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Financialisation and the requirements and potentials for wage-led recovery - a review focusing on the G20

Eckhard Hein
Matthias Mundt

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Financialisation and the requirements and potentials for wage-led recovery – a review focusing on the G20

*Study commissioned by the International Labour Office (ILO)
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**Eckhard Hein
Matthias Mundt**

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Preface

The Conditions of Work and Employment Research Series is aimed at presenting the findings of policy-oriented research in the area of working conditions from multidisciplinary perspectives such as laws, economics, statistics, sociology and industrial relations.

Decent work concerns both the quantity and quality of employment, and indeed, the conditions of work and employment have great impacts on workers' well-being and enterprise performance. In recent years, conditions of work and employment have changed significantly in many countries, both advanced and developing, part due to globalization, technological changes, and regulatory shifts. At the same time there has been a growing recognition that improving the quality of work is also an important policy goal. Yet the challenge of what kinds of concrete policy actions need to be developed to improve the every-day reality for workers remains. With this challenge in mind, the Conditions of Work and Employment Series is intended to offer new ideas and insights on improving working conditions. It is also meant to stimulate debates among governments and social partners concerning how to better design and implement policies with the aim of ensuring decent working conditions for all workers.

ILO's Conditions of Work and Employment Branch (<http://www.ilo.org/travail>) is devoted to developing knowledge and policies and to providing technical assistance in the area of working conditions such as wages, working time, work organization, maternity protection and arrangements to ensure an adequate work-life balance.

Philippe Marcadent
Chief
Conditions of Work and Employment Branch
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Social Protection Sector

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Abstract

This paper is intended to provide a comprehensive review of financialisation as a major cause for the financial and economic crisis which started in 2007, and to outline the requirements and the potentials for a long-run sustainable recovery strategy after the ‘Great Recession’. We argue 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 level. Our focus is 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, and on the role of re-distribution for the global imbalances underlying the present financial and economic crisis. Finally, the requirements for distribution policies within an expansionary post-crisis economic policy regime, a wage-led growth regime embedded in a Global Keynesian New Deal, are outlined.

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

In 2008/09 the world economy was hit by a decline in real GDP, which had not been seen for generations. The so called ‘Great Recession’ started with the collapse of the subprime mortgage market in the US in summer 2007, and it gained momentum with the breakdown of Lehman Brothers in September 2008. Under the conditions of deregulated and liberalised international financial markets, the financial and economic crisis rapidly spread all over the world and reached another climax with the euro crisis starting in 2010. Although recovery already started in late 2009 – albeit with different speeds in different countries – the world economy is far from having overcome the causes of the crisis, which are rooted in the long-run developments since the early 1980s, and in late 2011 it is threatened by another slowdown. We hold that the severity of the present crisis is due to the following medium- to long-run developments, in particular in the advanced capitalist economies but affecting also the emerging market economies: inefficient regulation of financial markets, increasing inequality in the distribution of income and rising imbalances at the global (and at the Euro area) level.¹ 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 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.² Epstein (2005: 3) has presented a widely accepted definition, arguing that ‘[...] financialisation means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies’.

From a macroeconomic perspective, financialisation has affected long-run economic developments through the following channels (Hein 2010a, 2010b, Hein/van Treeck 2010a). 1. With regard to distribution, financialisation has been conducive to a rising gross profit share, including retained profits, dividends and interest payments, and thus a falling labour income share, on the one hand, and to increasing inequality of wages and top management salaries, on the other hand. The major reasons for this have been falling bargaining power of trade unions, increasing profit claims imposed in particular by increasingly powerful rentiers and a change in the sectoral composition of the economy in favour of the financial corporate sector.

2. 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

¹ 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), Stockhammer (2010a, 2010b), 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 resulting potential for instability. For a review of the changes in world-wide financial markets and related imbalances which fed the financial crisis see Guttman (2009).

² 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.

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, or through risky financial investments aimed at generating maximum short-run profits. 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.

3. Regarding consumption, financialisation has generated increasing potential for wealth-based and debt-financed consumption, thus creating the potential to compensate for the depressing demand effects of financialisation in some countries, which were imposed on the economy via re-distribution and the depressing impact on real investment. Stock market and housing price booms have each increased notional wealth against which households were willing to borrow. Changing financial norms, new financial instruments (credit card debt, home equity lending), deterioration of creditworthiness standards, triggered by securitisation of mortgage debt and 'originate and distribute' strategies of commercial banks, made increasing credit available to low income, low wealth households, in particular. This allowed consumption to rise faster than medium income and thus to stabilise aggregate demand. But it also triggered increasing debt-income ratios and of private households and thus increasing financial fragility.

4. Whereas some countries relied on soaring consumption demand as the main driver of aggregate demand and GDP growth, other focussed on mercantilist export-led strategies as alternative to generate demand in the face of re-distribution at the expense of (low) labour incomes, stagnating consumption demand and weak real investment. However, this strategy contributed to rising global current account imbalances prior to the Great Recession.

This paper is intended to provide a comprehensive review of financialisation as a major cause for the crisis, focussing on the four channels outlined above, on the one hand. On the other hand, the paper attempts to outline the requirements of and the potentials for a long-run sustainable recovery strategy after the present financial and economic crisis, and it will be argued that such a recovery strategy will have to be (mass) income- or wage-led. For these purposes the link between financialisation, distribution and the present crisis has to be established.³ Our focus will be on the relationship between financialisation and income re-distribution since the early 1980s, on the effects of re-distribution on aggregate demand, and on the global and regional imbalances underlying the present financial and economic crisis, and finally and, in particular, on the requirements for distribution policies embedded in an expansionary post-crisis economic policy regime, a wage-led growth regime. In this study we will concentrate on the G20 economies, that is on Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom (UK) and the United States of America (US), although

³ 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.

restrictions of data will prevent a full coverage of all countries for all the empirical indicators we will use.⁴

In Section 2 of the paper the three dimensions of re-distribution in the course of financialisation and neo-liberalism since the early 1980s will be outlined: functional distribution, personal distribution and the development of top incomes. Examining the effects of financialisation on distribution we focus on the determinants of functional income 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. We will identify the potential channels through which financialisation and neo-liberalism have affected the share of direct labour in national income in the negative. Three channels are of particular interest: 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; third, the weakening of bargaining power of workers and trade unions 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 (the threats of) downsizing the government sector and abandoning government demand management policies.

In Section 3 of the paper the effects of re-distribution on aggregate demand and the global and regional imbalances will be examined. Since the countries examined so far in the empirical literature are dominated by ‘wage-led’ domestic demand regimes, and most of them also by wage-led overall demand regimes – and probably also by ‘wage-led’ growth regimes –, a falling wage share and increasing inequality should have been detrimental to domestic and total demand as well as growth. However, further effects of financialisation have to be taken into account. Whereas the direct effects on investment of the business sector, via ‘preference’ (shareholder value orientation and short-termism of management) and ‘internal means of finance’ channels (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 households can be positive and can over-compensate 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. The counterpart to the ‘debt-led consumption boom’ model is the ‘export-led mercantilist’ model, which is driven by export surpluses compensating for weak domestic demand. Since the former model has meant considerable current accounts deficits, these two models are complementary and they have generated the highly fragile constellation which collapsed in the Great Recession.

In Section 4 of the paper we will draw the economic policy conclusions from our analysis. We will argue 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 (mass) 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

⁴ See Hein (2011a) for a similar study focusing on a set of European countries plus China, Japan and the US.

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. Furthermore, 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 will claim that a wage-led recovery strategy has to be embedded in a ‘Global 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. We will argue that the three main pillars of the policy package of a ‘Global Keynesian New Deal’ 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 and a new world financial order. We will show how each of these pillars is intimately linked with (mass) income- or wage-led recovery. Section 5 will summarise and conclude.

2. Financialisation, neo-liberalism and income re-distribution

2.1 Empirical overview of development of income shares, personal income distribution and top incomes

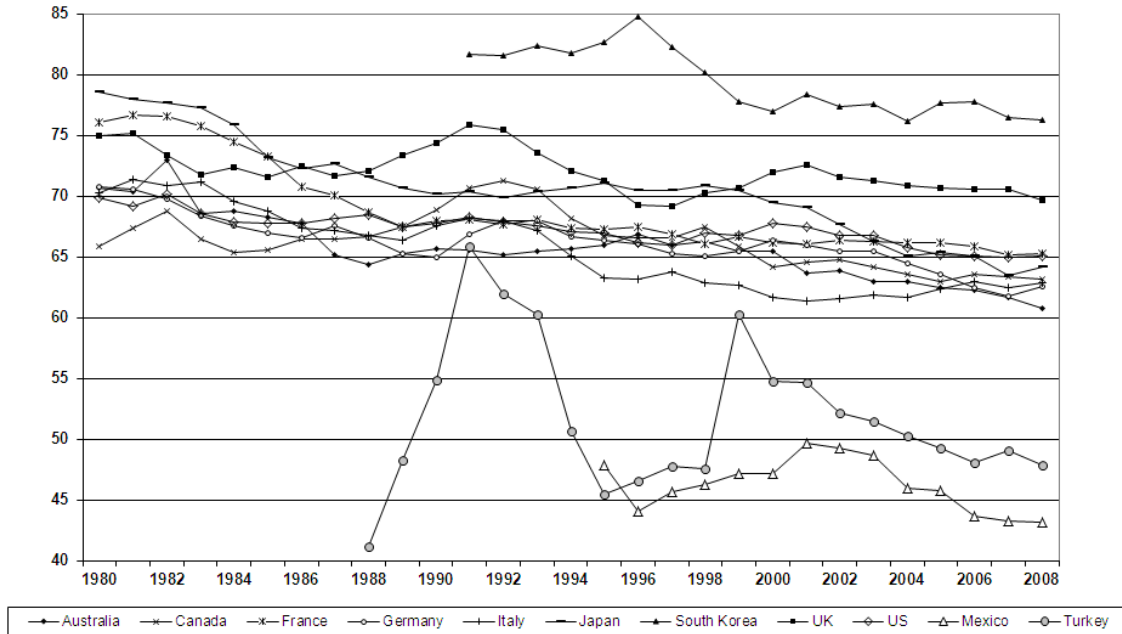
The neo-liberal period and the uprising of finance-dominated capitalism, which started in the early 1980s in the US and the UK and has since then also swept to other countries, has been associated with an enormous re-distribution of income. This has several dimensions which will be analysed for G20 countries, provided that data availability allows for.

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,⁵ 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 (Figure 1a). A second group of countries consisting of emerging market G20 economies also shows an overall falling trend of the wage share with the exception of India (Figure 1b). In order to eliminate cyclical fluctuations of the labour income share or the wage share, we have calculated cyclical averages for the three trade cycles from the early 1980s until 2008 (Table 1). Comparing the third cycle (early 2000s until 2008) with the second cycle (early 1990s to the early 2000s) it is visible that on average the labour income share, or the wage share, has fallen in all countries. The fall has been most substantial in Argentina, Canada, Japan, and South Africa with more than 4 percentage points, and in Australia, Brazil, China, Germany, South Korea, and Turkey with more than 2 percentage points of GDP. In France, India, Italy, Mexico, Russia, the UK, and the US, the labour income share, or the

⁵ The labour income share is given by the compensation per employee divided by GDP at factor costs per person employed. The European Commission (2011) from which most of our data is taken calls this the ‘adjusted wage share’.

