated by growth differentials and not so much by inflation differentials and changes in the real exchange rate.

**Table 7a: Key macroeconomic variables for ‘debt-led consumption boom’ economies, average values for the trade cycle from the early 2000s – 2008**

	<b>Greece</b>	<b>Ireland</b>	<b>Spain</b>	<b>UK</b>	<b>US</b>
Financial balances of external sector as a share of nominal GDP, per cent	12.49	2.88	7.10	2.22	5.00
Financial balances of public sector as share of nominal GDP, per cent	-5.74	-0.13	-0.03	-3.25	-3.51
Financial balance of private sector as a share of nominal GDP, per cent	-6.75	-2.74	-7.07	1.03	-1.49
Financial balance of private household sector as a share of nominal GDP, per cent	-11.44	-6.29	-1.54	-2.70	-1.83
Financial balance of the corporate sector as a share of nominal GDP, per cent	4.69	3.55	-5.53	3.73	0.34
Real GDP growth, per cent	3.89	3.92	3.02	2.28	2.16
Growth contribution of domestic demand including stocks, percentage points	4.10	3.26	3.82	2.53	2.22
Growth contribution of private consumption, percentage points	2.79	1.87	1.74	1.52	1.76
Growth contribution of public consumption, percentage points	0.49	0.59	0.93	0.49	0.37
Growth contribution of gross fixed capital formation, percentage points	0.79	0.79	1.14	0.54	0.14
Growth contribution of the balance of goods and services, percentage points	-0.20	0.66	-0.81	-0.24	-0.06
Net exports of goods and services as a share of nominal GDP, per cent	-10.97	12.23	-4.69	-2.86	-4.87
Change in labour income, share as percentage of GDP at current factor costs, from previous cycle, percentage points	-1.40	-5.17	-3.71	-1.32	-1.32
Growth rate of nominal unit labour costs, per cent	3.47	3.95	3.31	2.40	1.93
Inflation (HCPI growth rate), per cent	3.41	3.50	3.33	2.04	2.83
Growth rate of nominal effective exchange rates (relative to 23 countries), per cent	1.60	2.81	1.53	-1.33	-2.84
Growth rate of real effective exchange rates (relative to 23 countries), per cent	2.91	4.97	2.82	-0.75	-2.99

Notes: The beginning of a trade cycle is given by a local minimum of annual real GDP growth in the respective country

Source: European Commission (2010), author’s calculations

**Table 7b: Key macroeconomic variables for ‘export-led mercantilist’ economies,  
average values for the trade cycle from the early 2000s – 2008**

	<b>Austria</b>	<b>Belgium</b>	<b>Germany</b>	<b>Nether-lands</b>	<b>Sweden</b>	<b>Japan</b>	<b>China</b>
Financial balances of external sector as a share of nominal GDP, per cent	-2.26	-3.90	-5.55	-7.15	-7.14	-3.45	-5.40
Financial balances of public sector as share of nominal GDP, per cent	-1.45	-0.56	-2.09	-0.85	1.30	-5.16	-1.61
Financial balance of private sector as a share of nominal GDP, per cent	3.70	4.46	7.64	8.00	5.84	8.61	7.01
Financial balance of private household sector as a share of nominal GDP, per cent	4.68	4.25	5.90	0.16	3.86	3.65	...
Financial balance of the corporate sector as a share of nominal GDP, per cent	-0.98	0.21	1.74	7.84	1.98	4.96	...
Real GDP growth, per cent	2.13	1.84	1.44	1.96	2.42	1.22	10.42
Growth contribution of domestic demand including stocks, percentage points	1.26	1.70	0.85	1.43	1.85	0.75	...
Growth contribution of private consumption, percentage points	0.76	0.63	0.18	0.37	0.94	0.61	...
Growth contribution of public consumption, percentage points	0.28	0.45	0.16	0.75	0.24	0.29	...
Growth contribution of gross fixed capital formation, percentage points	0.19	0.62	0.49	0.35	0.71	-0.16	...
Growth contribution of the balance of goods and services, percentage points	0.77	0.14	0.58	0.52	0.57	0.46	...
Net exports of goods and services as a share of nominal GDP, per cent	4.35	4.02	5.56	7.63	7.45	1.24	4.72
Change in labour income, share as percentage of GDP at current factor costs, from previous cycle, percentage points	-5.54	-1.58	-2.71	-1.64	2.13	-4.73	...
Growth rate of nominal unit labour costs, per cent	1.05	2.02	0.17	1.88	1.61	-2.12	...
Inflation (HCPI growth rate), per cent <sup>(a)</sup>	2.12	2.34	1.78	1.94	1.80	-0.06	2.15
Growth rate of nominal effective exchange rates (relative to 23 countries), per cent	1.21	1.48	2.09	1.37	0.26	-1.92	...
Growth rate of real effective exchange rates (relative to 23 countries), per cent	0.55	1.58	0.14	1.56	-0.28	-6.00	...

Notes: The beginning of a trade cycle is given by a local minimum of annual real GDP growth in the respective country; <sup>(a)</sup> China: consumer price inflation  
Source: European Commission (2010) for all countries but China, IMF (2010) for China, author’s calculations

**Table 7c: Key macroeconomic variables for ‘neither-nor’ economies,  
average values for the trade cycle from the early 2000s – 2008**

	<b>France</b>	<b>Italy</b>	<b>Portugal</b>
Financial balances of external sector as a share of nominal GDP, per cent	1.25	1.59	9.40
Financial balances of public sector as share of nominal GDP, per cent	-3.18	-3.16	-3.65
Financial balance of private sector as a share of nominal GDP, per cent	1.93	1.57	-5.75
Financial balance of private household sector as a share of nominal GDP, per cent	3.80	3.91	1.54
Financial balance of the corporate sector as a share of nominal GDP, per cent	-1.87	-2.34	-7.29
Real GDP growth, per cent	1.64	0.73	0.82
Growth contribution of domestic demand including stocks, percentage points	2.13	0.81	1.04
Growth contribution of private consumption, percentage points	1.24	0.44	1.05
Growth contribution of public consumption, percentage points	0.38	0.27	0.20
Growth contribution of gross fixed capital formation, percentage points	0.56	0.08	-0.25
Growth contribution of the balance of goods and services, percentage points	-0.50	-0.08	-0.19
Net exports of goods and services as a share of nominal GDP, per cent	-0.52	-0.07	-8.08
Change in labour income, share as percentage of GDP at current factor costs, from previous cycle, percentage points	-0.97	-0.88	0.49
Growth rate of nominal unit labour costs, per cent	2.01	2.95	2.41
Inflation (HCPI growth rate), per cent	1.98	2.36	2.68
Growth rate of nominal effective exchange rates (relative to 23 countries), per cent	1.84	1.92	1.26
Growth rate of real effective exchange rates (relative to 23 countries), per cent	1.98	3.12	1.59

Notes: The beginning of a trade cycle is given by a local minimum of annual real GDP growth in the respective country

Source: European Commission (2010), author’s calculations

The counterparts to the ‘debt-led consumption boom’ economies at the world and the Euro area level were the ‘export-led mercantilist’ economies. This group consists of Austria, Belgium, Germany, the Netherlands, Sweden, Japan and China (Table 7b). These economies were characterised by surpluses in the balances of goods and services and in the current accounts, i.e. the financial balances of the respective external sectors were in deficit.<sup>49</sup> Although some of these countries (Belgium, the Netherlands, Sweden) had seen considerable increases in wealth-income ratios and/or in residential property prices (Table 6, Figure 5a), whereas others had not (Austria, Germany, Japan, China) (Table 6, Figure 5b), financial balances of private households remained in surplus in the ‘export-led mercantilist’ countries. The financial balances of the private sectors were strongly positive in each of the countries. Growth contributions of private consumption and domestic demand were either moderate, as for Austria, Belgium, the Netherlands and Sweden, or very weak, as in the case of Germany and Japan, and these countries considerably relied on positive growth contributions of the balance of goods and services. Only in Belgium was the growth contribution of external demand rather small. The basis for external surpluses were thus weak domestic demand, on the one hand, but also low unit labour cost growth, low inflation, and, in the case of Japan, nominal depreciation of the currency, on the other hand. For the ‘export-led mercantilist’ Euro area countries the real effective exchange rate relative to 23 industrial economies increased to a lesser extent than in the ‘debt-led consumption boom’ Euro area countries, implying an increase in price competitiveness of the former relative to the latter. Sweden and Japan managed to increase price competitiveness absolutely. The ‘export-led mercantilist’ countries have thus benefitted from world demand being driven by the ‘debt-led consumption boom’ countries. However, following this model came at a price: With the exception of Sweden, and notably the catching-up China, real GDP growth in the export-led countries remained well below real GDP growth in the debt-led economies, and in particular the more closed large economies of Germany and Japan performed even worse than the more open and smaller economies of Austria, Belgium and the Netherlands.<sup>50</sup>

In the cycle of the early 2000s to 2008, France, Italy and Portugal can neither be considered to have been ‘debt-led consumption boom’ economies nor ‘export-led mercantilist’ economies. Although France and Italy saw significant increases in net wealth-

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<sup>49</sup> For the developments of the financial balances of the three main sectors, private sector, public sector and external sector, over time in the ‘export-led mercantilist’ economies see Figures A3a-g in the appendix.

