

# Some Stylized Facts on the Finance-dominated Accumulation Regime

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While there is an agreement that the Fordist accumulation regime came to an end in the course of the 1970s, there is no agreement on how to characterize the post-Fordist regime (or if such is already in place). This paper seeks to put together various arguments related to financialization (in the broad sense) from a macroeconomic point of view and evaluate their relevance by confronting them with the actual development of macroeconomic variables for EU countries. The paper discusses changes in investment behaviour, consumption behaviour and government expenditures, investigating to what extent changes are related to financialization. Households experience higher debt levels. Rising profits of businesses come with only moderate investment. The notion of a ‘finance-dominated’ accumulation regime is proposed to highlight that financial developments crucially shape the pattern and pace of accumulation. The finance-dominated accumulation regime is characterized by mediocre growth performance and a high degree of fragility. However, so far deregulated financial markets have not led to major financial crises in advanced capitalist economies. A possible reason for this is that the size of the state sector has not been substantially reduced despite neo-liberal attempts to do so.

**KEY WORDS** Financialization, Finance-dominated accumulation regime, Macroeconomics consumption, Investment, Financial system, Financial stability

## **Introduction**

The notion of financialization covers a wide range of phenomena: the deregulation of the financial sector and the proliferation of new financial instruments, the liberalization of international capital flows and increasing instability on exchange rate markets, a shift to market-based financial systems, the emergence of institutional investors as major players in financial markets and the boom (and bust) asset markets, shareholder value orientation and changes in corporate governance (of non-financial business), increased access to credit by previously ‘underbanked’ groups or changes in the level of (real) interest rates. Financialization has also been used to highlight psychological changes and ideological structures. The list could easily be extended. This paper aims to explore what (some of) these changes mean for macroeconomics.

To do so, the macroeconomic structure will be explored by means of the standard Keynesian expenditure function. Aggregate expenditures consist of private consumption

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( $C$ ), investment ( $I$ ), net exports ( $NX$ ) and government expenditures ( $G$ ):  $Y = C + I + NX + G$ .<sup>1</sup> Each of these components will be investigated to analyze whether changes that can plausibly be linked to financialization have occurred and have modified the relevant behavioural pattern. My approach also implies that different aspects of financialization will be investigated in the explanation of different macroeconomic variables. This inconsistency is, however, not a shortcoming of this paper, but a reflection of the state of research on financialization where no unified concept or explanation has emerged. In my approach not all aspects of financialization will thus be accounted for, but only those directly relevant for aggregate expenditures.

Beyond and next to investigating the effects of financialization on isolated key macroeconomic components, this paper aims at exploring whether these effects give rise to a coherent pattern. In other words, we ask whether we can meaningfully speak of a finance-dominated accumulation regime and, if so, what its macroeconomic characteristics are. The argument is presented in a regulationist framework<sup>2</sup> to highlight that the macroeconomic dynamic (described as the ‘accumulation regime’) is embedded in a particular institutional setting (the ‘mode of regulation’). While there is a universal agreement that the Fordist accumulation regime came to an end in the course of the 1970s, there is no agreement on how to characterize the post-Fordist regime (or if such is already in place). After an initial emphasis on flexibility and, later, information and communication technology as driving forces of the accumulation regime, financial factors have recently received more attention. The notion of a ‘finance-dominated’ accumulation regime is proposed to highlight that financial developments crucially shape the pattern and pace of accumulation.

The term *finance-dominated* rather than finance-led is used to highlight that financialization is shaping the pattern of accumulation (or put in another way: the composition of the components of aggregate demand and their volatility). Boyer (2000), in a seminal paper, uses the term *finance-led*, a term that is related but different. Thus a clarification is necessary. An accumulation regime is defined as finance-led if an increase in the financial norm, that is, the hurdle rate set by financial markets for investment projects, leads to an increase in growth. No presumption of this sort is made here. Rather, it is argued that a finance-dominated accumulation regime should be defined in such a way that financialization can positively or negatively affect growth.<sup>3</sup> The term finance-dominated is used to delineate our approach from that of Boyer (2000), which has its own merits and an admirable analytical clarity, but also can obscure important effects of financialization: in particular, it is possible that the macro economy is not finance-led while still being shaped by changes in the financial sector. This is exactly the hypothesis put forward here.

For convenience our hypotheses regarding the key characteristics of the finance-dominated accumulation regime are summarized at the outset, before going into further detail. The argument put forward is that in the finance-dominated accumulation regime:

- Consumption expenditures can at times become the driving force for growth as households gain improved access to credit. However this creates new potential for instability as servicing high debt levels may become difficult in recessions.
- Investment expenditures are sluggish due to shareholder value orientation, increased uncertainty and the strong (standard) accelerator effects in the investment function. Increased profits do not translate into higher investment.
- Deregulation of financial markets leads to an increase of capital flows and, as a consequence, volatile exchange rates, which lead to an increase in uncertainty and repeatedly to severe currency crises.

- The government share in GDP remains stagnant but high (despite the neo-liberal agenda to reduce it), which contributes to the stability of the economy.
- Overall the finance-dominated accumulation regime thus comes with a moderate growth in aggregate demand . . .
- . . . and exhibits a high degree of fragility with crises typically emanating from international (foreign exchange) or domestic financial markets.