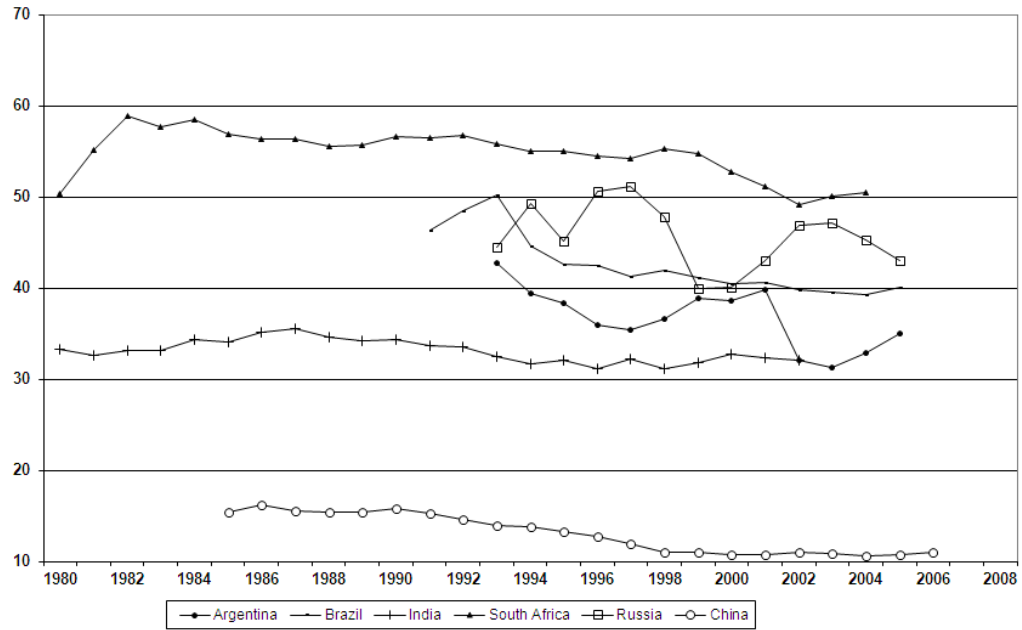
wage share, has fallen by less than 2 percentage points of GDP. The reasons for this long-run development and its relationship with neo-liberalism and finance-dominated capitalism will be examined more closely in the Section 2.2. But first, we take a brief look at two other indicators of re-distribution.

Figure 1 a : Labour income shares as percentage of GDP at current factor costs, eleven G20 economies, 1980-2008



Source: European Commission (2011)

Figure 1 b: Wage share in GDP, in percent, six G20 economies, 1980-2008



Source: Charpe (2011)

Table 1: Labour income share as percentage of GDP at current factor costs or wage share in GDP, in per cent, G20 countries, 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. - 2.), percentage points
Argentina ^{a) b)}	...	38.42	32.79 ^{c)}	-5.63
Australia	66.70	65.76	62.57	-3.19
Brazil ^{a) b)}	...	43.33	39.64 ^{c)}	-3.69
Canada	66.89	67.79	63.75	-4.05
China ^{a) b)}	15.58	13.11	10.82	-2.28
France	71.44	66.88	65.87	-1.01
Germany	67.11	66.04	63.37	-2.67
India ^{a), b)}	34.03	32.25	32.18 ^{c)}	-0.07
Indonesia ^{a)}	...	...	...	...
Italy	68.70	63.25	62.37	-0.88
Japan ^{a)}	72.38	70.47	65.75	-4.73
Mexico ^{a)}	...	46.35	46.16	-0.19
Russia ^{a) b)}	...	45.87	45.56 ^{c)}	-0.31
Saudi Arabia ^{a)}	...	...	...	...
South Africa ^{a) b)}	56.65	54.87	50.18 ^{c)}	-4.69
South Korea ^{a)}	81.62	80.53	76.97	-3.56
Turkey ^{a)}	48.07	54.12	50.34	-3.78
UK	72.98	71.99	70.73	-1.26
US	68.20	67.12	65.87	-1.25

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.

^{a)} adjusted to fit in 3 cycle pattern, ^{b)} wage share in GDP or in gross value added, ^{c)} incomplete trade cycle

Source: European Commission (2011), Charpe (2011), authors' calculations

Second, personal income distribution has become more unequal in most of the countries in the early 2000s as compared to previous periods. Taking the Gini coefficient as an indicator, this is true for the distribution of market income, with Argentina, Brazil and France being exceptions (Table 2a). In some countries this long-run rise in inequality has been considerable, in particular in Australia, Canada, Germany, Italy, Japan, Mexico, Russia, the UK, and the US. If we include re-distribution via taxes and social policies by the state, France, Indonesia and Turkey have not seen any long-run increase in their Gini coefficients (Table 2b). The other countries for which data are available, 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 Argentina, Australia, China, Germany, Italy, the UK, and the US. Although tax and social policies have reduced income inequality in the countries under investigation for which data comparison is possible, except Argentina, in most countries this has not prevented an increase in inequality over time. This is also the conclusion the OECD (2008) draws for a broader set of countries and from the application of other measures of income inequality.

Table 2 a: Gini coefficient before taxes

Country	mid-70s	mid-80s	around 1990	mid-90s	around 2000	mid-2000s	Change from earliest to most recent value
Argentina	...	...	...	0.47	0.48	0.46	-0.01
Australia	0.27	0.30	0.34	0.36	0.38	...	0.11
Brazil	0.64	0.59	0.61	0.59	0.59	0.57	-0.07
Canada	0.38	0.4	0.4	0.43	0.44	0.44	0.06
China	0.29	0.3	0.34	0.36	...	...	0.07
France	...	0.52	0.51	0.48	0.50	0.48	-0.04
Germany	...	0.44	0.42	0.46	0.48	0.51	0.07
India	0.42	...	...	...	...	...	...
Indonesia	...	0.40	0.39	0.40	...	...	0
Italy	...	0.42	0.44	0.51	0.52	0.56	0.14
Japan	...	0.35	...	0.40	0.43	0.44	0.09
Mexico	...	...	...	...	...	...	...
Russia	...	...	0.27	0.47	0.52	0.45	0.18
Saudi Arabia	...	...	...	...	...	...	...
South Africa	...	...	0.63	0.59	0.63 ^{a)}	...	0
South Korea	0.35	0.34	0.35	0.34	0.37	...	0.02
Turkey	...	...	...	...	...	...	...
UK	0.36	0.44	0.46	0.48	0.48	0.46	0.1
US	0.37	0.40	0.42	0.45	0.45	0.46	0.09

Notes: OECD 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)} only urban incomes

Source: OECD (2010) for Canada, France, Germany Italy, Japan, UK and US, WIDER (2011) for Argentina, Australia, Brazil, China, India, Indonesia, Russia, South Africa and South Korea, authors' calculations

Table 2 b: Gini coefficient after taxes

Country	mid-70s	mid-80s	around 1990	mid-90s	around 2000	mid-2000s	Change from earliest to most recent value
Argentina	0.37	0.40	0.44	0.47	0.48	0.50	0.13
Australia	0.18	0.21	0.25	0.28	0.28	0.29	0.11
Brazil	...	...	...	...	...	...	...
Canada	0.3	0.29	0.29	0.29	0.32	0.32	0.02
China	...	...	0.38	0.45	0.45	0.45	0.07
France	...	0.31	0.30	0.28	0.28	0.28	-0.03
Germany	...	0.26	0.26	0.27	0.27	0.30	0.04
India ^{a)}	0.29	0.32	0.30	...	...	...	0.01
Indonesia ^{b)}	0.34	0.33	0.25	0.27	0.24	...	-0.1
Italy	...	0.31	0.30	0.35	0.34	0.35	0.04
Japan	...	0.30	...	0.32	0.34	0.32	0.02
Mexico	...	0.45	...	0.52	0.51	0.47	0.02
Russia	...	...	...	0.44	0.43	...	-0.01
Saudi Arabia	...	...	...	...	...	...	...
South Africa	0.47	0.47	...	...	...	...	...
South Korea	...	...	0.35	0.33	0.37	...	0.02
Turkey	...	0.43	...	0.49	...	0.43	0
UK	0.28	0.33	0.37	0.35	0.37	0.34	0.06
US	0.32	0.34	0.35	0.36	0.36	0.38	0.06

Notes: OECD 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)} related to 'consumption', ^{b)} related to 'expenditure'

Source: : OECD (2010) for Canada, France, Germany Italy, Japan, Mexico, Turkey, UK and US, WIDER (2011) for Argentina, Australia, China, India, Indonesia, Russia, South Africa and South Korea, authors' calculations

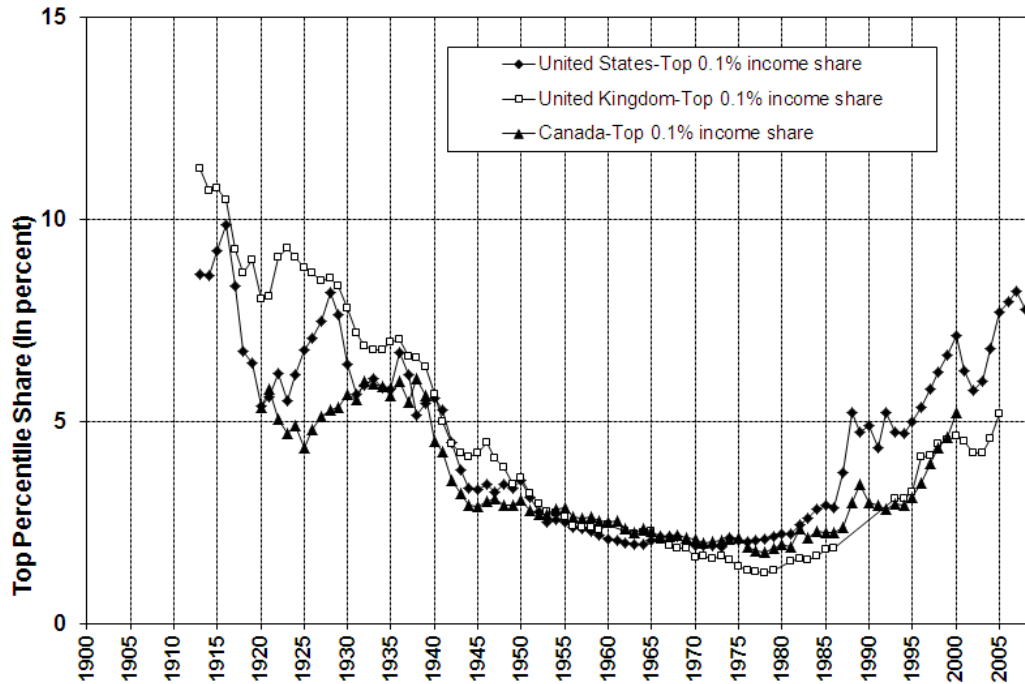
Third, as the path-breaking analysis by Piketty/Saez (2003, 2006) based on tax data for the US has shown, the share of top incomes in national income has increased significantly since the early 1980s in this country.⁶ Making use of the data supplied by Alvaredo et al. (2011) we take a look at the development of the income shares of the top 0.1 per cent in 12 G20 countries included in this data set in Figures 2a-2c.⁷ The US, the UK and Canada 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 and Canada. In China, France, Germany, Italy and Japan, however, the shares of the top 0.1 per cent have remained roughly constant or only slightly increased in the neo-liberal period and have not returned to the high level prior to World War II. But note that the share of the top 0.1 per cent in Germany is substantially

⁶ 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 by Piketty/Saez (2003) for the US against the background of financialisation.