<sup>50</sup> Note that for Germany this finding is well in line with recent studies on the German demand regime which find re-distribution at the expense of the labour income share to positively affect net exports, but this effect to be too small to over-compensate the negative impact of re-distribution on domestic demand, so that the overall demand regime in Germany remains wage-led, even under the conditions of increasing globalisation (Stockhammer/Hein/Grafl 2011).

income ratios and in residential property prices (Table 6, Figure 5a), whereas Portugal did not see such increases (Figure 5b), financial balances of private households remained positive in all three countries.<sup>51</sup> The corporate sector had negative balances in these countries and together with negative public sector balances this meant current account deficits, which were considerable particularly in Portugal. Although not experiencing a debt-led consumption boom, growth was driven by domestic demand in the face of rising (Portugal) or only weakly declining (France, Italy) labour income shares and considerable public deficits in each of the countries. The balances goods and services were negative and so were the growth contributions of external demand. The loss of price competitiveness with respect to the ‘export-led mercantilist’ Euro area countries, i.e. higher unit labour cost growth and higher inflation than in these countries, may have contributed to the external deficit. GDP growth remained particularly weak in Portugal and Italy, whereas France had higher growth than the stagnative mercantilist economies of Germany and Japan, but lower growth than the rest of the countries in our data set.

Against the background of ‘financialisation’ and income re-distribution at the expense of lower wage incomes and the labour income share, a highly fragile constellation at national, regional (Euro area) and global levels had developed in the course of the trade cycle of the early 2000s.<sup>52</sup> The dynamic ‘debt-led consumption boom’ model of the US and the other countries following this model had to rely on the willingness and the ability of private households to go into debt, and thus on ever rising notional wealth, in particular rising residential property prices, (seemingly) providing collateral for credit, and on the willingness of the rest of the world to run current account surpluses and thus to supply credit, notably the ‘export-led mercantilist’ countries, in order to finance the related current account deficits in the ‘debt-led consumption boom’ economies. The slowly growing or stagnating ‘export-led mercantilist’ economies had to rely on the willingness and the ability of the rest of the world, notably the ‘debt-led consumption boom’ economies, to go into debt, because their moderate or weak growth rates were dependent on dynamic growth of world demand and their export markets.

A collapse of a ‘debt-led consumption boom’, as it was triggered by the collapse of the subprime mortgage market in the US in 2007, does therefore not only affect the ‘debt-led consumption boom’ economies themselves, also the ‘export-led mercantilist’ economies are

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<sup>51</sup> For the developments of the financial balances of the three main sectors, private sector, public sector and external sector, over time in the ‘neither-nor’ economies see Figures A4a-c in the appendix.

<sup>52</sup> See for similar arguments also Fitoussi/Stiglitz (2009), Hein/Truger (2010, 2011), Horn et al. (2009), Stockhammer (2010a).

quickly infected. On the one hand, their export markets collapse in the crisis and they are facing serious aggregate demand problems. On the other hand, they are infected through the financial markets, because their capital exports may get drastically devalued if they were directed towards the risky and now collapsing financial markets of the ‘debt-led consumption boom’ economies. Both channels became effective during the present crisis. In 2009, real GDP growth in the stagnative ‘export-led mercantilist’ economies of Germany (-5.0 per cent) and Japan (-5.2 per cent) was hit even harder than growth in the main ‘debt-led consumption boom’ economy, from where the crisis started, the US (-2.4 per cent) (European Commission 2010).<sup>53</sup> Also the ‘debt-led consumption boom’ economies have not uniformly been hit by the crisis. Whereas the US, being able to issue debt in its own currency, ‘only’ suffered from the financial and economic crisis, in other countries, notably Greece and Ireland, the crisis also became a public debt crisis and contributed to a currency crisis, i.e. the euro crisis which started in 2010.<sup>54</sup>

## **6. Distribution policies as integral part of a ‘Keynesian New Deal’**

In the previous sections we have shown how re-distribution at the expense of low wage incomes and the labour income share, associated with ‘neo-liberalism’ and ‘financialisation’, has contributed to macroeconomic instability, at the national, the European and the global level, and has thus contributed to the severity of the recent crisis. From our analysis it follows that a medium- to long-run sustainable recovery strategy for major parts of the developed world economy can neither follow the ‘debt-led consumption boom’ model nor the ‘export-led mercantilist’ model,<sup>55</sup> in particular in those economies which are characterised by wage-led demand and growth regimes. Tendencies towards over-indebtedness of private households have to be avoided, as well as persistent current account surpluses or deficits which are not due to productivity growth catch-up processes of less developed economies.<sup>56</sup> This implies that also profit-led economies which turn profit-led via the export channel need to give up export-led strategies because their strategy has to rely on current account deficits in other countries and thus contributes to world wide imbalances.

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<sup>53</sup> See Hein/Truger (2010) for a case study on Germany in the international context.

<sup>54</sup> See Hein/Truger (2011) for an analysis of the underlying imbalances of the euro crisis of 2010.

<sup>55</sup> For a critique of export-led strategies see also UNCTAD (2010: 77-97).

<sup>56</sup> Since deficits or surpluses in the balance of goods and services are mainly affected by growth differentials it may be too restrictive to require balanced current accounts from developing countries in a productivity catch-up process. However, the risks of indebtedness in foreign currency with persistent deficits in the current accounts have to be considered as well. Here is not the place to elaborate on this issue, but see Hein/Truger/van Treeck (2011), with a focus on how to cope with the imbalances in the Euro area..

A medium- to long-run recovery strategy has to be income- or wage-led. This means that wages will have to rise broadly in line with (potential) output. Labour income shares have thus to be at least roughly stable in the medium to long run, and may even rise if distribution claims of firms, rentiers, the state or the foreign sector are falling and permit the increase of the labour income share without triggering cumulative inflationary processes. In this case, the economy may also benefit from wage-push effects on productivity growth, i.e. rising real wages and labour income shares pushing firms to speed up the introduction of labour saving innovation into the production process and thus increasing potential growth.<sup>57</sup> A wage-led recovery strategy would therefore also contribute to overcome the tendencies towards dampened productivity growth associated with ‘financialisation’ and ‘neo-liberalism’ (Hein 2011). These tendencies have been imposed through the long-run depressing effects of ‘financialisation’ and ‘neo-liberalism’ on the labour income share, thus dampening the wage-push effect, on capital accumulation, with a negative effect on capital embodied technical progress and thus productivity growth, and on aggregate demand growth, thus dampening the ‘Verdoorn’ effect.

A wage-led recovery strategy requires addressing the three main causes for the fall in the labour income share in the period of ‘neo-liberalism’ and ‘financialisation’, as identified in Section 3 of this paper: First, bargaining power of trade unions has to be stabilised and enhanced; second, overhead costs of firms, in particular top management salaries and interest payments, as well as profit claims of financial wealth holders have to be reduced; and third, the sectoral composition of the economy has to be shifted away from the high profit share financial corporations towards the non-financial corporate sector and the public sector.

Although reversing the trends in primary functional distribution is the key for a wage-led recovery strategy, distribution or incomes policies should not only address primary functional distribution. They should also directly focus on reducing inequality of personal distribution of income, in particular of disposable income. This means that the tendencies towards increasing wage dispersion have to be contained and, in particular, that progressive tax policies and social policies need to be applied in order to reduce inequality in the distribution of disposable income.

Distribution or incomes policies have to be at the core of, and embedded in a ‘Keynesian New Deal’<sup>58</sup>, which more broadly will have to address the three main causes for

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<sup>57</sup> See Bhaduri (2006), Casetti (2003) and Dutt (2006b) for theoretical models and Hein/Tarassow (2010), Marquetti (2004), Naastepad (2006), and Vergeer/Kleinknecht (2007) for empirical results.

<sup>58</sup> With the focus on functional income distribution and incomes policies our suggestions are perhaps closer to Kalecki (1944, 1971: 156-164) than to Keynes (1936, 1943). We have chosen the term ‘Keynesian New Deal’ nonetheless for political marketing reasons.



the severity of the crisis: inefficient regulation of financial markets, increasing inequality in the distribution of income and rising imbalances at the global (and at the Euro area) level. In Hein/Truger (2011) we have developed three main pillars of the policy package of a ‘Keynesian New Deal at the global and the European level’: first, the re-regulation of the financial sector in order to prevent future financial excesses and financial crises; second, the re-orientation of macroeconomic policies, in particular in the current account surplus countries; and third, the re-construction of international macroeconomic policy co-ordination – in particular on the European level – and a new world financial order. In what follows we briefly sketch the main building blocks of such a Keynesian New Deal and highlight the role of distribution and incomes policies.

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.<sup>59</sup> 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 this sector in particular. These measures include the standardisation and supervision of all financial products in order to increase transparency in the market. Off-balance sheet operations should be abolished and national and international regulation and supervision of all financial intermediaries (banks, insurance companies, 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 increase resilience. Therefore public and cooperative banks supplying credit to households and small firms and thus competing with private banks should be strengthened. Financial institutions with systemic relevance should be in public ownership, because stability of these institutions can be considered to be a public good, too. Second, re-regulation should generate incentives for economic actors in the financial and non-financial sectors encouraging them 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 creditors and their investment projects, grant credit and supervise the fulfilment of payment commitments by the debtor. For the financial and non-financial corporate sector, share buy backs in order to drive share prices up should be reduced or even abolished. Short-termism of managers in the corporate sector

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<sup>59</sup> For detailed lists of required regulation see, for example, Ash et al. (2009), Fitoussi/Stiglitz (2009), and Wade (2009).