This paper differs from the previous economic literature on financialization in two ways. First, it uses a broad notion of financialization that includes various changes in the financial sector. Much of the economic literature (Boyer 2000; Hein & van Treeck 2007; Skott & Ryoo 2007; Stockhammer 2004a, 2005) uses a more specific, narrower and therefore analytically more convenient notion. This highlights a fundamental dilemma of economic modelling: models have to be simple such that they can be solved (and interpreted). If the relevant phenomenon has to be condensed, they can then help to clarify important mechanisms and their effects. However, financialization represents a challenge for modelling as it includes a wide range of phenomena in different spheres of the economy and society. Inevitably modelling exercises will thus ignore aspects of financialization that other researchers may consider crucial. For this paper I consider a set of changes in the financial sphere that have substantial effects on macroeconomic aggregates or macroeconomic behavioural functions. Rather than developing a full macroeconomic model or econometric tests, the paper seeks to distil empirically grounded stylized facts. It thereby contributes to understanding which aspects of financialization are most important macroeconomically.

Second, this paper has a focus on developments in Western European countries. Most of the empirical literature (Brenner 2003; Crotty 2003; Duménil & Lévy 2001; Krippner 2005) has a focus on the US. This is because financialization is presumably most developed in the US and because data availability is, for many questions, better. However, financialization may have different effects on different economies. This is for two reasons. First, the US and the UK are international financial centres and it is not obvious that the financial centres and the financial periphery will be affected in parallel ways. Second, financialization is not only the result of exogenous developments (say, in technology), but it is the outcome of policies. As political developments differ in different regions, European developments have to be analyzed in their own right. In particular, financial deregulation in European countries, as well as monetary policy, is strongly shaped by the particular (neo-liberal) path of European integration (Bieler 2003).

The paper is structured as follows. The second section provides the background by discussing the neo-liberal mode of regulation. The third, fourth and fifth sections discuss potential changes due to financialization in consumption behaviour, investment behaviour and capital flows, respectively. The sixth section looks at changes in government expenditures. The seventh section summarizes the findings by providing an overview of key macroeconomic indicators of the Euro area. Finally, the eighth section concludes by discussing why financial crises have not had worse macroeconomic effects so far.

### **The Background: A Neo-liberal Mode of Regulation**

Financialization is not the only important change in the macroeconomy. In the relevant period globalization and a technological revolution centred on information and communication technologies has taken place. Nor is financialization a change that hit economies

as an exogenous shock. Rather, it is the outcome of particular policy arrangements. In this section I briefly contextualize my analysis of financialization in the broader political economy setting. For this it is helpful to think of the socio-economic basis of the regime of accumulation in terms of a neo-liberal mode of regulation. Space limitations prevent an extensive discussion of neo-liberalism. It will thus have to suffice to highlight some key points of the neo-liberal mode of regulation.<sup>4</sup>

First, a shift in power from labour to capital, expressed in falling wage shares in Europe and increased job insecurity, has occurred. Depending on the country and region this has been articulated in an erosion of the organizational strength of labour and the increased power of capital, in part due to more effective threats associated with capital mobility due to globalization. Second, a redefinition of the role of the state has taken place, which has involved privatization and deregulation in many areas. These deregulations range from product market deregulation and increasing flexibility of the labour market to deregulation of financial markets. Third, monetary policy, which (at least in theory) used to support fiscal policy in its pursuit of full employment during the Fordist regime, has been reoriented. In the neo-liberal regime price stability has become the predominant and, in the form of inflation targeting, often the only policy goal of monetary policy.

It is important to realize that neo-liberalism does not just mean deregulation, but a selective form of deregulation. In many areas a re-regulation is taking place. This is most obvious in the case of the European Monetary System, which has been regulated and designed in various forms over the past three decades.

Neo-liberalism is the outcome of political decisions. In continental Europe many of these decisions were decreed at the European level.<sup>5</sup> The Maastricht Treaty, the Stability and Growth Pact, the Services Directive, to name but the most important ones, have been crucial vehicles to push forward the neo-liberal agenda. However, this is not say that the EU is a homogenous agent in pursuit of neo-liberal goals. Rather, it has its own internal conflicts and contradictions. Van Apeldoorn (1999) has coined the term 'embedded neo-liberalism' to describe the predominantly neo-liberal orientation of the EU policies that simultaneously includes social aspects (thus the adjective 'embedded').

The neo-liberal mode of regulation describes the political and institutional framework for the regime of accumulation. The next step is thus to investigate to what extent financialization has shaped key macroeconomic relations. This question will be explored for consumption behaviour, investment behaviour, capital flows and government expenditures in the following sections.

### **Households: Changes in Consumption Behaviour?**

How has financialization affected household behaviour? One frequently discussed question is to what extent private households hold their wealth in the form of financial assets, in particular shares. Furthermore, Langley (2007) highlights that financialization has also far-reaching psychological consequences as individuals have to develop new forms of financial self-discipline. Given our focus on macroeconomic issues, the key question is how private consumption expenditures (and conversely savings) have been affected by financialization. As private consumption is the largest single component of aggregate demand, the answer to this question, while seemingly technical, is an important one.

In the 1990s macroeconomists rediscovered the wealth effect in the consumption function. This rediscovery was motivated by the economic experience in the US, where private consumption expenditures became the driving force in GDP growth. The falling saving rates were thus explained by the rise in the value of financial assets because of the stock market boom. Most of the fall in the savings rate occurred in the top income groups, who also benefited most from the increase in financial wealth (Brenner 2003: 191). In the late 1990s a 5 per cent marginal propensity to consume out of financial wealth was often quoted (with some more qualification for European countries; e.g. Boone et al. 1998). To the surprise of many economists, the stock market crash in 2000 did not result in a slowdown in consumption growth. The unabated consumption boom in the US was then explained by booming house prices. Residential property was thus identified as the key source of the wealth effect. Several studies claimed to find substantially higher marginal propensity to consume out of property wealth than out of financial assets (Case et al 2001; Catte et al. 2004; Girouard et al. 2006). One of the reasons that housing wealth is supposed to drive consumption expenditures is that residential property is more frequently accepted as collateral.