⁷ Brazil, Indonesia, Mexico, Russia, Saudi Arabia, South Korea and Turkey are not included in the data set by Alvaredo et al. (2011).

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.⁸ In Australia, India, Argentina and South Africa, the shares of the top 0.1 per cent have increased since the 1980s, but, with the exception of Australia, not yet returned to the high levels prior to World War II.

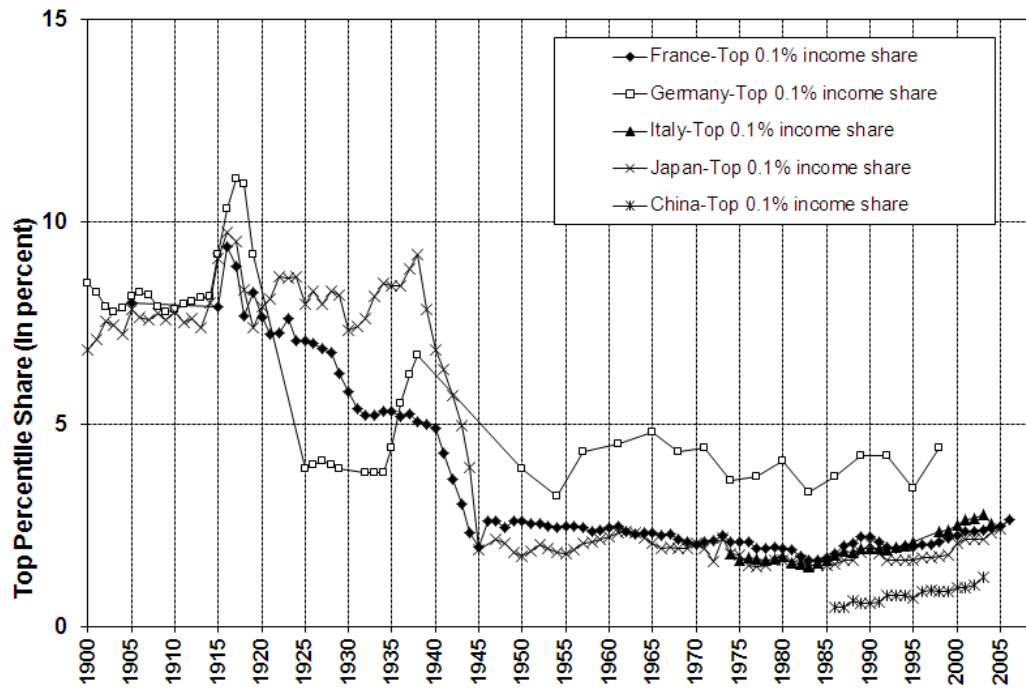
Figure 2 a: Top 0.1% share in national income: Canada, UK and US



Source: Alvaredo, F., Atkinson, A.B., Piketty, T., Saez E. (2011)

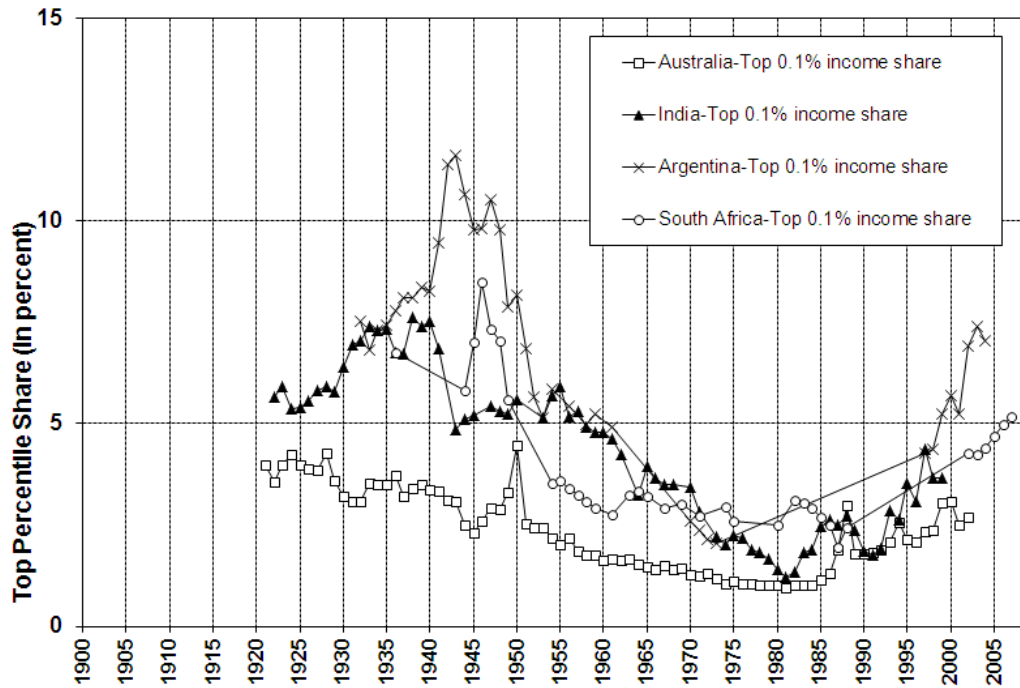
⁸ In the data set provided by Alvaredo et al. (2011) for Germany, the top 0.1 per cent income share does not show any pronounced rising trend until 1998. Bach/Corneo/Steiner (2009), in their study for Germany confirm this result also for the values until 2003. However, they find a remarkable growth of the income share accruing to the richest 0.001 per cent in the population (about 650 persons), which managed to increase their share of gross market income – excluding capital gains – from 0.55 per cent in 1992 to 0.82 per cent in 2003.

Figure 2 b: Top 0.1% share in national income: China, France, Germany, Italy, Japan



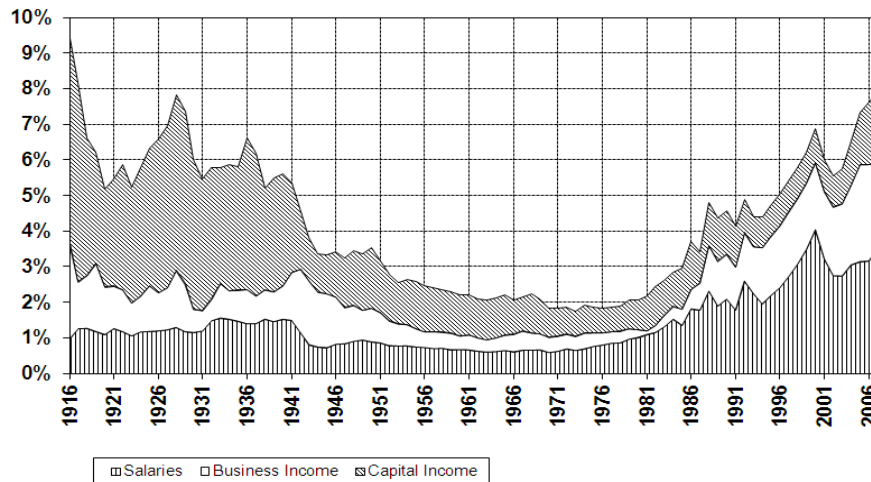
Source: Alvaredo, F., Atkinson, A.B., Piketty, T., Saez E. (2011)

Figure 2 c: Top 0.1% share in national income: Argentina, Australia, India, South Africa



Source: Alvaredo, F., Atkinson, A.B., Piketty, T., Saez E. (2011)

Figure 3: The top 0.1 income share and its composition, US, 1916-2007



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 (2010)

The increase in the income share of the top 0.1 per cent in the US has been 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 per cent income share has remained roughly constant (Figure 3). Remuneration of top management ('working rich') has therefore contributed significantly, but not exclusively, to rising inequality in the US from the early 1980s until 2006. As the study by Bach/Corneo/Steiner (2009) on Germany and the review by Atkinson/Piketty/Saez (2011) on other countries show, the 'working rich' phenomenon seems to arise in such countries like Germany, Italy, the UK and Japan, too.⁹ 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'.¹⁰

In the following sub-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).¹¹ On the other hand, the analysis of functional income distribution allows for a straightforward integration of changes in distribution into a macroeconomic framework.

⁹ According to Bach/Corneo/Steiner (2009), in Germany the main income of the top 0.1 per cent income share derives mainly from business activity (64.1 per cent in 1992, 58.5 per cent in 2003) and capital income (20.9 per cent in 1992, 19.2 per cent in 2003), with a decreasing trend each. Top management salaries have played a minor role. However their share has increased from 15 per cent in 1992 to 22.4 per cent in 2003.

¹⁰ See Buchele/Christiansen (2007) for such an exercise for the US corporate sector. They somewhat arbitrarily identify the share of the top 0.5 per cent 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 (2011a) for Germany.

¹¹ As can be seen in Figures A1 and A2 in the appendix, there seems to be an inverse empirical correlation between the average values of the labour income shares over the second and third trade cycles in our investigation and the Gini coefficients before taxes related to these trade cycles, although in the third cycle the correlation is not statistically significant. This correlation should only be taken as a first and superficial indication which would need more detailed examination. However, this is well beyond the scope of this paper.

2.2 Financialisation and changes in functional distribution: potential channels of influence

2.2.1 A Kaleckian approach

In order to discuss 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 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.¹² Since we are mostly dealing with developed capitalist economies with dominating industrial and service sectors, as well as with rapidly developing economies, we apply Kalecki's approach. In the labour intensive service sector below full employment supply can be considered to be 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.¹³ 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 so much 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. To the extent that raw materials and semi-finished products are imported from abroad, international trade is also included into our model.

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.¹⁴ 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

¹² See Hein/Lavoie/van Treeck (2011a, 2011b) for a discussion of the related problems.

¹³ 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.

¹⁴ See Lavoie (2009) for another Kaleckian approach starting from target rate of return pricing and including overhead labour.

counter-cyclically, i.e. will fall (rise) with fixed overhead costs spreading over increasing (decreasing) output.¹⁵

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:

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

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 μ 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:

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

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

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

with Π 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:

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

¹⁵ Overhead labour salaries are thus an important contribution to the observed counter-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.

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:¹⁶

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

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

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 μ), 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 neo-liberalism 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 (1976) and Baran/Sweezy (1966) focussing on the tendencies towards ‘monopoly capital’.¹⁷ 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

¹⁶ 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: 144-148, Semmler 1984).