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 into long-term projects improving productivity and developing new products. Third, measures directed at containing systemic instability, like asset-based reserved-requirements and counter-cyclical capital requirements for all financial intermediaries, and a general financial transactions tax should be implemented.

Apart from stabilising and orienting the financial sector towards financing real economic activity, these measures should affect distribution and thus positively feed back 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. 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 the profit claims.

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. In Hein and Stockhammer (2010) a blueprint for a Post-Keynesian macroeconomic policy mix – as opposed to the New Consensus model focussing on labour market deregulation in order to reduce the NAIRU and on monetary policy for short-run real and long-run nominal stabilisation –<sup>60</sup> has been developed which can be used as an orientation.

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, as suggested by the New Consensus approach. Central banks should instead target low real interest rates in order to avoid unfavourable cost and distribution effects on firms and workers, while favouring rentiers. 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 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

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<sup>60</sup> For the New Consensus model see for example Goodfriend/King (1997) and Clarida/Gali/Gertler (1999).

a lender of last resort in periods of liquidity crisis, and they should be involved in the regulation and the supervision of financial markets.

Second, fiscal policies should take 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 an 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 employment.<sup>61</sup> 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. Fiscal policies will therefore have a major role to play in rebalancing current accounts at the global and the regional (Euro area) levels. Unfavourable regressive distribution effects of public debt can be avoided by central bank policies targeting low interest rates 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.

Third, 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. If distribution claims of firms, rentiers, government and the external sector are constant, nominal wages should rise according to the sum of long-run economy wide growth of labour productivity plus the inflation target.<sup>62</sup> A reduction of claims of the other actors, however, would allow for an increase of nominal wages exceeding this benchmark. In order to contribute to rebalancing the current accounts, nominal wage growth in the current account surplus countries will have to exceed the benchmark for an interim period, whereas nominal wage growth in the deficit countries will have to fall short of the benchmark during the adjustment process. In order to achieve the nominal wage growth targets, a high degree of wage bargaining co-ordination at the macroeconomic level, and organised labour markets with strong labour unions and employer associations seem to be a necessary condition. Legal minimum wage legislation should contain wage dispersion and thus contribute to a more equal distribution of income.

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<sup>61</sup> On the 'functional finance' view proposed here, see Lerner (1943), Kalecki (1944), and Arestis and Sawyer (2004).

<sup>62</sup> Trade unions would have to acknowledge that there are other ways to redistribute income apart from wage bargaining: "The classical day-by-day bargaining for wages is not the only way of influencing the distribution of national income to the advantage of the workers." (Kalecki 1971: 164)

On the international level, international policy coordination has to make sure that ‘export-led mercantilist’ strategies and the associated pressure on labour unions to moderate wage claims in favour of increasing international competitiveness no longer pay off. This implies that targets for current account balances have to be included in international policy coordination at the regional and the global level. For a reform of economic policy institutions in the European Union and the Euro area tackling the present imbalances, this implies that the framework for the European Central Bank (ECB) has to be changed, such that the ECB will have to pursue long-run policies targeting low interest rates, and the orientation of labour market and social policies towards deregulation and flexibilisation will have to be abandoned in favour of re-organising labour markets, stabilising labour unions and employer associations, along with Euro area-wide minimum wage legislation.<sup>63</sup> A change in European policy institutions means, in particular, that the Stability and Growth Pact (SGP) at the European level has to be abandoned and needs to be replaced by a means of coordination of national fiscal policies at the Euro area level which allows for the short- and long-run stabilising role of fiscal policies incorporating current account targets. At the global level the return to a cooperative world financial order and a system with fixed but adjustable exchange rates, symmetric adjustment obligations for current account deficit and surplus countries, and regulated international capital flows seems to be required in order to avoid the imbalances that have contributed to the present crisis and to preclude ‘export-led mercantilist’ policies by major economies. Keynes’s (1942) proposal for an International Clearing Union is the obvious blueprint for this.<sup>64</sup>

## **7. Summary and conclusions**

In this paper we have argued that the severity of the present crisis cannot be understood without examining the medium- to long-run developments in the world economy since the early 1980s: inefficient regulation of financial markets, increasing inequality in the distribution of income and rising imbalances at the global (and at the Euro area) level. Our focus has been on the changes in distribution triggered by ‘finance-dominated capitalism’ embedded in a ‘neo-liberal’ policy stance since the early 1980s, on potential causes for this re-distribution, on the effects of re-distribution on aggregate demand and growth, on the role of re-distribution for the global and regional imbalances underlying the present financial and

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<sup>63</sup> For a more detailed discussion of required economic policy reforms in the EU and the Euro area see Hein/Truger (2011).

<sup>64</sup> See also Davidson (2009: 134-142), Guttman (2009), Kregel (2009), UNCTAD (2009), and Wade (2009).

economic crisis, and on the requirements for distribution policies in an expansionary post-crisis economic policy regime.

In Section 2 we have examined the three dimensions of re-distribution in the course of ‘financialisation’ and ‘neo-liberalism’ since the early 1980s: functional distribution, personal distribution and the development of top incomes. We have shown that this period was characterised by a falling labour income share and by increasing inequality in the personal distribution of disposable income in most of the 14 countries in the data set for our study, the main European Union countries, the US and Japan. The UK and the US have also seen a dramatic increase in the income shares of top incomes, whereas in the other countries this increase was only modest.

In Section 3 we have then focused on the determinants of functional income distribution against the background of a Kaleckian theory of distribution, because we consider the development of functional income distribution as the key to changes in personal distribution and to the understanding of the macroeconomic effects of distributional changes. In particular, we have identified three channels through which ‘financialisation’ and ‘neo-liberalism’ have affected the share of direct labour in national income in the negative: first, the change in the sectoral composition of the economy in favour of the high profit share financial corporations and at the expense of the non-financial corporate sector and the government sector; second, the rise in overhead costs, in particular top management salaries and interest payments, and the increase in profit claims imposed on the corporate sector by shareholders, which have caused the mark-up to rise and the share of direct labour to fall; third, the weakening of bargaining power of workers and trade union triggered by shareholder value orientation and short-termism of management, increasing relevance of the financial sector with weak trade unions, the threat-effect of liberalisation and globalisation of finance and trade, deregulation of the labour market, and downsizing the government sector and abandoning government demand management policies. Whereas the results for the first and the third channel seem to be quite straightforward empirically, for the second channel, the increase in the mark-up and a decrease in the labour income share due to higher top management salaries, and higher interest and dividend payments to rentiers, there is plenty of statistical evidence but econometric support is rather scarce. In this area, further research seems to be required.

In Section 4 the effects of re-distribution at the expense of labour on aggregate demand and growth have been discussed. For those countries in our data set for which econometric studies on the demand regime are available these studies mostly obtain wage-led

demand regimes, except for Austria and Japan where demand was found to be profit-led. Therefore, falling labour income shares should have been associated with decreasing demand and – with reasonable assumptions – also with falling GDP growth in most of the countries. Comparing cyclical average developments over the three cycles from the early 1980s until 2008, this is what we generally have observed. However, there have been some exceptions from this trend. This is hardly surprising, because there have been further effects of ‘financialisation’ and ‘neo-liberalism’ on aggregate demand and growth, apart from the effects via changing functional income distribution. Whereas the direct effects on investment in capital stock of the business sector, via the ‘preference channel’ (shareholder value orientation and short-termism of management) and the ‘internal means of finance channel’ (rising dividend payments and share buybacks), have been found to be negative in the theoretical and empirical literature, the effect on consumption demand of private household can be positive and can compensate for the partially negative demand effects of ‘financialisation’ through the decrease in the labour income share and the fall in real investment. The conditions for this are considerable wealth effects on consumption and an increase in financial and/or housing wealth. If these conditions are met, liberalisation of financial markets, financial innovation and deterioration of creditworthiness standards may generate ‘debt-led consumption booms’, which, however, suffer from internal contradictions regarding sustainability, because such a boom is founded on increasing debt-income ratios of the private household sector.

In Section 5 we have examined the relationship between re-distribution, associated with ‘financialisation’ and ‘neo-liberalism’, and the escalating regional (Euro area wide) and global current account imbalances in the early 2000s, as one of the sources of the severity of the crisis which started in 2007. We have shown that during the trade cycle of the early 2000s two ‘models of capitalism under “financialisation”’ have developed, the ‘debt-led consumption boom’ and the ‘export-led mercantilist’ model. Since the former model, generating higher rates of growth than the latter – with the exception of catching-up China which we have included in this section –, has meant considerable current accounts deficits, these two models are complementary and they have generated a highly fragile constellation. The dynamic ‘debt-led consumption boom’ economies had to rely on the willingness and the ability of their private households to go into debt, and thus on ever rising notional wealth, in particular rising residential property prices, (seemingly) providing collateral for credit, and on the willingness of the rest of the world to run current account surpluses and to supply credit, notably the ‘export-led mercantilist’ countries, in order to finance the related current account

deficits of the ‘debt-led consumption’ economies. The slowly growing or stagnating ‘export-led mercantilist’ economies had to rely on the willingness of the ‘debt-led consumption boom’ economies to go into debt, because their moderate or weak growth rates were dependent on dynamic growth of world demand. The collapse of a ‘debt-led consumption boom’ therefore quickly infected the ‘export-led mercantilist’ economies through the collapse of their export markets and through devaluation of their capital exports in risky financial markets in the course of the financial crisis.