While there is substantial evidence for the US (albeit based on a short period of observations!) to back up this story, the evidence on European economies was always much thinner. Typically, the wealth effects estimated for European economies were much smaller and/or not statistically significant. Moreover the US housing market differs from those in continental Europe and reliable data on (aggregate) house prices is not readily available. It is thus not clear to what extent the mainstream story for the US also applies to European economies.

Booming property prices and a mortgage-fuelled consumption boom, however, only cover parts of how financialization may affect consumption behaviour. More generally speaking, financialization has given households more access to credit. Access of credit, of course, is not restricted to mortgages, but also includes other forms of consumer credit, credit cards and overdraft bank accounts. Consequently household debt is increasing. Unfortunately there is little systematic literature on changes in the marketing policies of banks. It is therefore impossible to say to what extent the higher exposure of households is the result of their decisions relating to improved access to credit because of housing wealth and to what extent it is due to more aggressive policies from banks.<sup>6</sup>

Household debt is difficult to measure and international comparisons suffer chronically from deficiencies in comparability of data due to different financial institutions and practices in different countries. Therefore debt ratios should only be compared with caution. Table 1 uses data from Girouard et al. (2006), which contains the OECD's estimates of household debt compared to disposable income. European countries display a wide range of debt to income ratios, which may in part be due to problems of data comparability. However, all European countries (for which data is available) have experienced rising debt ratios since 1995. Notably the (unweighted) average of the debt ratios of the European countries is similar to the US.

OECD data also show that (household) saving rates are falling throughout the OECD countries, with the most pronounced fall occurring in the US. Surprisingly, however, it turns out that this is not mirrored in the consumption data in Table 1, which reports private consumption expenditures as a percentage of disposable income by decade.<sup>7</sup> While the US (and Japan) have experienced a substantial and consistent increase in consumption compared to

TABLE 1

Household debt and private consumption expenditures as a percentage of disposable income

	Household debt (%)			Private consumption expenditures (%)			
	1995	2000	2005	1970s	1980s	1990s	2000s
Belgium				63	67	63	63
Denmark	188	236	260	63	65	62	59
Germany*	97	111	107	64	66	69	70
Greece				63	70	75	74
Spain	59	83	107	72	73	70	70
France	66	78	89	63	66	65	66
Ireland		81	141	73	75	68	62
Italy	32	46	59	67	68	69	70
Luxembourg				64	59	55	53
Netherlands	113	175	246	59	60	59	58
Austria				66	68	68	67
Portugal				79	75	74	78
Finland	64	66	89	64	65	66	61
Sweden	90	107	134	56	57	59	56
United Kingdom	106	118	159	69	71	73	72
<i>EU uwa</i>	<i>91</i>	<i>110</i>	<i>139</i>	<i>66</i>	<i>67</i>	<i>66</i>	<i>65</i>
United States	93	107	135	70	73	76	80
Japan	113	136	132	61	64	67	71

Note: Data for Denmark, Spain and Japan refer to 2004 rather than 2005. \*Germany refers to West Germany before 1991.

Sources: For household debt, Girourard et al. (2006); for private consumption expenditures, AMECO.

disposable income since the mid-1980s, the same is not true in Europe. In most countries, notably France and Germany, the changes in the consumption share are in the order of magnitude within the range of a business cycle. There was a strong increase in Greece and a strong decrease in Ireland. The (unweighted) average of the EU15 is unambiguously flat, with no change in the consumption ratio of economic significance.

While these data suggest that the changes in consumption behaviour are not substantial (other than maybe the USA), there are several qualifications. First, European countries, have experienced a substantial decline in the wage share. As wage incomes are typically associated with higher consumption propensities than profit incomes, this ought to lead to a decrease in the consumption share. Stockhammer et al. (2007) find a saving differential of around 0.4.<sup>8</sup> Given that wage shares have declined by some ten percentage points since 1980, consumption shares ought to have declined by some four percentage points over this period due to income distribution. If so, increased debt could have compensated this decline.

Second, in many countries the pay-as-you-go pension systems are being reformed or have been questioned. Typically some version of a capital-based system is envisioned in which households have to invest their savings (usually via funds) in the stock market. This

should lead to an increase in savings. Financialization may thus have contradictory effects on consumption: on the one hand, it may increase consumption (for a given income level) because it improves access to credit; on the other hand, it may decrease consumption as a higher proportion of income has to be saved (privately) for retirement.

Third, increased mortgages need not go into consumption; instead they may lead to increased residential investment. Anecdotal evidence certainly has it that this has happened in Ireland and in Spain. We will return to this issue in the next section.

## Investment

Financialization brought about many changes that potentially affect business investment (that is, physical investment by firms): new financial instruments have changed financing patterns, shareholder value orientation affected management goals, instability on financial markets could increase uncertainty for firms, to name some of them. However, it has been hard to pin down these effects. In part this is probably due to the fact that effects of financialization are difficult to measure; in part this may be a mere reflection of the fact that business investment has always been the macroeconomic variable that is hardest to explain for economists.

TABLE 2  
Investment as percentage of operating surplus

	1970s (%)	1980s (%)	1990s (%)	2000s (%)
Austria	59	50	47	44
Belgium				
Denmark	46	47	46	49
Finland	57	57	41	36
France	46	46	42	43
Germany	52	48	42	35
Greece	24	24	26	36
Ireland	50	44	30	28
Italy	41	36	31	33
Luxembourg	39	48	51	50
Netherlands	48	39	38	38
Portugal	37	35	31	34
Spain	47	40	44	47
Sweden	59	52	46	51
Uk	55	48	44	42
<i>EU uwa</i>	47	44	40	40
USA	46	44	39	39
Japan	58	59	61	56

Note: Investment is private gross fixed capital formation. EU is an unweighted average of available EU countries.

Source: OECD National accounts.