¹⁷ 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.

ever rising prices and finally a loss of competitiveness of the firm.¹⁸ 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 affecting 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).¹⁹ 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).²⁰ 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 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 to borrow 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)

¹⁸ 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.

¹⁹ 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.”

²⁰ 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.

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 channels identified above. We consider the three determinants of the mark-up: the degree of price competition in the goods market, bargaining power and activity of trade unions in the labour market, and 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,²¹ 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 the attempts at downsizing the share of government activity in real GDP, the reduction of government intervention in the private sector of the economy, and the retreat 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 and in the following sub-section we discuss the relevance of each of these potential effects taking a look at the related literature.

²¹ 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 2: Financialisation and the gross profit share – a Kaleckian perspective

	Determinants of the gross profit share (including (top) management salaries)				
	Mark-up				
Stylized facts of financialisation (1.-7.) and neo-liberalism (8.-9.)	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

2.2.2 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), Dühaupt (2011b) 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 the 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, whereas 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.²² 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 (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 (2011b) 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. 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. The increase in the rentiers share has almost exclusively been driven by an increase in the share of dividend income.

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

²² 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).

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.²³ 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 1960-2007.²⁴ 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.²⁵ 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 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

²³ 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.

²⁴ 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.

²⁵ 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.

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.²⁶

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.²⁷ 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.”²⁸

²⁶ 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.

²⁷ See also Stockhammer (2009) for a brief review of further studies on non-OECD countries.

²⁸ 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.

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 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.

3. Financialisation, re-distribution, aggregate demand and global imbalances

3.1 Financialisation, re-distribution and aggregate demand

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. Onaran/Galanis (2012) have shown that these findings do not only hold true for the developed capitalist economies among the G20 but also for most of the emerging market economies in this group, with the exception of South Africa. Including the external sector, foreign trade and globalisation effects, aggregate demand remains wage-led in most of the developed G20 (Table 4), although re-distribution at the expense of labour in many studies has a significantly positive effect on net exports. This effect may turn aggregate demand in some economies profit-led (Argentina, Australia, Canada, China, India, Mexico). 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 domestic demand in the G20 countries, and also a restrictive effect on aggregate demand for many of the economies in this club. 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.²⁹

²⁹ 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.

Table 3: Empirical estimations of demand regimes of G20 economies

	Period	Australia	Canada	France	Germany	Italy	Japan	UK	USA	Euro area
Bowles/ Boyer (1995)	1953/61 – 1987	...	...	profit-led	profit-led	...	profit-led	wage-led	wage-led	...
Gordon (1995)	1955 – 1988	...	...	...	...	...	...	...	profit-led	...
Naastepad / Storm (2007)	1960 – 2000	...	...	wage-led	wage-led	wage-led	profit-led	wage-led	profit-led	...
Ederer / Stockhammer (2007)	1960 – 2004	...	...	profit-led	...	...	...	...	...	...
Hein/ Vogel (2008)	1960 – 2005	...	...	wage-led	wage-led	...	...	wage-led	wage-led	...
Hein/ Vogel (2009)	1960 – 2005	...	...	wage-led	wage-led	...	...	...	...	...
Stockhammer / Onaran / Ederer (2009)	1960 – 2005	...	...	...	...	...	...	...	...	wage-led
Onaran / Stockhammer / Grafl (2011)	1962 – 2007	...	...	...	...	...	...	...	wage-led	...
Stockhammer / Hein/ Grafl (2011)	1970 – 2005	...	...	...	wage-led	...	...	...	...	...
Onaran / Galanis (2012)	Early 1960s – 2007	profit-led	profit-led	wage-led	wage-led	wage-led	wage-led	wage-led	wage-led	wage-led

	Period	Argentina	Brazil	China	India	Indonesia	Mexico	Russia	South Africa	South Korea	Turkey
Onaran / Stockhammer (2005)	1965/70 – 1997/2000	...	...	...	...	...	...	...	...	wage-led	wage-led
Molero Simmaro (2011)	1978 – 2007	...	...	profit-led	...	...	...	...	...	...	...
Onaran / Galanis (2012)	Early 1970s/ 80 – 2007	profit-led	...	profit-led	profit-led	...	profit-led	...	profit-led	wage-led	wage-led

However, re-distribution is not the only effect of financialisation on aggregate demand and growth. First, there are other – potentially contradicting – direct partial effects of financialisation on consumption and investment behaviour. Second, macroeconomic policies, government demand management, and the overall macroeconomic policy regime have to be taken into account, too. Since the former set of factors is closely related to financialisation we shall discuss them first. The latter is taken into account when it comes to the discussion of global imbalances in Section 3.2 and to the policy implications of our analysis in Section 4.

3.1.1 Financialisation and investment

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 to shareholders’ profit maximisation objective. Managements’ desire for growth is contained through, in particular, higher dividend pay outs 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, 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.

With higher shareholder value orientation, investment of the firm in capital stock is thus affected in two ways: First, shareholders impose higher distribution of profits on firms, i.e. a higher dividend pay out 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 hence suffering (‘internal means of finance channel’). Second, 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.

3.1.2 Financialisation and consumption

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.³⁰ 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

³⁰ See, in particular, Barba/Pivetti (2009), Cynamon/Fazzari (2008), Guttmann/Plihon (2010), van Treeck/Hein/Dünhaupt (2007), and van Treeck (2009a).

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 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)³¹

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 for which data is available (Table 5, Figure 5). In particular Australia and the UK have seen considerable increases in household gross debt-income ratios based on increases in net wealth and rising residential property prices. In Canada, 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 gross debt-income ratios. In these two countries and in China residential property prices have also remained roughly constant in the course of the trade cycle of the early 2000 [see Figure 5 and Klär/Slacalek (2006: 542) for Japan], whereas the other G20 countries for which data is available have seen increases in residential property prices, which were considerable in Russia and South Africa, in particular.

³¹ 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 (2009:127). 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 loose their homes.

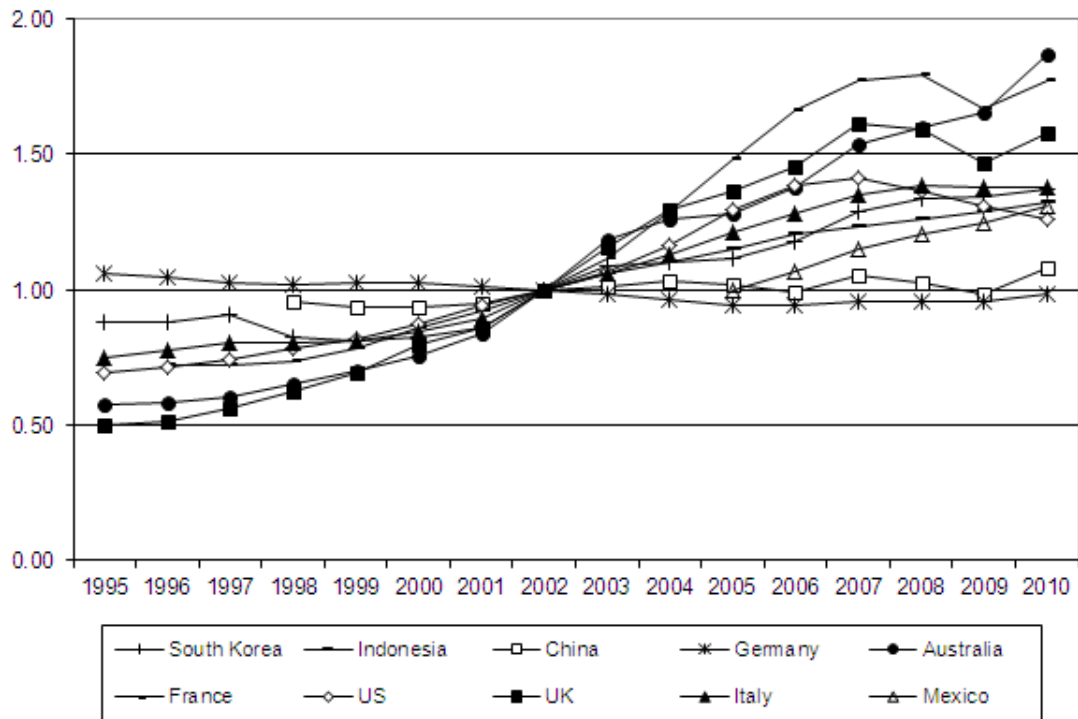
Table 4: Household debt and net wealth, per cent of annual disposable income

	Debt			Net wealth		
	1995	2000	2005	1995	2000	2005
Argentina	...	...	...	...	...	...
Australia	83	120	173	514	567	734
Brazil	...	...	...	...	...	...
Canada	103	114	124	370	527	640
China	...	...	...	...	...	...
France	66	78	89	461	547	752
Germany	97	111	107	541	575	578 ^{a)}
India	...	...	...	...	...	...
Indonesia	...	...	...	...	...	...
Italy	32	46	59	702	820	936 ^{a)}
Japan	130	136	132 ^{a)}	736	750	725 ^{a)}
Mexico	...	...	...	...	...	...
Russia	...	...	...	...	...	...
Saudi Arabia	...	...	...	...	...	...
South Africa	...	...	...	...	...	...
South Korea	...	...	...	...	...	...
Turkey	...	...	...	...	...	...
UK	106	118	159	569	750	790
US	93	107	135	510	575	573
China	...	...	...	...	...	...

Notes: ^{a)} 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)

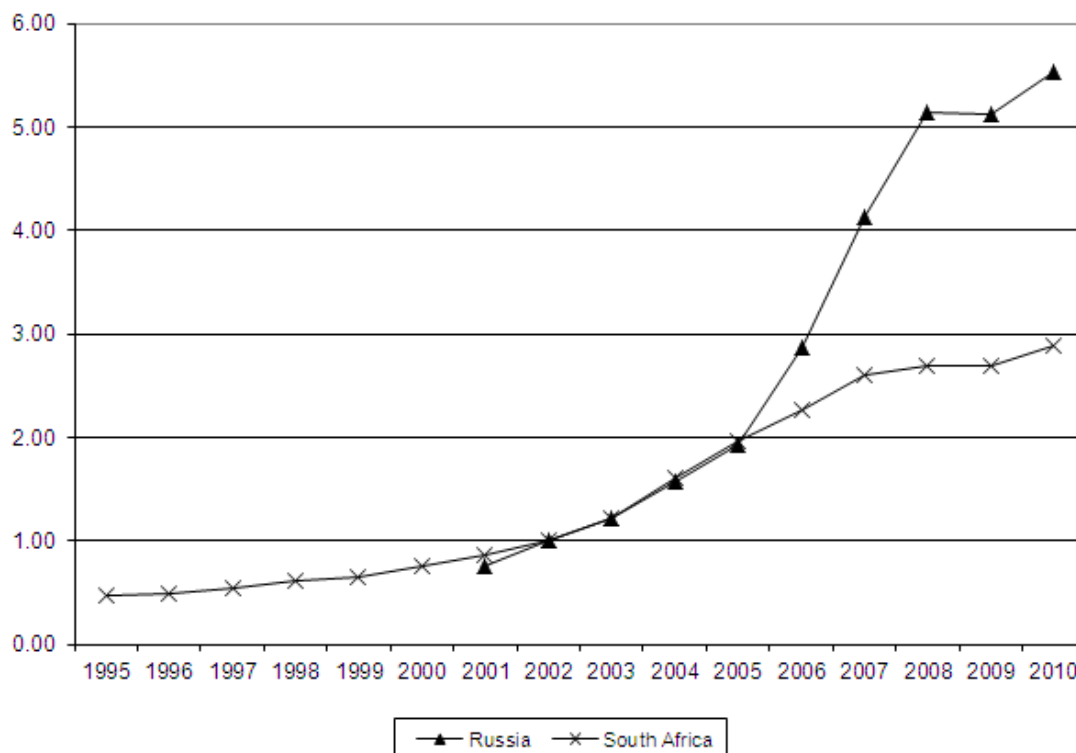
Figure 4 a: Residential property prices in nine G20 economies, 1995-2010, Index 2002 = 1
 (Mexico: 2005 =1)



Notes: Data are on residential property prices, all or existing dwellings for all countries but China, Indonesia and US. China: land prices (residential and commercial), Indonesia: new houses (big cities), US: existing one-family houses.