In Section 6 we have drawn the economic policy conclusions from our analysis. We have argued that a sustainable recovery strategy from the crisis can neither follow the ‘debt-led consumption boom’ nor the ‘export-led mercantilist’ model, but has to be income- or wage-led. A wage-led recovery strategy has to address the main causes for the falling labour income share in the period of ‘neo-liberalism’ and ‘financialisation’: First, bargaining power of trade unions has to be stabilised and enhanced; second, overhead costs of firms, in particular top management salaries and interest payments, and profit claims of financial wealth holders have to be reduced; and third, the sectoral composition of the economy has to be shifted away from the high profit share financial corporations towards the non-financial corporate sector and the public sector. Further more, the tendencies towards increasing wage dispersion have to be contained and, in particular, progressive tax policies and social policies need to be applied in order to reduce inequality in the distribution of disposable income. We have claimed that a wage-led recovery strategy has to be at the core of but has also to be embedded in a ‘Keynesian New Deal’ which more broadly will have to address the three main causes for the severity of the crisis: inefficient regulation of financial markets, increasing inequality in the distribution of income and rising imbalances at the global (and at the Euro area) level. The three main pillars of the policy package of a ‘Keynesian New Deal at the global and the European level’ are: first, the re-regulation of the financial sector in order to prevent future financial excesses and financial crises; second, the re-orientation of macroeconomic policies, in particular in the current account surplus countries; and third the re-construction of international macroeconomic policy co-ordination – in particular on the European level – and a new world financial order. Finally, we have shown how each of these pillars is intimately linked with income- or wage-led recovery.

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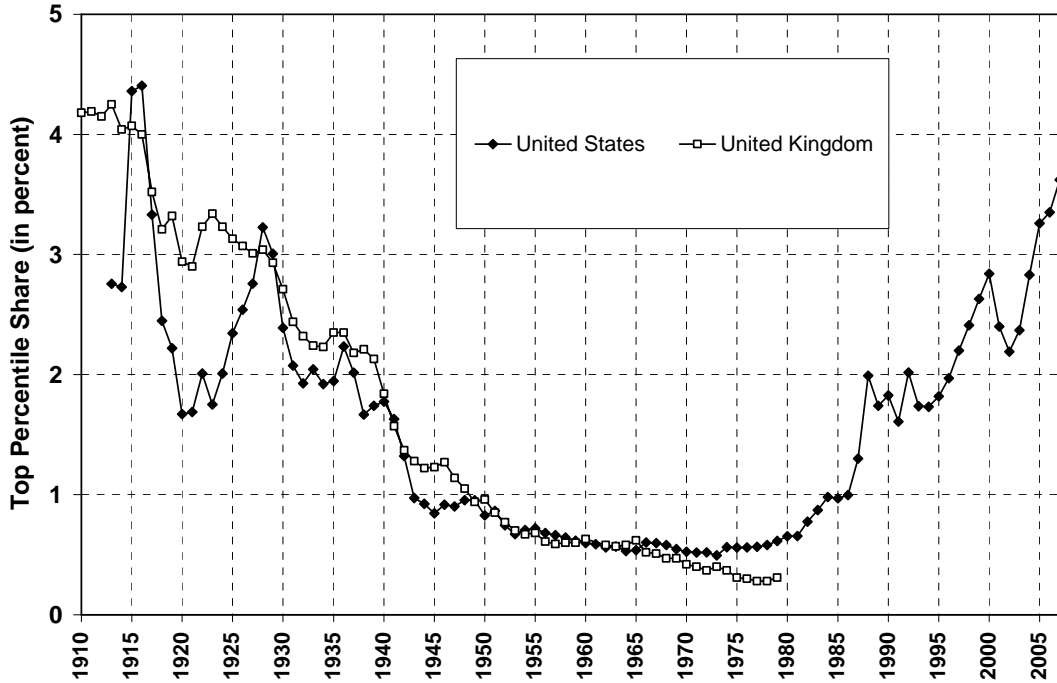
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## Appendix

Figure A1a

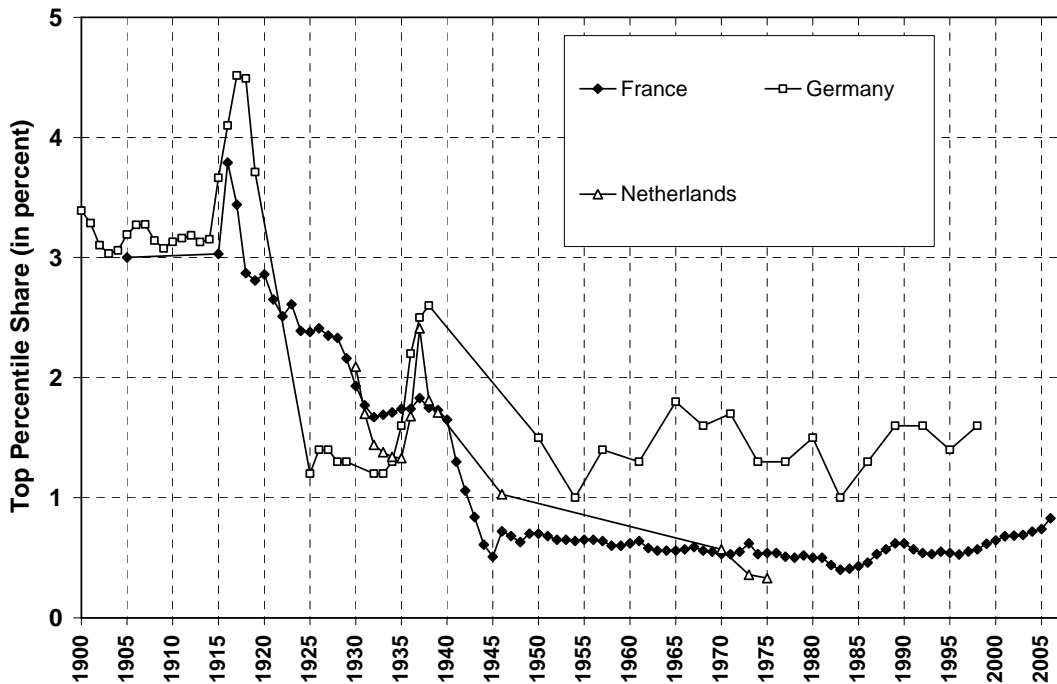
Top 0.01% share in national income: UK and US, 1910-2007



Source: Atkinson/Piketty/Saez (2010b)

Figure A1b

Top 0.01% share in national income: France, Germany, Netherlands, 1900-2006

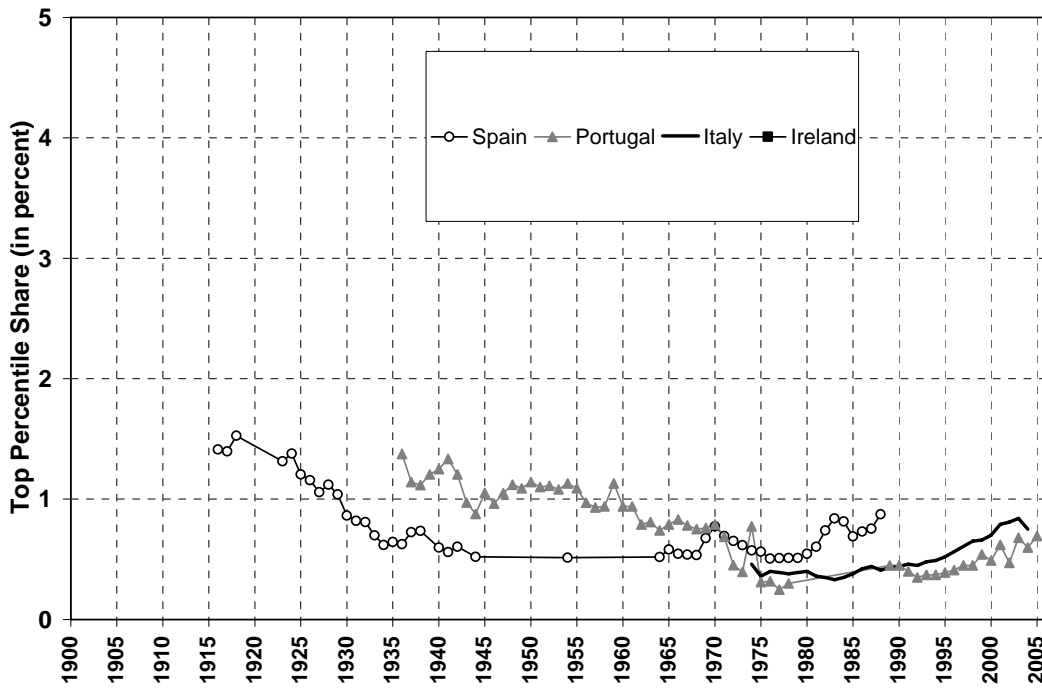


Source: Atkinson/Piketty/Saez (2010b)