One of the most important changes in investment behaviour is due to the increased role of shareholders in the firm: rather than a management–labour balance (like in the Fordist era), firms are now characterized by a management–shareholder balance. Several authors have discussed the microeconomics of shareholder value orientation. Lazonick and O’Sullivan (2000) argue that a shift in management behaviour from ‘retain and reinvest’ to ‘downsize and distribute’ has occurred. More formally, Stockhammer (2004a) shows that an increase in shareholder power will modify the desired profit–growth frontier for the firm. His estimations suggest that financialization may explain a substantial part of the slowdown in accumulation. However, results vary widely across countries.

A second change for investment behaviour has been in the economic environment that firms face. Volatility on financial markets has increased substantially in the course of financial deregulation. As a consequence firms face a higher degree of uncertainty, which may make physical investment projects less attractive. In particular volatility of exchange rates seems to have had some effects on manufacturing investment. However, uncertainty is hard to measure and estimation results from the existing literature are not conclusive enough to suggest a clear order of magnitude of the effect (Carruth et al. 2000).

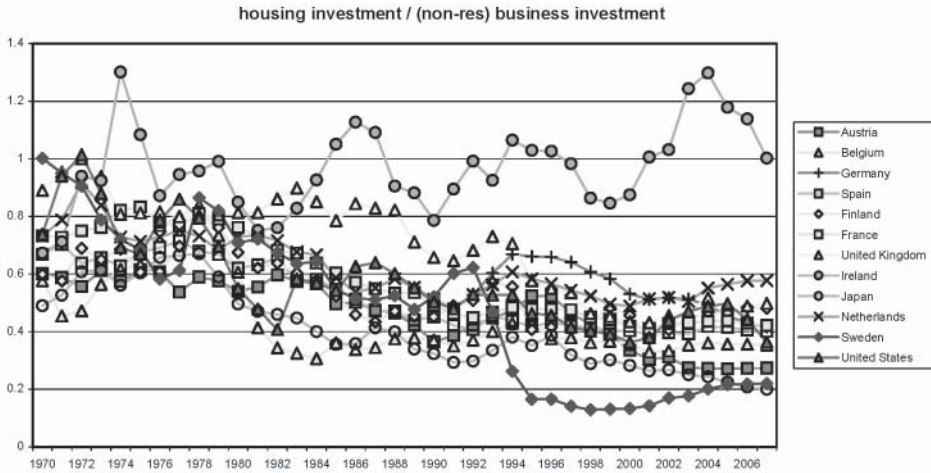
Overall, firms have not used new financial instruments to expand their investment expenditures. In the Anglo-Saxon countries, the buyback of corporate shares has led to an overall negative contribution of the stock market to the financial position of non-financial businesses (Schaberg 1999). Non-financial firms seem to increasingly rely on internal finance for investment projects. Overall, non-financial businesses seem to move from a net debtor position to a neutral or net creditor position. However data on these issues are not readily available or comparable.<sup>9</sup>

Here, we content ourselves with highlighting the changing relationship between profits and investment. In the major economies (Germany, France and the UK, as well as the US), the investment–profit ratio shows a clear declining trend (See Table 2). Some countries, such as Greece, Spain and Luxembourg, show an increasing trend. The unweighted average for the EU countries for which data is available has declined from 47 per cent in the 1970s to 40 per cent in the 2000s.

As the measure of operating surplus used here (as well as in the National Accounts) is a broad one that consists basically of all non-wage incomes, part of the reason for the declining trend in the investment operating surplus ratio is due to a change in the composition of the operating surplus. Interest and dividend payments have increased (Crotty 2003; Duménil & Lévy 2001). However only for few countries, namely for the US, is data readily available.

While Figure 1 provides a striking illustration that higher profits do not automatically lead to higher investment, this need not be all that surprising. Keynesians have long maintained that investment is about expectations rather than profits. Kalecki pointed out that the causation may be inverse: investment causing profits, rather than the other way around. Empirically, profits play a modest role in determining investment. Ford and Poret (1991) find no evidence that profits affect (aggregate) investment and Stockhammer et al. (2007) report minor effects for the EU12.

As noted in the previous section, households have taken out substantial numbers of mortgages over the past ten years. If this debt is not increasing consumption, one might expect an increase in *residential* investment. As illustrated in Figure 1, however, this is not the case.<sup>10</sup> The ratio of residential to (non-residential) business investment is decreasing



Source: AMECO.

Fig. 1. Residential investment as ratio of (non-residential) business investment.

rather than increasing. The household debt boom seems to have fuelled property prices (and maybe consumption) rather than investment. Only for Ireland is residential investment growing faster than business investment, but this is a clear exception. The unweighted average for the EU countries for which data is available shows a declining trend, with the ratio dropping from 62 per cent (in 1985) to 51 per cent (in 1995) and 46 per cent (in 2005).

Overall, there is no evidence that financialization has had a positive effect on business investment. Rather, the evidence is suggestive of negative effects due to shareholder value orientation and increased uncertainty. Notably, there has been no renewed interest in the effect of share prices on business investment (quite in contrast to the research on consumption expenditures and share prices). As in the early 1990s (Chirinko 1993; Ford & Poret 1992), most empirical economists would probably agree that share prices have little, if any, effect on investment. Nor is there much evidence that (other than maybe in Ireland) residential investment has been strongly affected by rising household debt levels.

### The Foreign Sector

In the aggregate expenditure function the foreign sector is represented by net exports. Over longer periods net exports will be balanced for most countries and, indeed, for the Euro area as a whole (but not within the Euro area) net exports are of a minor magnitude. However, the most interesting aspect of financialization in this area comes as the flip side of the current account: capital flows. It is important to realize that (abstracting from changes in Central Bank reserves) net exports have to equal (net) capital outflows. Inversely, a current account deficit corresponds to capital inflows. It is capital flows that have been most affected by financialization, or to be more precise, by financial deregulation.