Source: BIS (2011), authors' calculations.

Figure 4 b: Residential property prices, Russia and South Africa, 1995-2010, Index 2002 = 1



Notes: Data are on residential property prices existing dwellings for Russia and all middle-segment houses for South Africa.

Source: BIS (2011), authors' calculations.

3.1.3 Financialisation and the macroeconomic regime

Wealth-based and debt-financed increases in consumption may (partially) compensate for the contractive effects, which financialisation (and neo-liberalism) exerts on aggregate demand and growth via depressed real investment and income redistribution 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.³² 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 falling rate of capital accumulation. Due to a high propensity to

³² 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.

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, 2009a) 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 and stable debt-income ratio depends on the growth of income and on the rate of interest, as do government debt-GDP ratios.³³ 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 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. 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.³⁴ However, stock market wealth (and also

³³ See Barba/Pivetti (2009) for a derivation of the conditions.

³⁴ See also Bhaduri (2011a, 2011b).

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. 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 some 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 re-distribution at the expense of (low) labour incomes. However, consumption booms based on notional wealth effects and increasing indebtedness of private households seem to suffer from internal contradictions: A rising flow of credit to private households is initially expansionary but may turn finally contractionary as soon as the effects on the stock of household debt and required debt repayments are felt, in particular with increasing profit shares and interest rates and with weak investment in capital stock, as shown by Dutt (2005, 2006a). Maintaining aggregate demand in the latter case would then mean accepting permanently higher household debt-income ratios which would then generate increasing financial fragility and ‘financial instability’, 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.³⁵ Discussing whether Minsky’s ‘financial instability hypothesis’ can be fully applied to the present crisis, or to what extent it is relevant,³⁶ is however well beyond the scope of the present paper. In the

³⁵ 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 finance-capital-ratios or rising debt-capital ratios of the business sector accompanied by falling rates of capital accumulation (Hein 2010a, 2010b).

³⁶ For a Minskyan explanation of the current crisis see, for example, Carvalho (2009), Dymski (2011), Whalen (2008), and Wray (2009).

next sub-section we shall rather show that re-distribution did not only contribute to ‘financial fragility’ at national levels, in particular during the cycle prior to the present crisis, but that it was also transformed to the global level through the concomitant imbalances in the current accounts at the global level.

3.2 Financialisation and global 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 in the developed capitalist economies in particular, two extreme ‘types of capitalism under “financialisation”’ have developed,³⁷ which are complementary and which have fed rising current account imbalances in the world economy.³⁸ On the one hand, we have the ‘debt-led consumption boom’ type generating a ‘profits without investment’ regime. Since this type has been characterised by considerable current account deficits, there has developed a necessary counterpart at the global level, the ‘strongly export-led mercantilist’ type, on the other hand, 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 relatively weak domestic demand, either investment and/or consumption in the face of re-distribution at the expense of labour. Note that from national accounting we obtain Kalecki’s (1971: 82) famous profit equation:

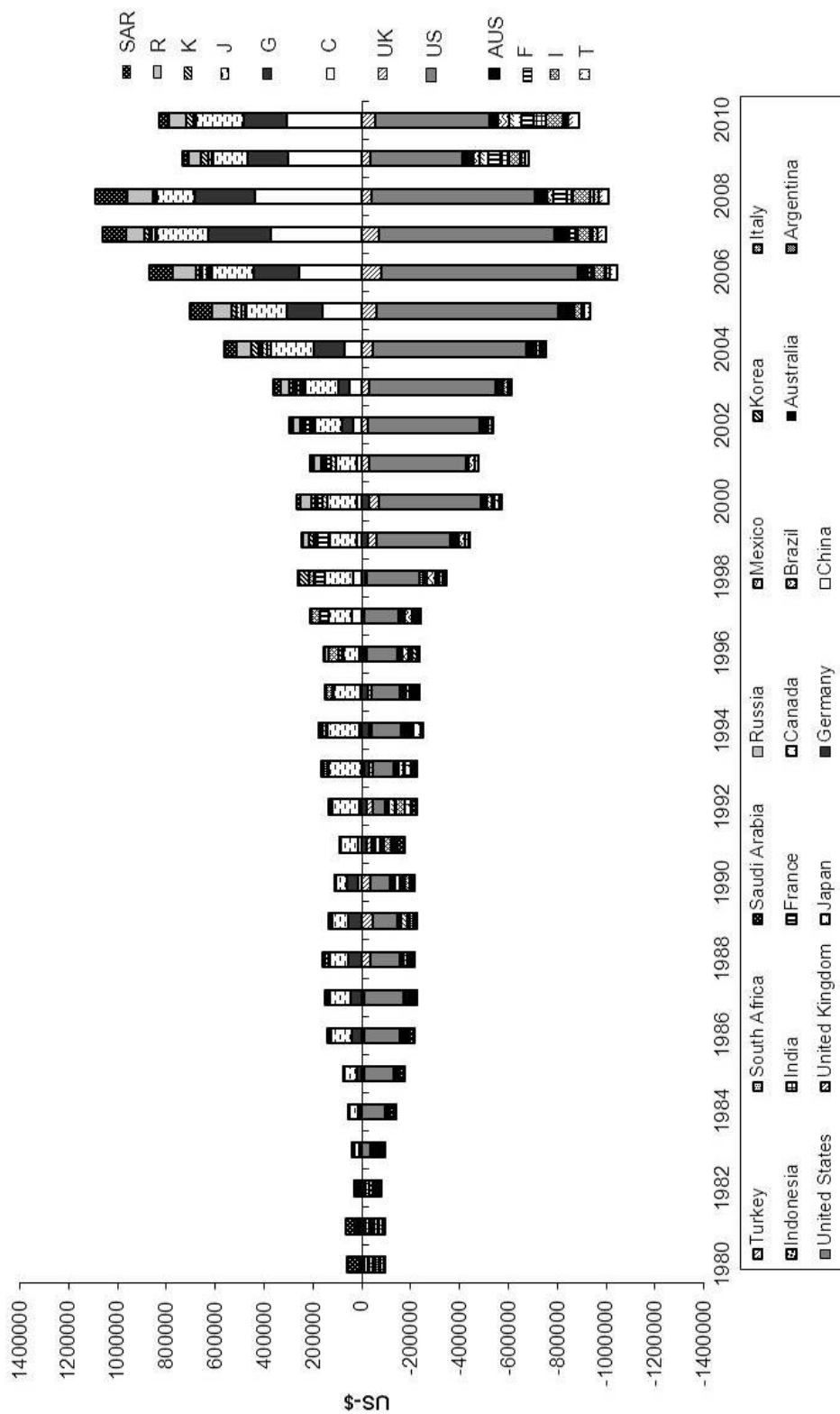
$$\begin{aligned} \text{Gross profits net of taxes} &= \text{Gross investment} \\ &+ \text{Export surplus} \\ &+ \text{Government budget deficit} && (8) \\ &- \text{Workers' saving} \\ &+ \text{Capitalists' consumption.} \end{aligned}$$

As the G20 current account imbalances have exploded in particular since the early 2000s in the course of recovery from the burst of the new economy boom of the late 1990s (Figure 5), we take cyclical average data for the trade cycle of the early 2000s in order to distinguish the two extreme types, the ‘debt-led consumption boom’ and the ‘strongly export-led mercantilist’ types, and two intermediate types of capitalism, the ‘domestic demand-led’ and the ‘weakly export-led’ types, and allocate the G20 countries to them. It goes without saying that classifying such a heterogeneous set of economies as the G20 into four categories is somewhat arbitrary by necessity. It should also be noted that the cycle of the early 2000s had dynamic growth rates in the emerging market economies, which exceeded the growth rates of the previous cycles, whereas in the developed capitalist economies real GDP growth fell short of the rates of the previous cycles (Table 6).

³⁷ 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).

³⁸ A similar development took place at regional level, in particular in the Euro area. See Hein (2011a), Hein/Truger (2011) and Hein/Truger/van Treeck/ (2012) for detailed analysis.

Figure 5: Current accounts of G20 economies, 1980-2010, in millions of US-\$



Source: IMF (2011)

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

	1. Early 1980s – early 1990s	2. Early 1990s – early 2000s	3. Early 2000s – 2008	Change (3. – 2.), percentage points
Argentina ^{a)}	-0.49	2.50	5.72	2.22
Australia	3.58	3.58	3.20	-0.38
Brazil ^{a)}	2.31	1.94	4.21	2.27
Canada	2.77	2.94	2.28	-0.66
China ^{a)}	9.97	9.85	10.66	0.81
France	2.21	2.15	1.61	-0.60
Germany	2.75	1.50	1.46	-0.04
India ^{a)}	5.67	5.48	7.37	1.89
Indonesia ^{a)}	6.48	3.93	5.19	1.26
Italy	2.20	1.59	0.73	-0.86
Japan ^{a)}	4.30	0.97	1.22	0.25
Mexico ^{a)}	1.85	3.44	2.43	-1.01
Russia ^{a)}	...	-0.34	6.79	7.13
Saudi Arabia ^{a)}	0.43	1.45	3.96	2.51
South Africa ^{a)}	1.05	2.16	4.24	2.08
South Korea ^{a)}	9.74	6.15	3.99	-2.16
Turkey ^{a)}	5.25	3.77	4.46	0.69
UK	2.77	2.54	2.21	-0.33
US	3.33	3.44	2.08	-1.36

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

^{a)} adjusted to fit in 3 cycle pattern.