Figure A1c

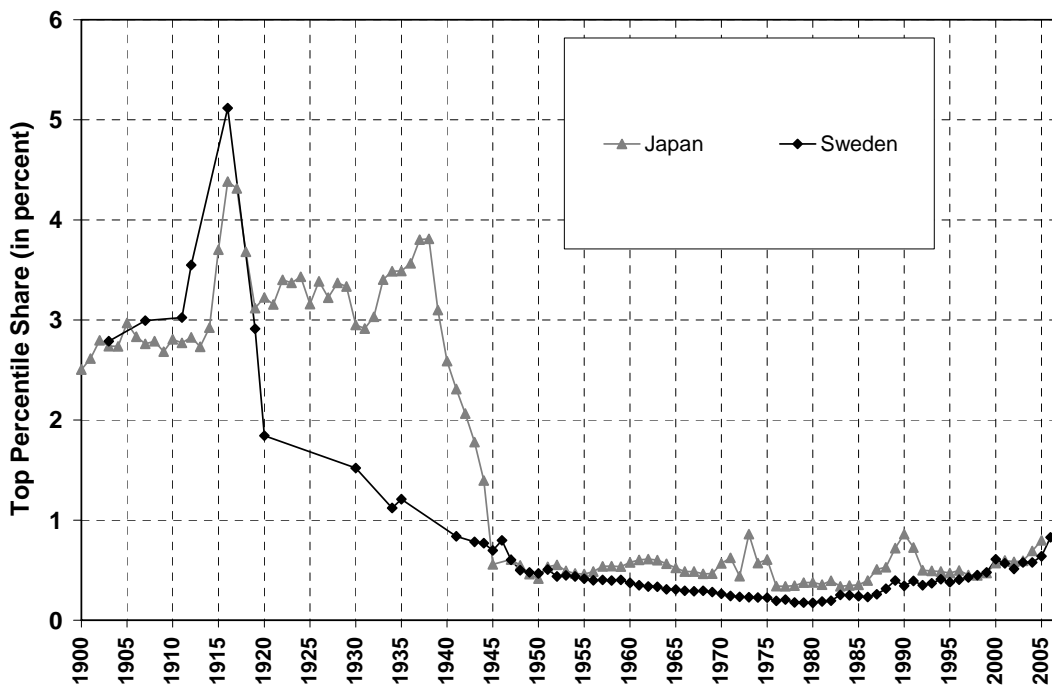
Top 0.01% share in national income: Ireland, Italy, Portugal, Spain, 1900-2006



Source: Atkinson/Piketty/Saez (2010b)

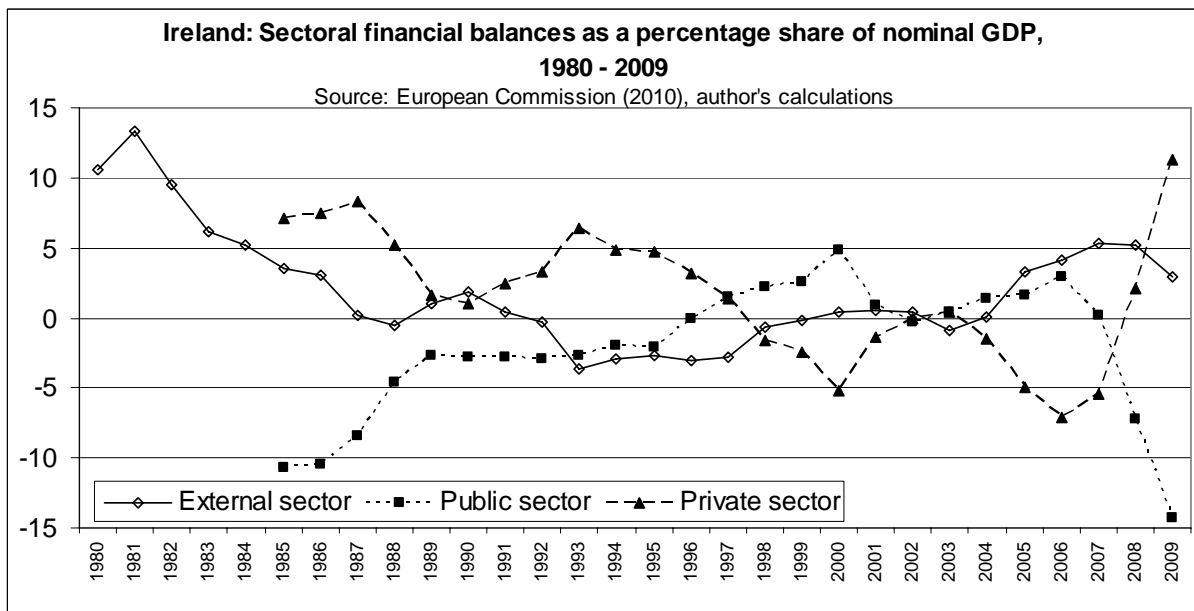
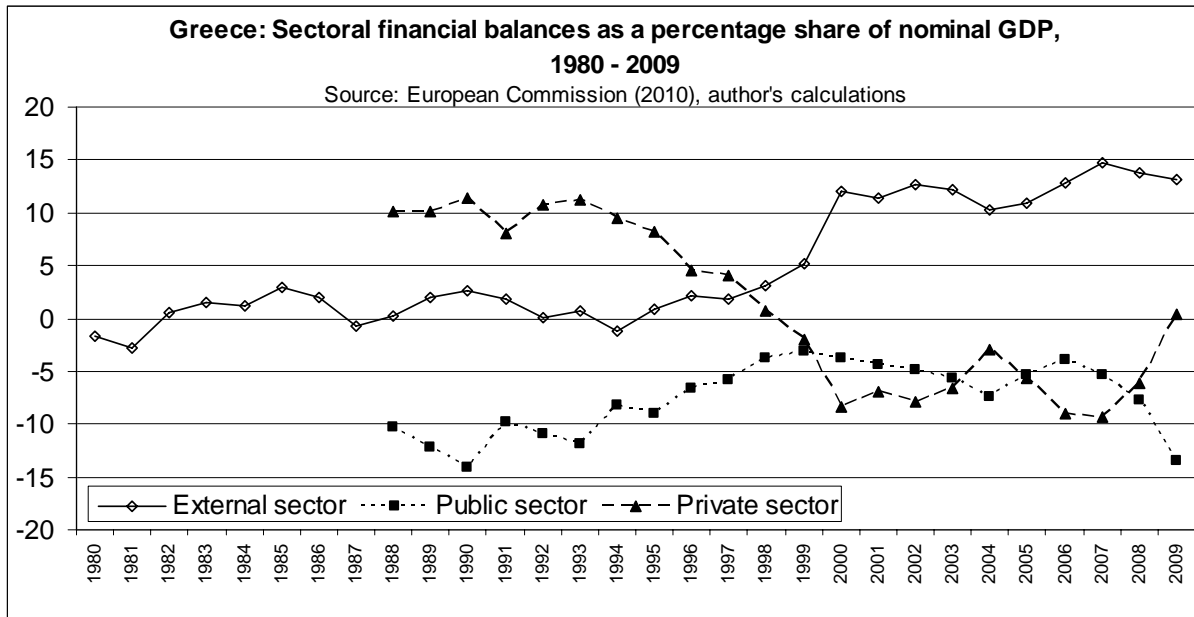
Figure A1d