The macroeconomic dangers of volatile capital flows have so far been felt mostly in emerging economies. Mexico 1994, Turkey 1994 and 2001, several countries in the course of the Southeast Asian crisis 1997/98, and Argentina 2001 are all examples of such crises related to capital flows. Most of them have led to severe recessions (at times with double-digit declines in real GDP), some of them long-lasting, others more short-lived.<sup>11</sup> However, the EMS crisis 1992/93 also shook developed economies (although the exchange rate devaluations were not as strong, nor were the following recessions.)

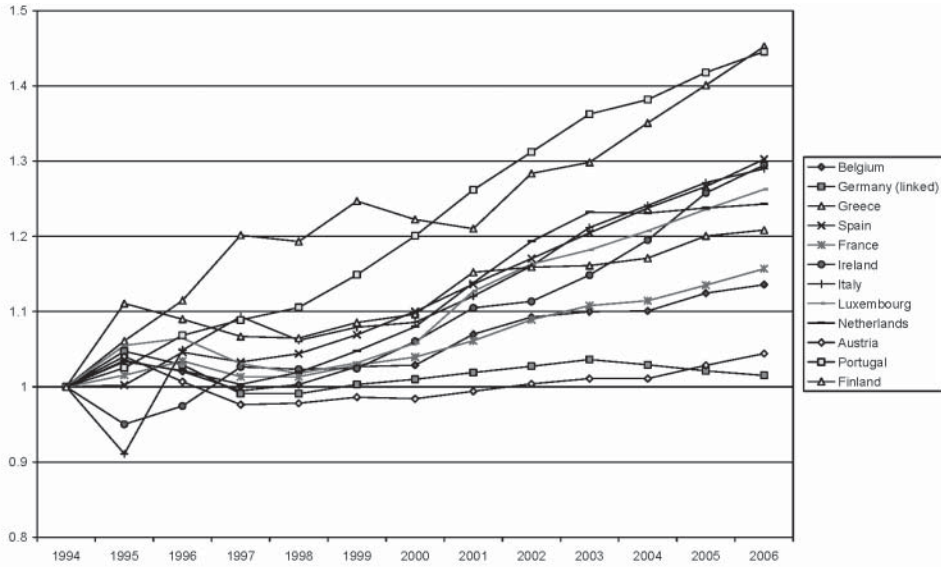
The reason why changes in the exchange rate have such a devastating effect is that in liberalized international markets it usually is profitable to engage in interest arbitrage, that is, to borrow in one currency and lend in another. If, say, interest rates in Turkish lira are higher than those in euros (with exchange rates expected to be stable), it is tempting to take out a euro credit and lend in Turkish lira (e.g. Turkish government bonds). By implication, assets and liabilities will then be denominated in different currencies (a related issue is that of the maturity of assets). An exchange rate realignment may then have disastrous effects on firms' or banks' balance sheets.

International exchange rate arrangements seem to be key to understanding the accumulation and growth dynamics in the finance-dominated accumulation regime. For Europe, the most important institutional change in this area of course was the EMS (which effectively ended with the 1992/93 crisis) and European Monetary Unification. The introduction of the euro was a reaction to the EMS crisis, where several countries had to devalue their currencies by some 20 per cent (*vis à vis* the Deutschmark). At first, the euro appears to have been a success. Not only was the new currency accepted by the public, but the euro system does eliminate (nominal) exchange rate fluctuations and thereby the possibility of exchange rate crises. It also substantially decreased inflation and (real) interest rates in the formerly soft-currency countries. However, since inflation differentials persist across European countries, there have been creeping changes in real exchange rates that have accumulated over the years. As shown in Figure 2, real exchange rates have diverged since the introduction of the euro.<sup>12</sup> Germany has devalued by more than 20 per cent in real terms *vis à vis* Portugal, Spain and Ireland since 1999. This will pose a major challenge in the coming years, as the only way these countries can achieve competitiveness (in the absence of productivity miracles) is by keeping their inflation rates well below German rates for extended periods. But as German core inflation is already close to zero, this would imply deflation in these countries, which probably would imply an intensification of distributional conflict.

Europe has reacted to the liberalization of capital flows by a rearrangement of the European exchange rate system and introduced a common currency. While this has ended the risk of exchange rate crises and brought benefits of low interest rates to countries that previously had high inflation, trade and cost-related imbalances are building up within the Euro area and there seems to be no mechanism for swiftly resolving these imbalances.

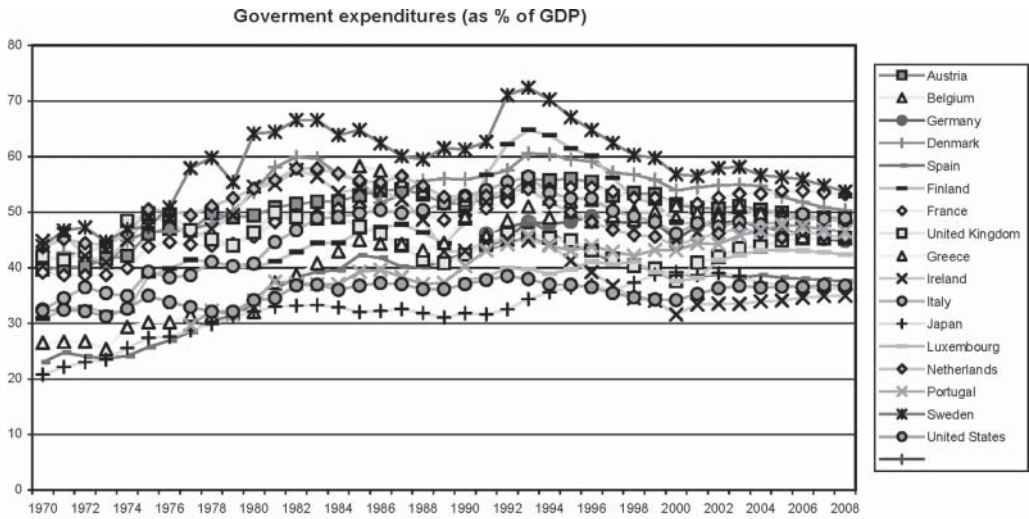
## **The State**

Downsizing the state was high priority on the to-do list of neo-liberals when they came to power in the 1980s and thereafter. Or so they claimed. It is remarkable that state shares in expenditures and receipts have not been reduced dramatically during the neo-liberal era. In



Source: AMECO.