Source: European Commission (2011), World Bank (2011), authors' calculations

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

	Australia	UK	US	Mexico
Financial balances of external sector as a share of nominal GDP, per cent	4.84	2.24	4.96	1.15
Financial balances of public sector as share of nominal GDP, per cent	0.73	-3.26	-3.50	-0.78 ^{a)}
Financial balance of private sector as a share of nominal GDP, per cent	-5.57	1.02	-1.47	-1.35 ^{a)}
Financial balance of private household sector as a share of nominal GDP, per cent	...	-2.37	-1.68	3.10 ^{a)}
Financial balance of the corporate sector as a share of nominal GDP, per cent	...	3.55	0.21	-4.44 ^{a)}
Real GDP growth, per cent	3.20	2.21	2.08	2.43
Growth contribution of domestic demand including stocks, percentage points	4.69	2.43	2.15	2.77
Growth contribution of private consumption, percentage points	2.05	1.52	1.75	2.41
Growth contribution of public consumption, percentage points	0.56	0.47	0.36	0.04
Growth contribution of gross fixed capital formation, percentage points	2.14	0.51	0.13	0.86
Growth contribution of the balance of goods and services, percentage points	-1.37	-0.23	-0.07	-0.37
Net exports of goods and services as a share of nominal GDP, per cent	-1.43	-2.83	-4.88	-1.67
Change in labour income share, as percentage of GDP at current factor costs, from previous cycle, percentage points	-3.19	-1.26	-1.25	-0.19
Growth rate of nominal unit labour costs, per cent	3.36	2.44	2.05	5.04
Inflation (rate of change of consumer price index), per cent	3.17	2.04	2.83	4.67
Growth rate of nominal effective exchange rates (relative to 52 countries), per cent	2.68	-1.25	-2.15	-2.84
Growth rate of real effective exchange rates (relative to 52 countries), per cent	3.49	-1.90	-2.05	-1.07

Notes: The beginning of a trade cycle is given by a local minimum of annual real GDP growth in the early 2000s in the respective country, a) average value only for 2001-02

Sources: European Commission (2011), BIS (2011), IMF (2011), World Bank (2011), authors' calculations

Table 7 b: Key macroeconomic variables for 'domestic demand-led' economies, average values for the trade cycle from the early 2000s – 2008

	France	Italy	India	South Africa	Turkey
Financial balances of external sector as a share of nominal GDP, per cent	1.16	1.59	0.22	3.24	4.41
Financial balances of public sector as share of nominal GDP, per cent	-3.18	-3.16	-7.23	-0.47	-4.52
Financial balance of private sector as a share of nominal GDP, per cent	2.02	1.57	7.01	-2.77	0.41
Financial balance of private household sector as a share of nominal GDP, per cent	3.78	4.04	...	...	...
Financial balance of the corporate sector as a share of nominal GDP, per cent	-1.80	-2.36	...	...	...
Real GDP growth, per cent	1.61	0.73	7.37	4.24	4.46
Growth contribution of domestic demand including stocks, percentage points	2.12	0.82	7.70	5.45	4.82
Growth contribution of private consumption, percentage points	1.21	0.44	4.02	2.99	3.30
Growth contribution of public consumption, percentage points	0.39	0.27	0.54	0.93	0.37
Growth contribution of gross fixed capital formation, percentage points	0.54	0.09	3.32	1.61	1.17
Growth contribution of the balance of goods and services, percentage points	-0.51	-0.08	-0.33	-1.21	-0.40
Net exports of goods and services as a share of nominal GDP, per cent	-0.49	-0.09	-2.52	0.13	-1.99
Change in labour income share, as percentage of GDP at current factor costs, or wage share in GDP from previous cycle, percentage points	-1.01	-0.88	-0.07^{a)}	-4.69^{a)}	-3.78
Growth rate of nominal unit labour costs, per cent	1.99	2.97	...	...	17.65
Inflation (rate of change of consumer price index), per cent	1.98	2.36	5.10	6.09	21.89
Growth rate of nominal effective exchange rates (relative to 52 countries), per cent	1.80	1.71	-1.94	-3.88	-10.87
Growth rate of real effective exchange rates (relative to 52 countries), per cent	1.18	1.25	0.49	-1.62	2.32

Notes: The beginning of a trade cycle is given by a local minimum of annual real GDP growth in the early 2000s in the respective country, a) wage share in GDP, no complete trade cycle

Sources: European Commission (2011), BIS (2011), IMF (2011), World Bank (2011), Charpe (2011), authors' calculations

Table 7 c: Key macroeconomic variables for 'strongly export-led mercantilist' economies, average values for the trade cycle from the early 2000s – 2008

	Germany	Japan	China	Indonesia	South Korea
Financial balances of external sector as a share of nominal GDP, per cent	-5.51	-3.45	-5.86	-2.24	-1.34
Financial balances of public sector as share of nominal GDP, per cent	-2.06	-5.15	-1.41	-0.74	2.47
Financial balance of private sector as a share of nominal GDP, per cent	7.57	8.60	7.26	2.98	-1.13
Financial balance of private household sector as a share of nominal GDP, per cent	5.89	2.56	...	...	...
Financial balance of the corporate sector as a share of nominal GDP, per cent	1.69	4.96	...	...	...
Real GDP growth, per cent	1.46	1.22	10.66	5.19	3.99
Growth contribution of domestic demand including stocks, percentage points	0.83	0.75	8.15	4.82	2.89
Growth contribution of private consumption, percentage points	0.23	0.61	3.11	2.52	1.40
Growth contribution of public consumption, percentage points	0.15	0.29	1.31	0.60	0.66
Growth contribution of gross fixed capital formation, percentage points	0.46	-0.19	4.47	1.61	0.68
Growth contribution of the balance of goods and services, percentage points	0.63	0.46	2.52	0.37	1.11
Net exports of goods and services as a share of nominal GDP, per cent	5.60	1.24	4.90	5.15	1.81
Change in labour income share, as percentage of GDP at current factor costs, or wage share in GDP, from previous cycle, percentage points	-2.67	-4.73	-2.28^{a)}	...	-3.56
Growth rate of nominal unit labour costs, per cent	0.03	-2.12	...	...	1.89
Inflation (rate of change of consumer price index), per cent	1.79	-0.06	2.37	9.44	3.21
Growth rate of nominal effective exchange rates (relative to 52 countries), per cent	1.97	-1.21	0.55	-3.48	-0.42
Growth rate of real effective exchange rates (relative to 52 countries), per cent	0.92	-4.07	0.57	3.41	0.18

Notes: The beginning of a trade cycle is given by a local minimum of annual real GDP growth in the early 2000s in the respective country, ^{a)} wage share in GDP, no complete trade cycle

Sources: European Commission (2011), BIS (2011), IMF (2011), World Bank (2011), Charpe (2011), authors' calculations

Table 7 d: Key macroeconomic variables for 'weakly export-led' economies, average values for the trade cycle from the early 2000s – 2008

	Canada	Argentina	Brazil	Russia	Saudi Arabia
Financial balances of external sector as a share of nominal GDP, per cent	-1.60	-3.72	-0.62	-8.50	-21.22
Financial balances of public sector as share of nominal GDP, per cent	0.77	-4.01	-3.13	4.94	16.03
Financial balance of private sector as a share of nominal GDP, per cent	0.83	7.73	3.74	3.55	5.18
Financial balance of private household sector as a share of nominal GDP, per cent	...	...	...	...	...
Financial balance of the corporate sector as a share of nominal GDP, per cent	...	...	...	...	...
Real GDP growth, per cent	2.28	5.72	4.21	6.79	3.96
Growth contribution of domestic demand including stocks, percentage points	3.46	5.92	4.66	10.38	8.32
Growth contribution of private consumption, percentage points	1.92	3.72	2.68	5.84	2.50
Growth contribution of public consumption, percentage points	0.55	0.43	0.59	0.29	2.48
Growth contribution of gross fixed capital formation, percentage points	1.04	2.30	1.19	2.58	2.83
Growth contribution of the balance of goods and services, percentage points	-1.16	-0.20	-0.46	-3.59	-4.36
Net exports of goods and services as a share of nominal GDP, per cent	3.50	7.47	2.50	11.24	26.91
Change in labour income share, as percentage of GDP at current factor costs, or in wage share in GDP, from previous cycle, percentage points	-4.05	-5.63^{a)}	-3.69^{a)}	-0.31^{a)}	...
Growth rate of nominal unit labour costs, per cent	2.73	...	...	...	...
Inflation (rate of change of consumer price index), per cent	2.26	11.67	6.96	12.26	2.58
Growth rate of nominal effective exchange rates (relative to 52 countries), per cent	3.53	-14.21	5.17	-2.41	-3.62
Growth rate of real effective exchange rates (relative to 52 countries), per cent	3.03	-9.03	8.33	6.56	-3.68

Notes: The beginning of a trade cycle is given by a local minimum of annual real GDP growth in the early 2000s in the respective country, ^{a)} wage share in GDP, no complete trade cycle

Sources: European Commission (2011), BIS (2011), IMF (2011), World Bank (2011), Charpe (2011), authors' calculations

In the cycle of the early 2000s, the ‘debt-led consumption boom’ type of capitalism can be found in the US and the UK, in particular, but also Australia and Mexico show tendencies towards this type (Figure 7a). Real GDP growth in all these countries was driven by domestic demand, and, in particular, these countries saw considerable growth contributions of private consumption in the face of declining labour income shares. Growth contributions of net exports were negative throughout, although Mexico, the UK and the US managed to improve price competitiveness, indicated by a negative rate of change in the real effective exchange rate, mainly through nominal depreciation of their currencies, whereas price competitiveness in Australia deteriorated.³⁹ The countries were characterised by considerable deficits in their balances of goods and services and current accounts were in deficit, too. Financial balances of the respective external sectors were therefore positive, whereas the domestic sectors were in deficit, either the private or the public sector, or both.

There is some indication that the development in the ‘debt-led consumption boom’ economies was driven by considerable increases in residential property prices and/or in wealth-income ratios in the cycle of the early 2000s. The UK and the US each show negative financial balances of the private household sector on average during the trade cycle of the early 2000s and Australia, the UK and the US have each seen significant increases in gross debt-income ratios of private households (Table 5). These were based on increases in (notional) net wealth and on considerable increases in residential property prices in each of these three countries (Figure 4a). In Mexico, residential property prices have increased since 2005, too, but there is no information on private household debt-income or net wealth-income ratios. Available data on private household financial balances until 2002 indicate that private household deficits and debt were not a general problem up to that year, so that classifying this country as a ‘debt-led consumption boom’ economy may be premature. During the trade cycle of the early 2000s, the ‘debt-led consumption boom’ economies were the world demand engines.