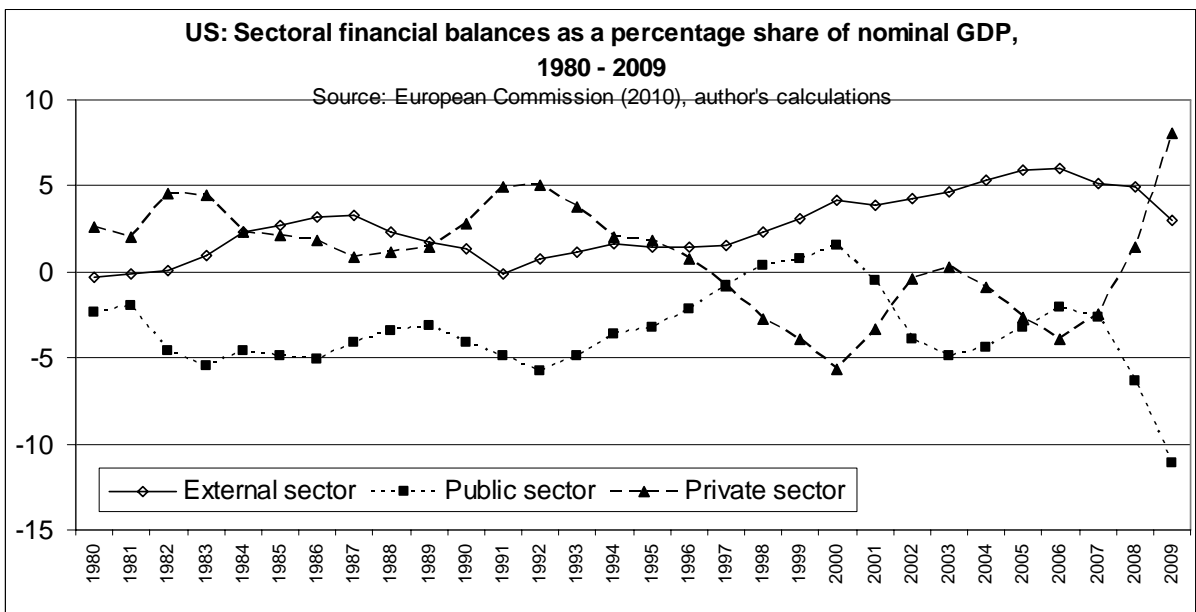
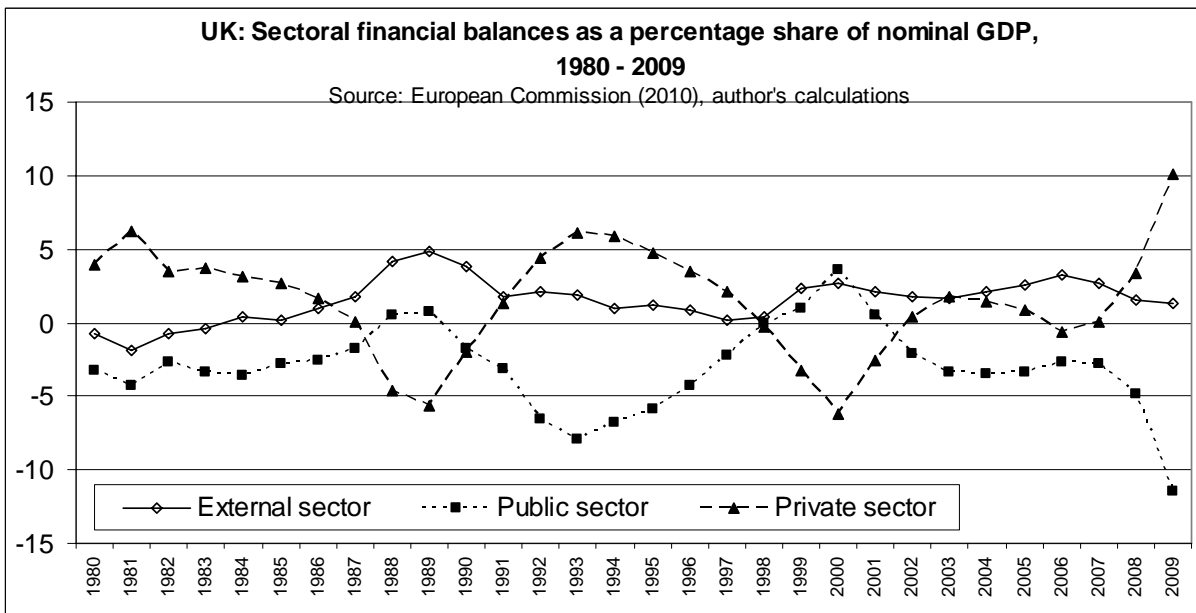
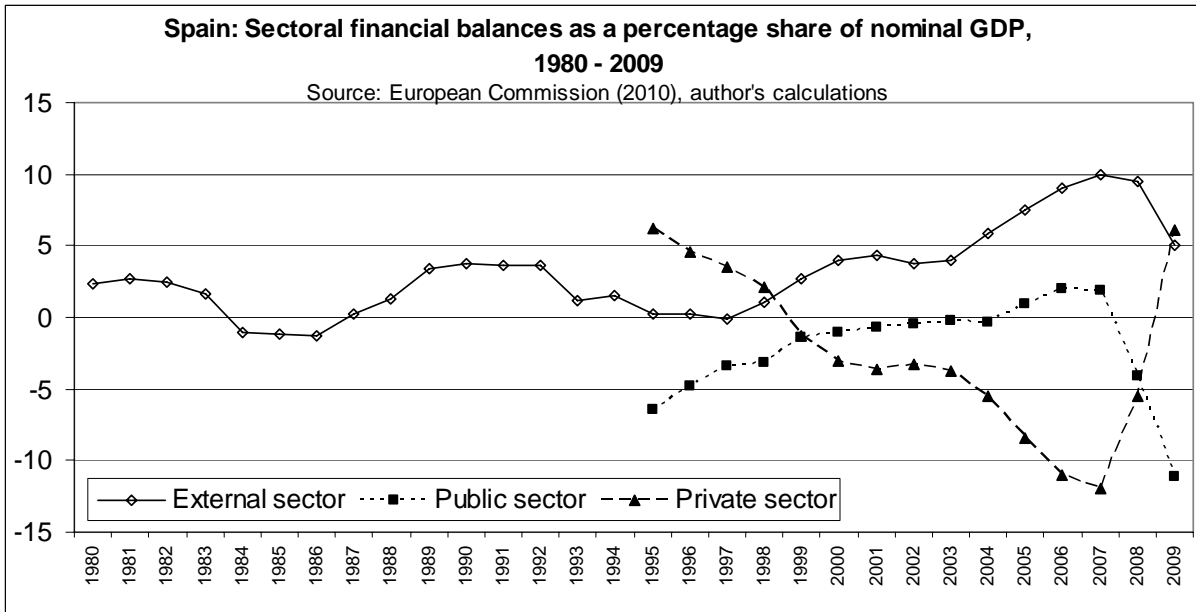
Top 0.01% share in national income: Japan, Sweden, 1900-2006



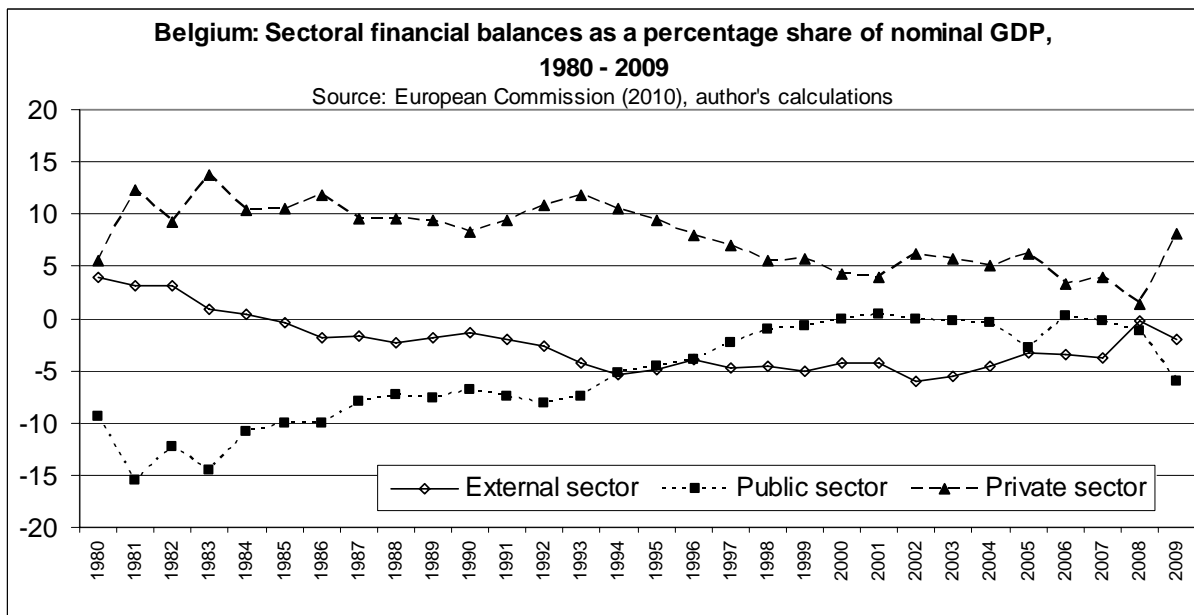
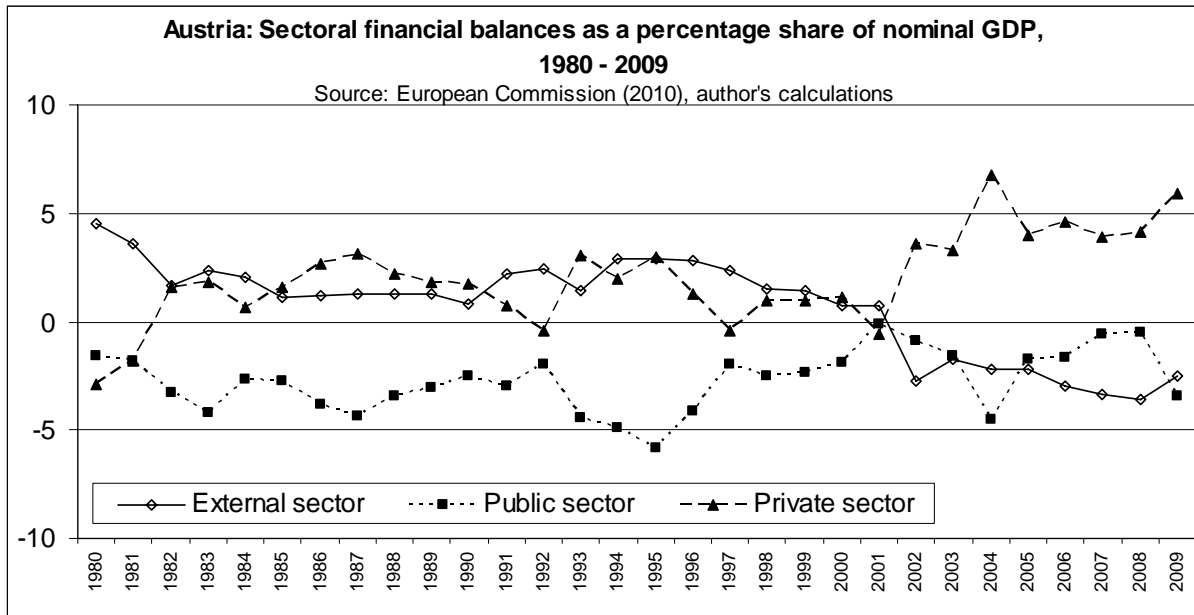
Source: Atkinson/Piketty/Saez (2010b)