Fig. 2. Nominal unit labour costs in the Euro area.



Note: Government total disbursements, OECD Economic Outlook dataset.

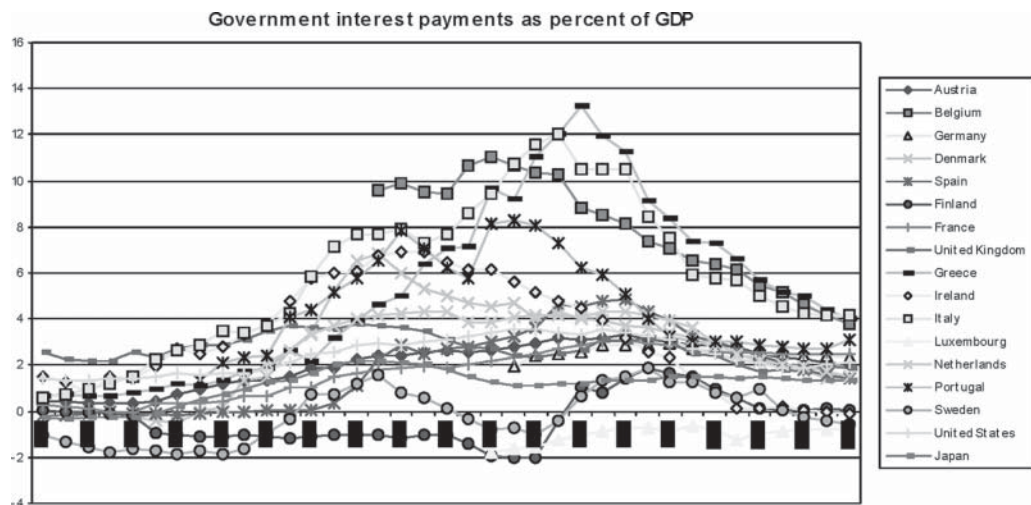
Fig. 3. Government expenditures as percentage of GDP.

Figure 3, government total expenditures are depicted as the percentage of GDP. While the *rise* of the state sector has clearly been halted since 1980, the state share has remained at the (historical) level of the late 1970s.

Only in three countries (Ireland, the UK and the Netherlands) are state shares lower than they were in the 1970s. In most countries (and the median) state shares have increased until the early 1980s and stagnated thereafter. Given that most countries experienced a neo-liberal hegemony of one form or another and the curtailing of the state was one of the neo-liberals' prime goals, this resilience of big government may be called the *neo-liberal puzzle*.<sup>13</sup>

However, some qualifications are in place. The graph does not imply that neo-liberal hegemony has not affected the state. It has. State-owned enterprises are not counted as the state sector in the National Accounts and therefore most privatizations will not show up in the data.<sup>14</sup> Furthermore, deregulation, not least in the financial sector, has taken place. As it does not affect the economic *size* of the state it, again, will not show up in the data, even though the state *influence* in the economy may have decreased. What is measured as the size of the state sector here is in fact the size of state employment and transfers (and, in some countries, military expenditures). It thus includes the welfare states as well as government bureaucracy. Overall, it is thus still remarkable how stable state shares have been.

One reason why state shares have remained stable might be that the composition of government expenditures has changed (while the overall volume has not). In the context of theorizing financialization, the obvious question is, whether the share of government interest payments has increased.<sup>15</sup> Government (net) interest payments as a percentage of GDP are shown in Figure 4. The hike in interest rates in the early 1980s has increased interest payments by governments dramatically to 10 per cent of GDP in some countries. Throughout the 1980s and early 1990s interest payments climbed to or remained at high levels compared to earlier decades.



Source: OECD.

Fig. 4. Government interest payments as percentage of GDP.

Since the mid-1990s, however, interest payments have decreased substantially (in the Southern European countries this is to a significant extent due to the reduction in interest rates because of EMU). In most countries, government interest payments now lie between 0 and 3 per cent of GDP. In the EU (unweighted average for the countries and periods where data is available), government interest payments increased from 0.7 per cent of GDP in the 1970s to 3.8 per cent (in the 1980s) and 4.5 per cent (in the 1990s) and have since declined to 2.5 per cent in the 2000s. Within the euro system, it is the Mediterranean countries that have experienced the greatest decline in government interest payments. While interest payments thus remain a significant part of GDP and are much higher than they were in the Fordist era, they are clearly not the main driving force behind stable state shares.

### The Overall Macroeconomic Performance

We can now summarize the findings of this paper. For European countries one does not find the strong evidence of a consumption boom (related with a property price bubble) that has been reported for the US – despite the fact that household debt levels increased substantially. Consumption ratios are stagnant. However, given that income distribution has changed at the expense of labour, which should have decreased consumption ratios, it is plausible that debt-driven consumption has also fuelled demand in Europe. There is little evidence however, that this debt, much of which is mortgage debt, has caused a substantial increase in residential investment. The latter is falling as a share of overall investment. Investment as such has not been a driving force of demand. In particular rising profits have not translated into rising investment. Presumably (but hardly conclusively) this is related to shareholder value orientation and increased uncertainty due to volatile financial markets. Liberalization of capital flows has led to volatile exchange rates, which have not translated into severe crises (with the exception of the 1992/93 EMS crisis) in Europe as they did in Southeast Asia, Latin America and Turkey. However, macroeconomic developments have also been strongly influenced by exchange rate arrangements through the Maastricht Treaty and the Stability and Growth Pact.