Also the second type, the ‘domestic demand-led’ economies, was a driver of world demand (Table 7b). This group consists of such different countries as France and Italy, on the one hand, and India, South Africa and Turkey, on the other hand. The ‘domestic demand-led’ economies display similar characteristics as the ‘debt-led consumption boom’ economies: The respective external sectors show positive financial balances, i.e. the current accounts of these countries were in deficit, and, with the exception of South Africa, the same holds true for the balances of goods and services. Growth contributions of net exports were negative throughout. Despite falling labour income shares, growth in these countries was therefore driven exclusively by domestic demand. However, these countries did not experience debt-led consumption booms in the face of re-distribution at the expense of labour. In the mature European economies of France and Italy net wealth-income ratios and also residential property prices increased (Table 5, Figure 4a), however, without feeding debt-financed consumption demand. Household gross debt-income ratios only slightly increased and financial balances of the private household sectors remained positive, as did the financial balances of the private sector as a whole. With falling labour income shares, growth contributions of private consumption demand remained weak and with weak investment in capital stock, real GDP growth in these countries was only meagre. The emerging economies in this group, India, South Africa and Turkey, however, have seen strong real GDP growth during the cycle of the early 2000s, which was driven by private consumption but also by considerable growth contributions of investment in capital stock. Due to lack of data, there is no indication yet that private consumption was mainly wealth driven and debt-financed. Financial balances of the private sector as a whole

³⁹ This may be an indication that changes in the balances of goods of services, and also in the current accounts, are dominated by relative dynamics of domestic demand and not so much by inflation differentials and changes in the real exchange rate.

remained positive in India and Turkey, whereas in South Africa this balance was negative. South Africa also experienced significant increases in residential property prices since the early 2000s (Figure 4b), but more data would be required to identify a debt-led consumption boom in this country.

The counterparts to the ‘debt-led consumption boom’ and the ‘domestic demand-led’ economies at the world level were the ‘export-led’ economies with both positive net exports of goods and services and current account surpluses, i.e. negative financial balances of the respective external sectors. We distinguish two types of export-led economies, first the ‘strongly export-led mercantilist’ type, and second the ‘weakly export-led’ type.

The ‘strongly export-led mercantilist’ type contains Germany, Japan, China, Indonesia, and South Korea (Table 7c). These countries have not only seen positive net exports and current accounts, but also gained from positive growth contributions of net exports in the course of the cycle of the early 2000s, which means that they managed to increase net exports on average during this period. The slowly growing mature economies of Germany and Japan with particularly weak domestic demand in the face of falling labour income shares and small, and in the case of Japan even negative, growth contributions of fixed capital formation, derived more than one third of their meagre growth from increasing external surpluses. But also the more dynamic Asian economies of China and South Korea, with more considerable growth contributions of private consumption and fixed capital formation, derived more than one fourth of their growth from rising external surpluses. Only Indonesian growth has relied less on increasing net exports.

Although Indonesia and South Korea have seen considerable increases in residential property prices (Figure 4a), there is no indication in the available data that this has stimulated debt-driven consumption. In China, Germany and Japan no such increase in residential property prices could be observed, and for Germany and Japan we have that household net wealth has only slightly increased (Germany) or declined (Japan), so that household gross debt-income ratios in these two countries have rather declined around 2005 as compared to 2000 (Table 5).

The basis for external surpluses were thus particularly weak domestic demand in the cases of Germany and Japan, 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.⁴⁰ Also in China and South Korea, where domestic demand was far more dynamic, net exports gained from low inflation and even nominal depreciation in the case of South Korea. Out of this group, only Indonesia has seen considerable real appreciation of its currency and respective losses in price competitiveness, mainly due to high inflation, which however, have not turned growth contributions of net exports negative.

The second type of ‘export-led’ economies, the ‘weakly export-led’ type, can be found in Canada, Argentina, Brazil, Russia and Saudi Arabia during the trade cycle of the early 2000s (Table 7d). Although these countries, in particular the fossil energy exporting countries of Russia and Saudi Arabia, have seen considerable surpluses in their balances of goods and services and in their current accounts, and thus negative financial balances of their respective external sectors, growth contributions of net exports were negative

⁴⁰ 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).

throughout. These countries have therefore experienced falling net exports on average over the trade cycle prior to the Great Recession. This was due to dynamic domestic demand in all of these countries with significant growth contributions of private consumption and gross fixed capital accumulation, and to loss of price competitiveness in the cases of Brazil, Canada and Russia, whereas Argentina and Saudi Arabia managed to increase competitiveness through nominal devaluation. Again, from the available data we have no indication that in these countries dynamic consumption was driven by wealth effects and household debt. Financial balances of the private sectors remained positive in all of these countries, although in the case of Russia there has been a dramatic increase in residential property prices (Figure 4b). And in the case of Canada, household net wealth-income ratios have increased considerably, without, however, triggering a significant increase in household gross debt-income ratios (Table 5).

From our analysis so far we can conclude that the escalating current account imbalances in the world economy during the trade cycle of the early 2000s were mainly driven and dominated by the two extreme types of capitalism, the ‘debt-led consumption boom’ type, on the one hand, and the ‘strongly export-led mercantilist’ type, on the other hand. These two types are mainly composed of developed capitalist economies which have been subject to the processes of financialisation starting in the early 1980s in particular. However, they also include Mexico as a presumably ‘debt-led consumption’ boom economy and China and Indonesia as ‘strongly export-led mercantilist’ economies. The two intermediate types of capitalism, the ‘weakly export-led’ and the ‘domestic demand-led’ types, including most of the emerging market G20 countries, but also Canada, France and Italy, contributed less to the global imbalances, because either their net exports were shrinking during the early 2000s trade cycle, or they had relied on domestic demand without building it on unsustainable private household debt.

Focussing on the two extreme types of capitalism, we can argue that against the background of financialisation and its effects on income distribution, fixed capital formation and consumption, a highly fragile constellation at national and global levels had developed in the course of the trade cycle of the early 2000s. On the one hand, the dynamic ‘debt-led consumption boom’ type of the US and the other countries following this type 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 increasingly supply credit, notably the ‘strongly export-led mercantilist’ countries, in order to finance the related current account deficits in the ‘debt-led consumption boom’ economies. On the other hand, in particular the slowly growing or stagnating ‘strongly export-led mercantilist’ economies, Germany and Japan, but also the more dynamic China, Indonesia and South Korea, had to rely on the willingness and the ability of their respective external sectors, in particular the ‘debt-led consumption boom’ economies, to go into debt, because their growth, which in the cases of Germany and Japan was very weak, but in the cases of China, Indonesia, and South Korea was highly dynamic, was 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, did therefore not only affect the ‘debt-led consumption boom’ economies themselves – only Australia did not see negative growth in 2009 –,⁴¹ also the ‘strongly export-led mercantilist’ economies were infected. In particular Germany and Japan experienced a considerable reduction in real GDP, whereas

⁴¹ For ‘debt-led consumption boom’ economies, in 2009 real GDP growth rates in per cent were as follows: Australia: 1.2; Mexico: - 6.5; UK: -4.9, US: -2.6 (IMF 2011).

China, Indonesia and South Korea only saw a slowdown in real GDP growth.⁴² On the one hand, export markets collapsed in the crisis and in particular the low growth economies of Germany and Japan were facing serious aggregate demand problems. On the other hand, they were infected through the financial markets, because their capital exports got drastically devalued if they were directed towards the risky and now collapsing financial markets of the ‘debt-led consumption boom’ economies. Also the ‘weakly export-led’ economies were affected through these two channels and real GDP growth collapsed and became even negative in Brazil, Canada and Russia.⁴³ Finally, also the ‘domestic demand-led’ economies were hit by the financial market crisis and the collapse of major parts of the world economy. In particular the European economies, France, Italy and Turkey, but also South Africa faced shrinking real GDP whereas India only saw a slowdown in its real GDP growth.⁴⁴

4. Wage-led recovery embedded in a ‘Global 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 levels of the capitalist economies affected by financialisation and finally at 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 world economy can neither follow the ‘debt-led consumption boom’ type nor the ‘strongly export-led mercantilist’ type,⁴⁵ 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.⁴⁶ 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.

A medium- to long-run recovery strategy has thus to be (mass) income- or wage-led. This means that wages will have to rise broadly in line with (potential) output. Labour income shares have 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

⁴² For ‘strongly export-led mercantilist’ economies, in 2009 real GDP growth rates in per cent were as follows: China: 9.1; Germany: -4.7; Indonesia: 4.5; Japan: -5.2; South Korea: 0.2 (IMF 2011).

⁴³ For ‘weakly export-led’ economies, in 2009 real GDP growth rates in per cent were as follows: Argentina: 0.9; Brazil: -0.2; Canada: -2.5; Russia: -7.9; Saudi Arabia: 0.6 (IMF 2011).

⁴⁴ For ‘domestic demand-led’ economies, in 2009 real GDP growth rates in per cent were as follows: France: -2.5; India: 5.7; Italy: -5.0; South Africa: -1.8; Turkey: -4.7 (IMF 2011).

⁴⁵ For a critique of export-led strategies see also UNCTAD (2010: 77-97).

⁴⁶ 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.

increasing potential growth.⁴⁷ A wage-led recovery strategy would therefore also contribute to overcoming the tendencies towards dampened productivity growth inherent to financialisation and neo-liberalism (Hein 2011b). 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 productivity growth, through the dampening effect on capital accumulation, with a negative effect on capital embodied technical progress and thus productivity growth, and on aggregate demand growth, thus restricting 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 2.2 of this paper: First, bargaining power of trade unions needs 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 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 policies are at the core of, and are thus embedded in, a ‘Global Keynesian New Deal’⁴⁸, 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. In Hein/Truger (2011) there have been 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 and a new world financial order.

In what follows we briefly sketch the main building blocks of such a Global Keynesian New Deal and highlight the role of distribution policies.

⁴⁷ See Bhaduri (2006), Cassetti (2003), and Dutt (2006b) for theoretical models and Hein/Tarassow (2010), Marquetti (2004), Naastepad (2006), and Vergeer/Kleinknecht (2007) for empirical results.

⁴⁸ With the focus on functional income distribution and distribution policies our suggestions are perhaps closer to Kalecki (1944, 1971: 156-164) than to Keynes (1936, 1943). We have chosen the term ‘Global Keynesian New Deal’ nonetheless for political marketing reasons.

4.1 Re-regulation of the financial sector

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.⁴⁹ 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 systematic relevance should be in public ownership, because stability of these institutions can be considered 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 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, in particular workers and trade unions, 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. Furthermore, commercial banks (savings and loans) should be strictly separated from investment banks in order to prevent contagion in the case of speculation crises in the latter sector.

Apart from stabilising and orienting the financial sector towards financing real economic activity, these measures should affect distribution and thus positively feedback on aggregate demand and growth through the following channels: First, since these measures imply a downsized financial sector they will contribute to an increasing labour income share through the change in the sectoral composition of the economy. 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.

⁴⁹ For detailed lists of required regulation see, for example, Ash et al. (2009), Fitoussi/Stiglitz (2009), Herr (2011) and Wade (2009).

4.2 Re-orientation of macroeconomic policies

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 –⁵⁰ 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 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 a (mass) 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.⁵¹ 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 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.⁵² 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

⁵⁰ For the New Consensus model see for example Goodfriend/King (1997) and Clarida/Gali/Gertler (1999).

⁵¹ On the 'functional finance' view proposed here, see Lerner (1943), Kalecki (1944), and Arestis/Sawyer (2004).

⁵² Trade unions would have to acknowledge that there are other ways to re-distribute 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)

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, and government involvement if required, seem to be a necessary condition. Legal minimum wage legislation should contain wage dispersion and thus contribute to a more equal distribution of income.