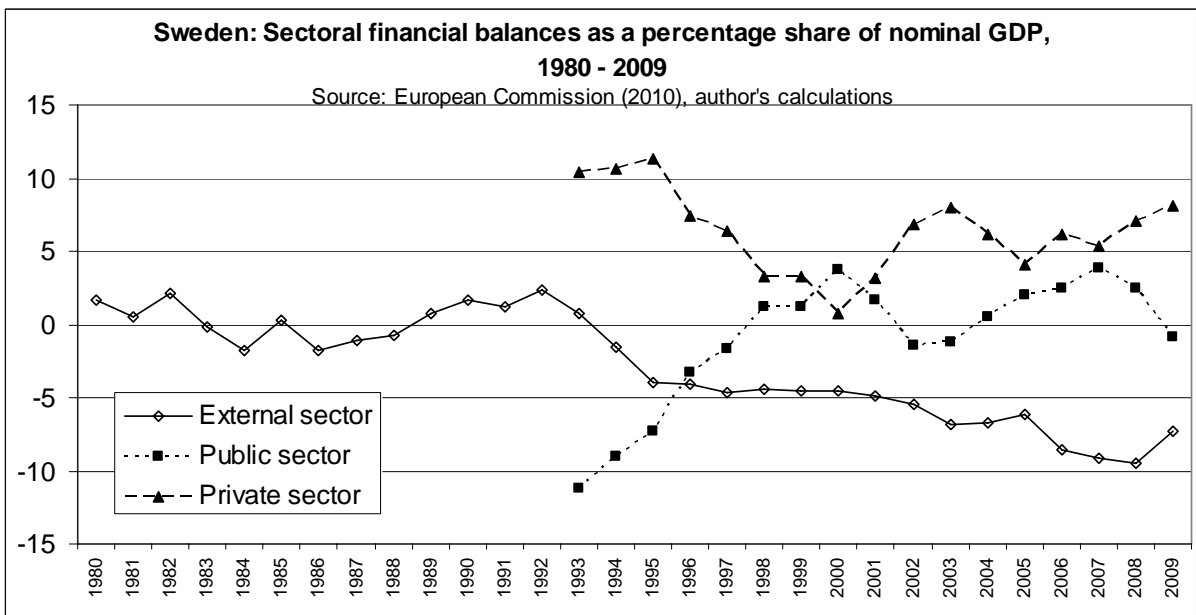
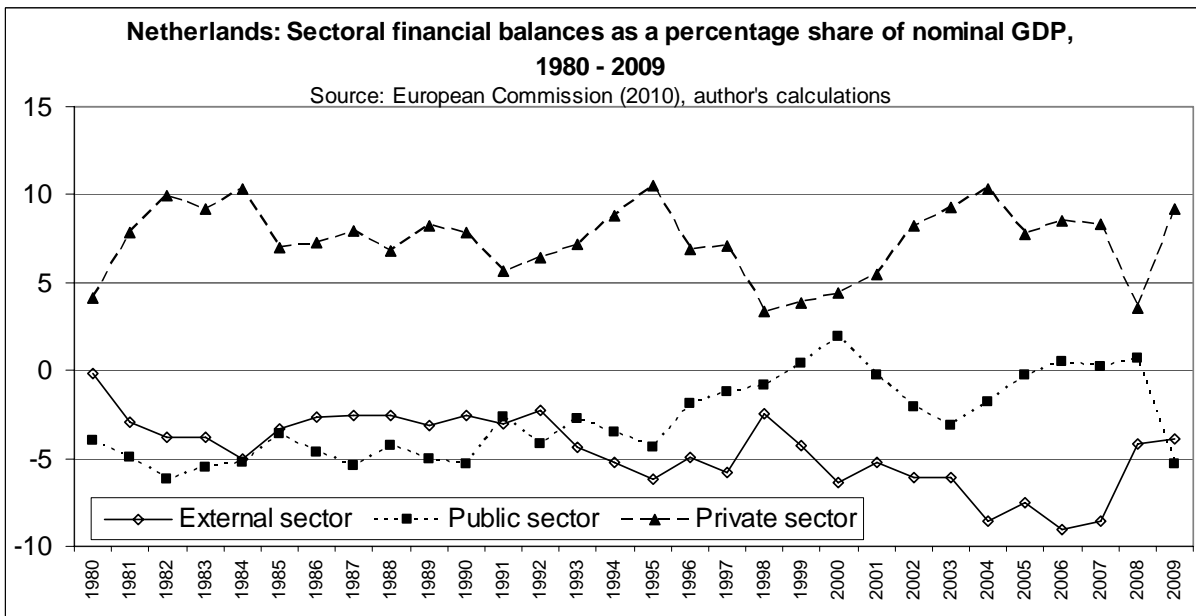
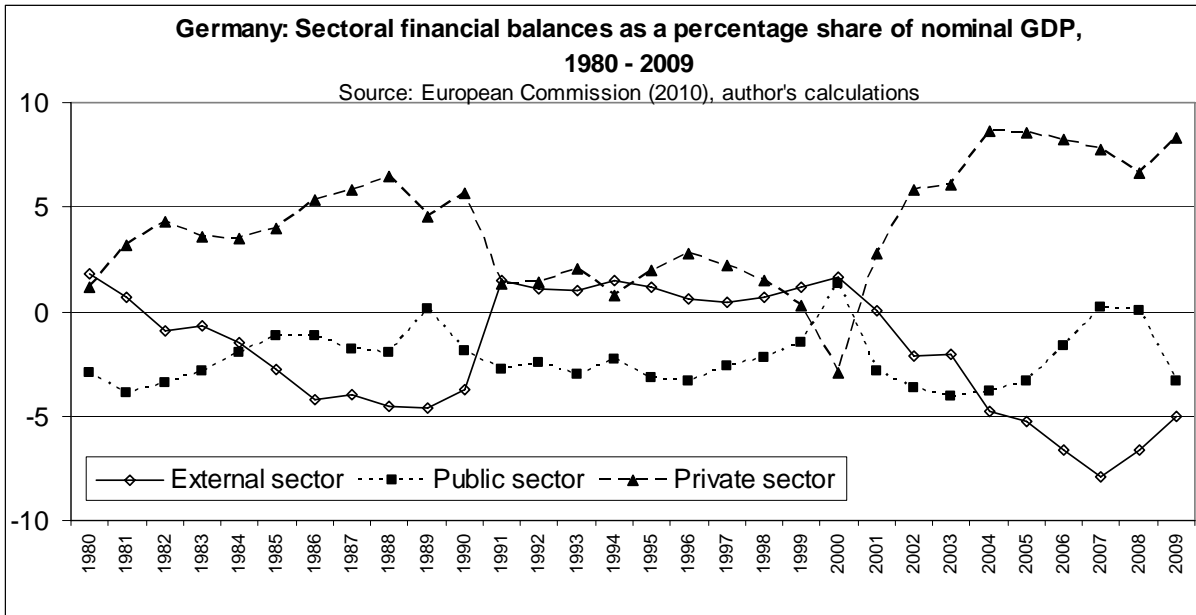
### Figures A2a-e: Financial balances in the 'debt-led consumption boom' economies

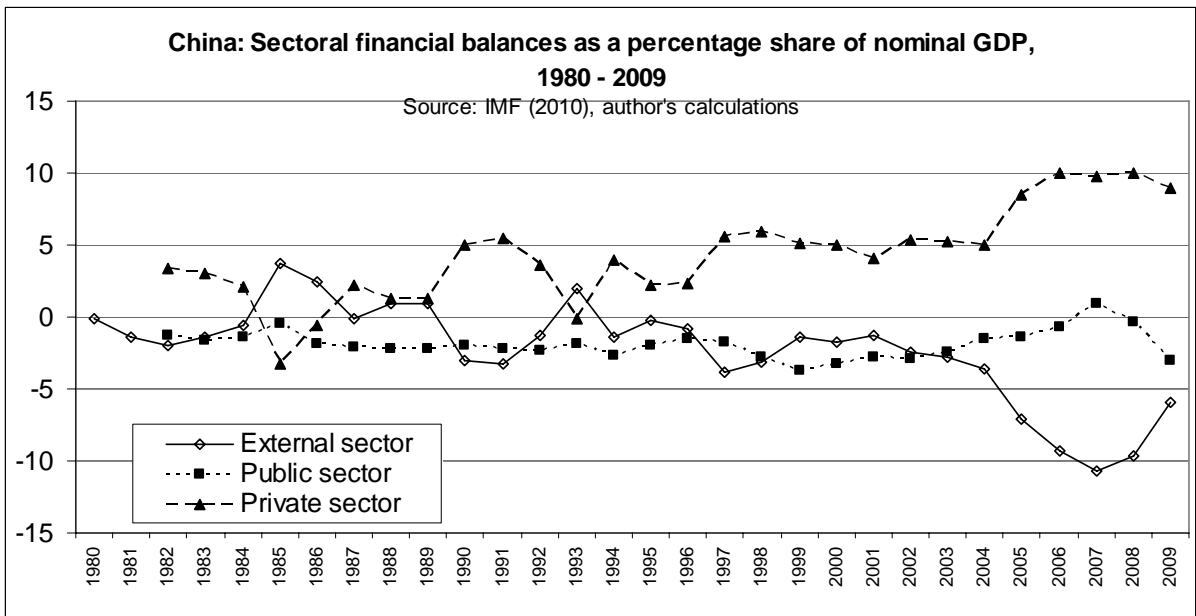
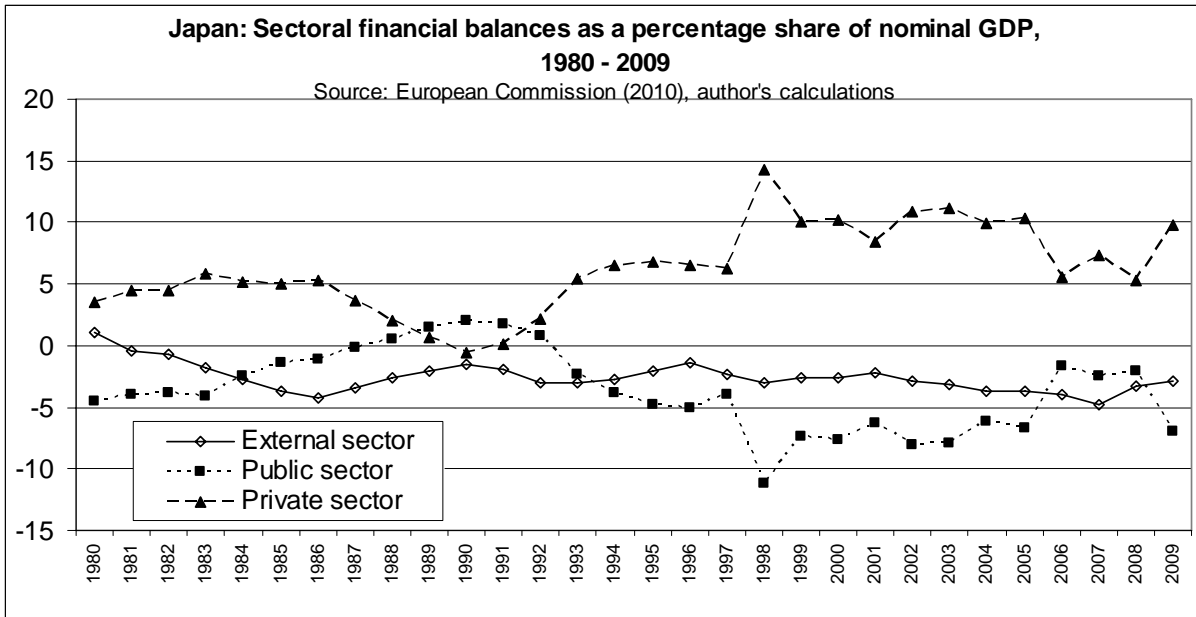