Table 3 presents a summary of the development of key macroeconomic indicators for the Euro area (EU12) since 1970. GDP growth is declining throughout this sample. Inflation had been reduced in the 1980s (from the high levels of the 1970s) and came down

TABLE 3  
Macroeconomic performance of the Euro area

	1970s	1980s	1990s	2000s
Real GDP growth	3.27%	2.43%	2.14%	1.49%
Inflation (GDP deflator)	9.21%	6.13%	2.41%	2.01%
Real long-term interest rate	1.40	4.04	4.66	2.45
Unemployment rate	4.16	8.55	9.61	8.47
Real wage growth	3.23%	0.62%	1.19%	0.45%

Source: AMECO, except for inflation: OECD.

further in the 1990s. Real interest rates were moderate in the 1970s and were hiked in the 1980s. In the course of the 1990s they came down again (most importantly in the Mediterranean countries), but even in the 2000s they remain well above real GDP growth rates. Unemployment increased dramatically in the late 1970s and in the early 1980s and has not improved since. In the 1990s unemployment increased further (though with substantial variation across countries). Finally, real wage growth used to grow roughly in line with productivity growth in the 1970s and was reduced in the 1980s and thereafter. In the late 1990s and early 2000s real wage growth virtually ceased (which is in part due to the strong weight of Germany, which experienced a phase of wage moderation). Overall, wage shares have declined by almost ten percentage points in the Euro area.

Overall, the effects of financialization thus give rise to a finance-dominated accumulation regime that is one of slow and fragile accumulation. If there is a post-Fordist regime of accumulation, it is a regime of *slow* accumulation (at least in Europe). Remarkably, however, it has not led to a severe recession in Europe. Indeed mainstream institutions argue that the business cycle has become moderated (IMF 2006). Given our discussion so far, one might wonder why recessions have not been harsher and more frequent. We might call this the *Minskyian puzzle*, as Hyman Minsky asserted that unregulated financial markets are prone to endogenous instability.

### **Why Have Recessions Not Been More Severe in the Finance-dominated Accumulation Regime?**

There are two related reasons to expect that the finance-dominated accumulation regime would lead to more volatility in output growth (and other macroeconomic variables). First, macroeconomic shocks from the financial sector have become more severe and more frequent. There is ample evidence that financial markets generate highly volatile prices. Overshooting is well established for exchange rates and the boom–bust cycles of share prices have become evident (again) in the past years. Second, because of high debt levels, the fragility of the economy has increased. Financialization has encouraged households to take on more debt. This debt presumably either has fuelled consumption expenditure or was necessary to buy property in the face of soaring house prices. Either way, debt has to be serviced out of current income (or by ever increasing debt). Even temporary reductions in income may thus escalate if households have to default on their loans. While this need not happen necessarily, the *fragility* of the system has increased as the resilience of households against temporary shocks has decreased.

One would expect that this combination of more frequent crises in financial markets and the high fragility of households to translate into macroeconomic volatility. However, this is not what has happened so far. Business cycles seem to have become more moderate since the 1970s. It is important to keep in mind that most of these financial variables (such as prices of shares or derivatives) have little direct impact on macroeconomic behaviour. Exchange rates seem to have strong and immediate impact only in the case of drastic changes. One crucial question for the transmission of financial crises is thus whether the banking system as such is drawn into the crisis.<sup>16</sup> Only once the provision of liquidity and credit is affected (as is often the case during currency crises), will there be direct macroeconomic effects.

There are three potential answers to this puzzle. The first is, indeed, Minsky's answer: big government. State shares are substantially higher than at the time of the Great Depression and, as pointed out, the neo-liberal era has not reduced them substantially. Automatic stabilizers are thus in place and government consumption forms a sizable part of the value added. Moreover, central banks in ACCs (in particular the Federal Reserve) have been proactive in reacting to dangers of financial crisis. The resilience of a sizable government sector and (by historical standards) a functional welfare state combined with adept monetary policy may be the reason why financial crises have so far not had a devastating effect on (advanced) economies.

The second answer is that recessions have not been severe *yet*, but a bad recession is just around the corner. During 2007 mainstream economic institutions increasingly began to worry about the possibility of a financial crisis (ECB 2007; IMF 2007). On the heterodox side, Crotty (2007) has made a compelling argument (with a focus on US institutions) that the financial sector holds much more risk than is commonly realized.<sup>17</sup>

Finally, the 'crisis ahead' argument runs the danger of misinterpreting what financialization meant for the macroeconomic pattern of ACCs. Financial deregulation has come with wide swings in the prices of financial assets (such as share prices and foreign exchange rates) that clearly deviate from what economists consider the underlying fundamentals. These deviations are economically inefficient and harmful. But rather than the abrupt and devastating adjustments, what we seem to be experiencing, at least with respect to foreign exchange markets, is a slow and extended adjustment process. Rather than the US in the 1930s and Argentina in the late 1990s, the type of crisis associated with the finance-dominated accumulation regime may be exemplified by Japan's painful period of stagnation and deflation. The high inflation countries in the EMU may soon experience similar phenomena.