4.3 Re-construction of international macroeconomic policy co-ordination and a new world financial order

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 into international policy coordination at the regional and the global level.⁵³ 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. As is well known, Keynes suggested an International Clearing Union in a fixed but adjustable exchange rate system, with the ‘bancor’ as international money for clearing operations between central banks, the Clearing Union as an international central bank financing temporary current account deficits, and selective controls of speculative capital movements between currency areas. What is most important for the present situation is that, according to Keynes (1942), whereas permanent current account deficit countries would be penalised in order to contract domestic demand (or to depreciate their currencies), also permanent current account surplus countries should be induced to expand domestic demand and thus to increase imports (or to appreciate their currencies), so that the whole burden of adjustment does not have to be carried by the deficit countries. This should give an overall impetus to world aggregate demand which will be needed in the future, not only in the short run but also in the long run.⁵⁴

5. 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 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 imbalances underlying the present financial and economic crisis, and on the requirements for distribution policies in an expansionary post-crisis economic policy regime.

⁵³ For a more detailed discussion of required economic policy reforms in the EU and the Euro area see Hein/Truger (2011) and Hein/Truger/van Treeck (2012).

⁵⁴ See also Davidson (2009: 134-142), Guttman (2009), Kregel (2009), UNCTAD (2009), and Wade (2009).

In Section 2 we have outlined 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 falling labour income shares in all the G20 countries for which data is available, and by increasing inequality in the personal distribution of disposable income in many of these countries. Canada, the UK and the US, as well as Argentina, Australia, India and South Africa, have also seen a dramatic increase in the income shares of top incomes, whereas in the other countries this increase was only modest. 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 may 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 (excluding management salaries which are part of wage income in national accounting) to fall; third, the weakening of bargaining power of workers and trade unions triggered by shareholder value orientation and short-termism of management, by increasing relevance of the financial sector with weak trade unions, by the threat-effect of liberalisation and globalisation of finance and trade, by deregulation of the labour market, and by downsizing the government sector and abandoning government demand management policies.

In Section 3 the effects of re-distribution at the expense of labour on aggregate demand and growth have been discussed. Econometric studies for G20 countries show that domestic demand in most of the countries is wage-led, and including net exports makes only a few of them 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 these countries. However, apart from re-distribution, financialisation has also had direct effects on capital accumulation of the business sector and on consumption of the private household sector. Whereas the direct effects on investment in capital stock, 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, if such a boom is founded on increasing debt-income ratios of the private household sector.

Based on these findings, we have examined the relationship between re-distribution, associated with financialisation and neo-liberalism, and the escalating 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 extreme ‘types of capitalism under financialisation’ have developed, the ‘debt-led consumption boom’ and the ‘strongly export-led mercantilist’ type. Furthermore, two intermediate types have been found, the ‘domestic demand-led’ type and the ‘weakly export-led’ type. In particular the ‘debt-led consumption boom’ countries, but also the ‘domestic demand-led’ economies, have acted as the world demand engines during the

trade cycle of the early 2000s and have generated considerable current accounts deficits. In particular the ‘strongly export-led mercantilist’ economies, but also the ‘weakly export-led’ countries, managed to free ride on the demand generated by the two other types. Therefore, in particular the two extreme types were complementary and have generated a highly fragile constellation on national and global levels. The ‘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 ‘strongly export-led mercantilist’ countries, in order to finance the related current account deficits of the ‘debt-led consumption’ economies. The ‘strongly export-led mercantilist’ economies had to rely on the willingness of the ‘debt-led consumption boom’ economies to go into debt, because their growth was mainly dependent on dynamic growth of world demand. The collapse of the ‘debt-led consumption boom’ economies therefore quickly infected the two types of ‘export-led’ 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. The collapse of the world economy then also hit the ‘domestic demand-led’ economies.

In Section 4 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 ‘strongly export-led mercantilist’ type, but has to be (mass) income or wage-led. We have argued that 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. Furthermore, 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 is at the core of and has to be embedded in a ‘Global 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 regional) levels. The three main pillars of the policy package of a ‘Global Keynesian New Deal’ have been finally outlined: 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 towards stimulating and stabilising domestic demand, in particular in the current account surplus countries; and third the re-construction of international macroeconomic policy co-ordination and a new world financial order. We have shown that each of these pillars is intimately linked with a (mass) income or wage-led recovery strategy.

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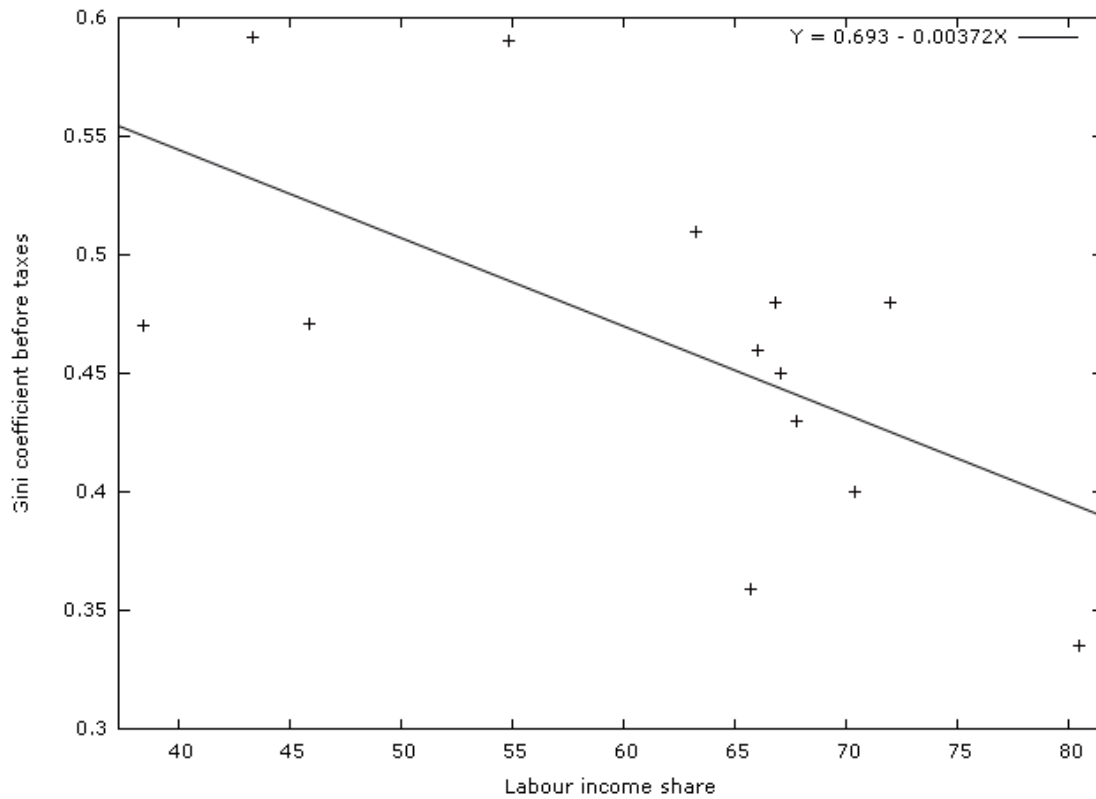
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Appendix

Figure A1 Average value of the labour income share over the trade cycle from the early 1990s to the early 2000s and the Gini coefficient before taxes in the mid 1990s



Notes:

Dependent variable: Gini coefficient before taxes

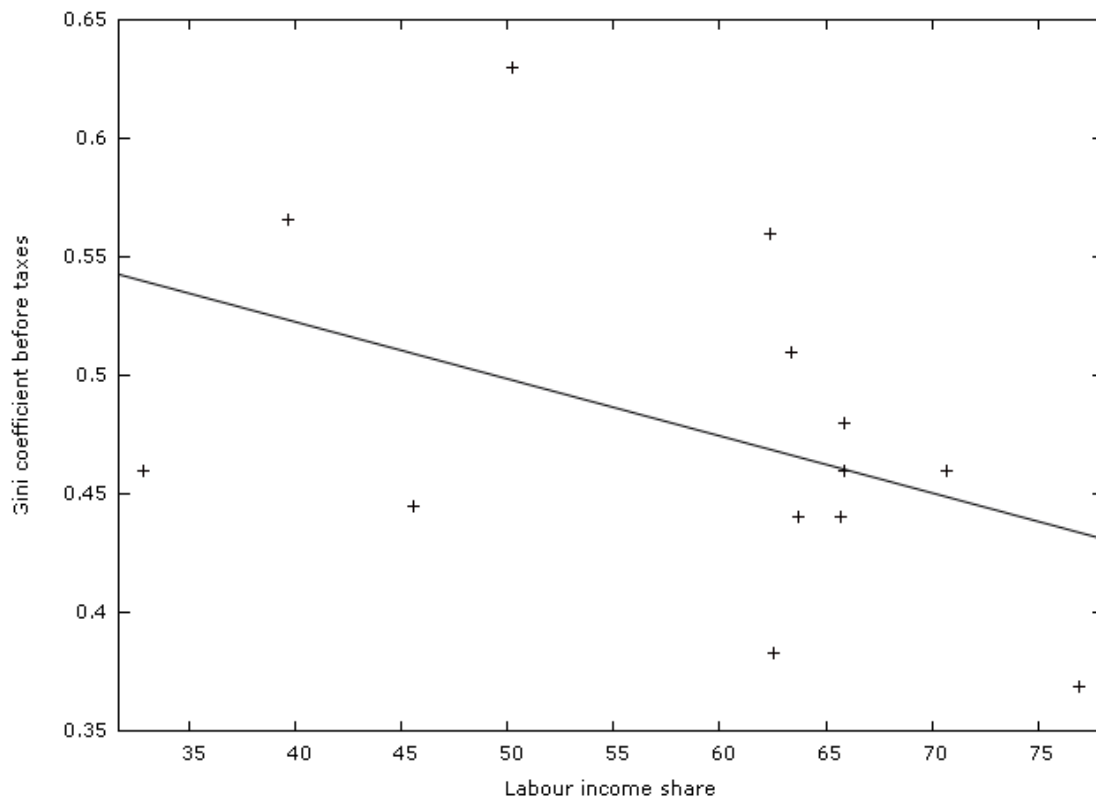
	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
Constant	0.693	0.091	7.612	0.000	***
Labour income share	-0.004	0.001	-2.567	0.026	**

Countries included: Argentina, Australia, Brazil, Canada, France, Germany, Italy, Japan, Russia, South Africa, South Korea, UK, US,

***: significance at 1 per cent level, **: significance at 5 per cent level

Sources: See Table 1 and Table 2a

Figure A2. Average value of the labour income share over the trade cycle from the early 2000s to 2008 and the Gini coefficient before taxes around 2000 or in the mid 2000s



Notes:

Dependent variable: Gini coefficient before taxes

	<i>Coefficient</i>	<i>Std. Error</i>	<i>t-ratio</i>	<i>p-value</i>	
Constant	0.619	0.094	6.602	0.000	***
Labour income share	-0.002	0.002	-1.542	0.151	

Countries included: Argentina, Australia, Brazil, Canada, France, Germany, Italy, Japan, Russia, South Africa, South Korea, UK, US,

***: significance at 1 per cent level, **: significance at 5 per cent level

Sources: See Table 1 and Table 2a

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