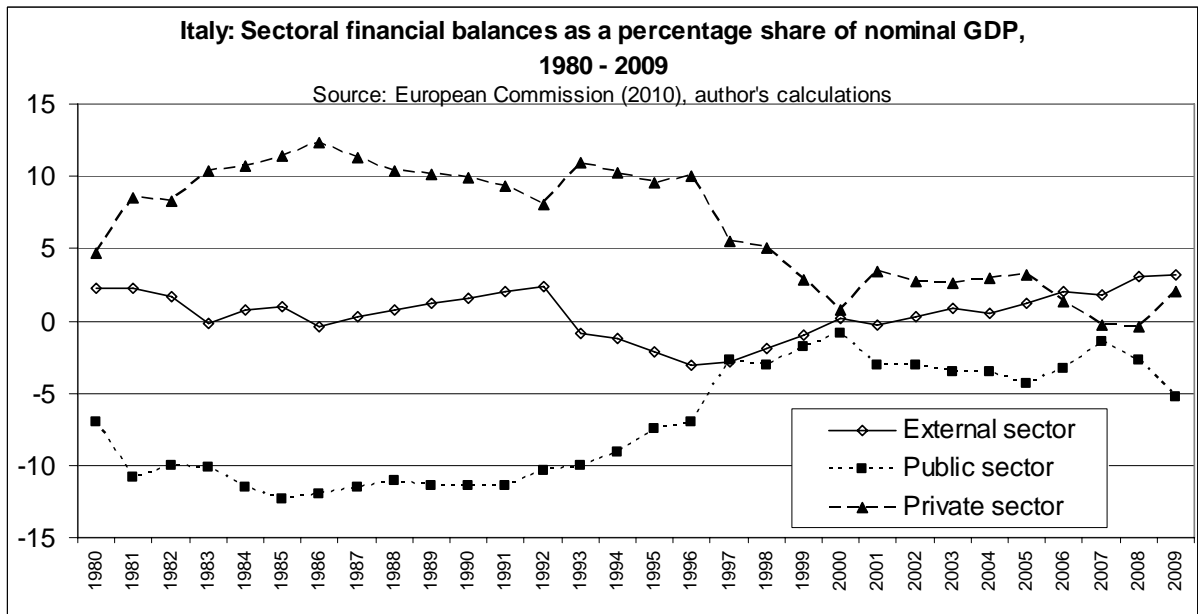
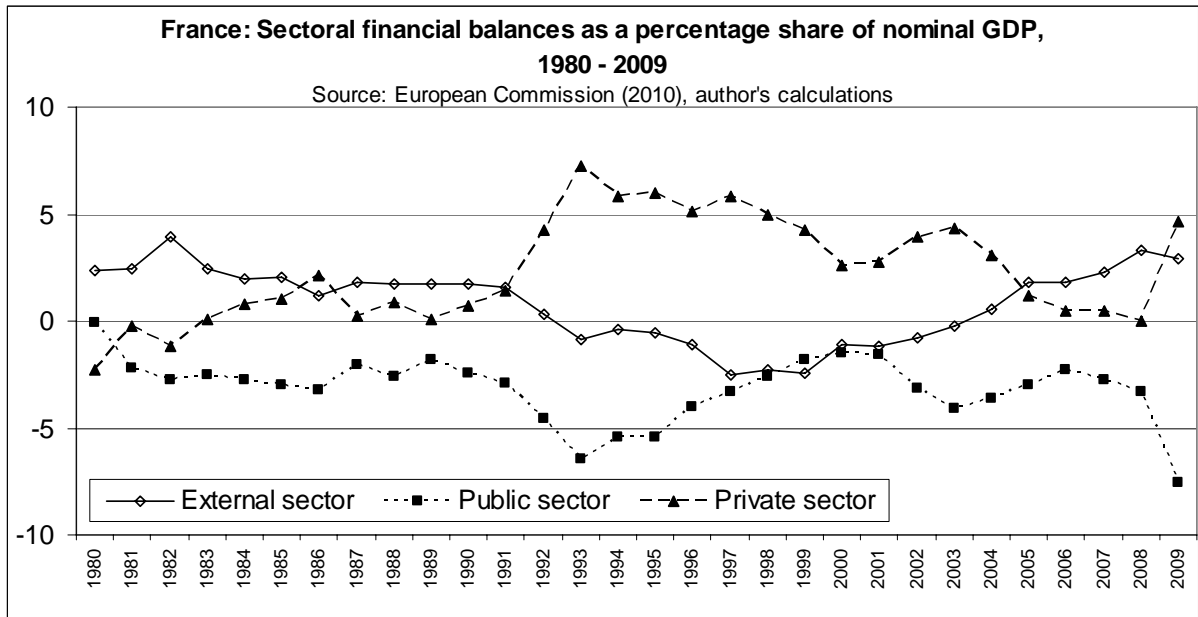
**Figures A3a-g: Financial balances in the 'export-led mercantilist' economies**

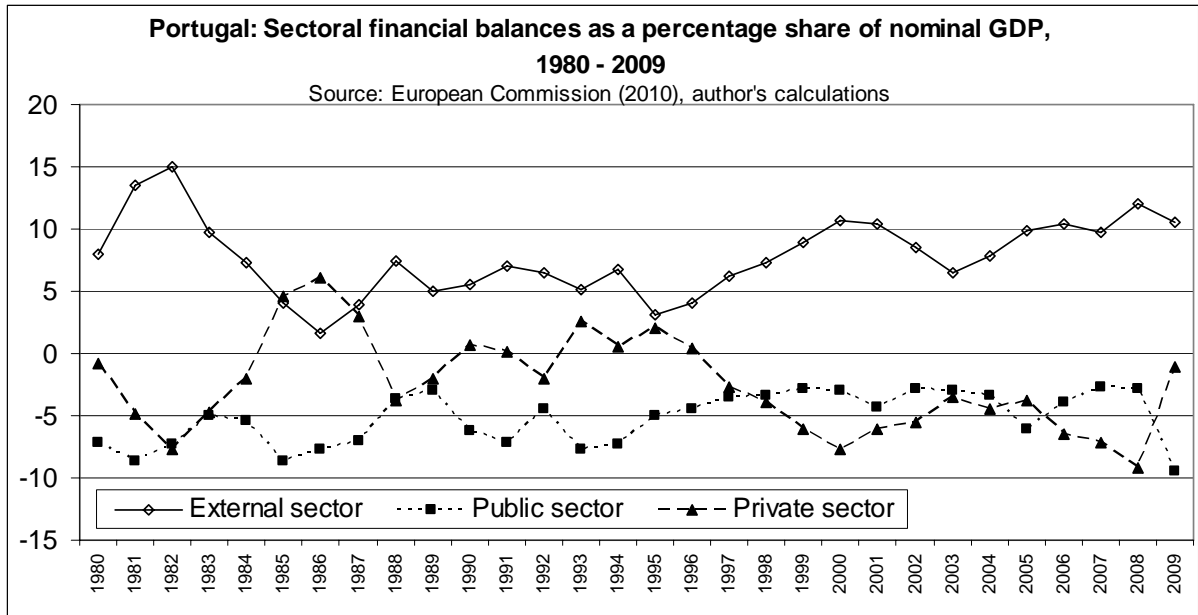






**Figures A4a-c: Financial balances in the ‘neither-nor’ economies**











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