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## Notes

- 1 One can also look at these relations in terms of savings behaviour of the various sectors of the economy. The savings of households ( $S_{HH}$ ), of corporations ( $S_C$ ), of government ( $S_G$ ) and of the foreign sector ( $S_F$ ) have to add up to zero:  $S_{HH} + S_C + S_G + S_F = 0$ . In other words, for each debtor there has to be a creditor. Not all sectors can run a deficit at the same time. Inversely, not all sectors can decrease their deficits simultaneously. Note that government saving is the negative of the budget deficits (i.e. the budget surplus) and that the savings of the foreign sector, that is capital inflows, are equal to the negative of net exports. This latter relation will become important in the final section of this paper.

- 2 Classical works of the (French) Regulation Theory include Aglietta (1979), Lipietz (1985) and Boyer (1990). Similarities between Regulation Theory and the (American) Social Structures of Accumulation approach (Bowles et al. 1983; Gordon et al. 1982) are now widely recognized (e.g. McDonough & Nardone 2006).
- 3 While the term 'finance-dominated' has, to my knowledge, not been used before, other authors have put forward arguments in a similar spirit. Aglietta and Rebérioux (2005) use the term 'finance-led', an analysis centring on shareholder value without implying that the finance-led regime would automatically give rise to high growth. Brenner (2003) highlights how a boom turned into a bubble without invoking the notions financialization or finance-led growth. He highlights the importance of international exchange rate policies for the competitiveness of the US manufacturing factor. Both contributions also emphasize the instability of the finance-dominated accumulation regime.
- 4 One might also call the present accumulation regime a 'neo-liberal accumulation regime'. At this stage the term 'finance dominated' is used to highlight how changes in the financial system affect the components of demand.
- 5 There seems to be a recognition that Regulation Theory has had a focus on self-sustained *national* modes of regulation of the Fordist era. For the Post-Fordist regime, supra-national actors and structures do play a more important role (Dannreuther & Petit 2006).
- 6 The mainstream literature assumes that households are rational. They increase their debt ratios because their wealth increases. While this is probably part of the story, it is also conceivable that a substantial part of the accumulated debt is due to households irrationally maintaining consumption levels that are unsustainable. As wages have stagnated in many countries, but consumption norms as represented in mass media have arguably increased, many households could have been driven into debt. Moreover, there is evidence from experimental psychology that the means of payment influences consumption decisions: consumers typically buy more when using credit cards. This is another indication that debt ratios are in part not due to rational decisions.
- 7 As we lack an exact date for the end of Fordism and the beginning of the neo-liberal mode of regulation, decades are used for periodization, which gives ten-year averages (except for the 2000s, where the latest available data is used). These periods are long enough to iron out most of the fluctuations associated with the business cycle. The 1970s are the final decade of the Fordist era (or, if one prefers, the period of the crisis of Fordism). Neo-liberalism was inaugurated by the coming to power of Margaret Thatcher, Ronald Reagan and Helmut Kohl and coincides with an abrupt shift in monetary policy in the late 1970s/early 1980s. In the European context, this periodization is convenient because the first neo-liberal decade (the 1980s) includes the European Monetary and Exchange Rate System (EMS). The second neo-liberal decade (the 1990s) began with the implementation of the Single Market and is characterized in terms of economic policy by the Maastricht Treaty and the following Stability and Growth Pact (SGP). The final period (the 2000s) is shorter and therefore may reflect the cyclical downturn in this period. Any periodization is arbitrary in detail; however changes in periodization should make little difference to the overall picture.
- 8 This value is in line with comparable studies for other groups of countries (Hein & Vogel 2007; Naastepad & Storm 2006).
- 9 Duménil and Lévy present data for France and the US. Stockhammer (2004a: Table 5.5) summarizes data on several major economies. However, changes in the System of National Accounts make it impossible to update the data. OECD (2007) summarizes available data for selected OECD countries, which confirm that corporations move towards a net lending position.
- 10 Results look very similar if one looks at residential investment compared to disposable income rather than business investment.
- 11 The fact that some countries recover quickly after a deep recession does not imply that everything returns to pre-crisis. Onaran (2005) argues that financial crises often lead to lasting changes in functional income distribution.

- 12 Presumably not all countries entered the euro with the 'correct' exchange rate. In particular, the Deutschmark is often thought to have entered overvalued. However, if the real exchange rate realignments since 1999 were a correction of the initial values, one would expect the real exchange rates to stabilize after a while. Currently, there is no indication of that.
- 13 Crotty (2003, 2005) also uses the term 'neo-liberal puzzle' and defines it thus: 'financial markets demand that corporations achieve ever higher profits, while product markets make this result impossible to achieve' (Crotty (2003: 271). Crotty's neo-liberal puzzle refers to the *economic structure*, where the notion used in this paper refers to *economic policy* making.
- 14 The details may depend on the legal setting. Private firms owned by the state are not counted in the public sector. Firms that are institutionally part of the state (as in many cases, for example, the postal service) are counted.
- 15 Note that Arrighi's (1994) notion of financialization is at times close to what one might call *fiscalization*. As the profitable investment projects get exhausted at the end of a long wave, the state comes in and private financiers start lending to the state.
- 16 This spreading of financial crises from one sector to the core of the banking sector is why economists are worried about the crisis in subprime mortgages. While subprime mortgages are a minor segment of the banks' business, it has created a liquidity crisis in the inter-bank market (where banks lend to each other), which is at the very heart of the banking system. The desire of banks to lend to households has been closely related with the property boom: as long as property prices are expected to rise, banks can expect to recover the loan even in the event of a default. Now (autumn 2007) that defaults start rising and prices begin declining, the balance sheets of banks and other financial institutions are exposed to the full extent of defaults.
- 17 Crotty presented his paper in February 2007, well before the subprime crisis materialized. Similarly, Aglietta and Rebiérioux (2005) had pointed out that securitization would only transfer risk not eliminate it.

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