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Abstract

The increasing dominance of finance starting in the late 1970s/early 1980s in the US and the UK, and somewhat later in other countries, was associated with two fundamental and structural processes generating the contradictions of this phase of development and finally the financial and economic crises starting in 2007: the deregulation of the financial (and economic) system and the massive redistribution of income at the expense of labour and low income households. These fundamental processes provided the conditions for the generation of major imbalances within some of the national economies, on the one hand, and at the international level, on the other hand. These imbalances and contradictions led eventually to the deep financial and economic crisis, starting in 2007. Therefore, a more resilient financial and economic system requires the re-regulation and downsizing of the financial sector, the re-distribution of income (and wealth) from top to bottom and from capital to labour, the re-orientation of macroeconomic policies towards stabilizing domestic demand at non-inflationary full employment levels, and the re-creation of international monetary and economic policy coordination.

Keywords: Financialisation, distribution, growth, financial and economic crisis, resilient financial and economic system

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1. Introduction

Work Package 3 of the FESSUD (Financialisation, Economy, Society, Sustainable Development) project has been concerned with ‘Causes and Consequences of the Financial Crisis’. In this paper we will present a synthesis of this work package and draw some conclusions with respect to the required characteristics of a more resilient financial and economic system. In Section 2 we will outline the structure and the contents of the work packages, as well as the applied methods. Section 3 will then deal with the historical and theoretical backbone of the analysis in the work package. Section 4 will provide a summary of the empirical results generated in the work package based on these historical and theoretical foundations. In the final Section 5 we will then draw the conclusions and outline the characteristics and features of a more resilient financial and economic system as a guideline for future economic policy making. It goes without saying that in this synthesis we will rely on the research output produced in the context of this work package of FESSUD. The appendix provides the full list of deliverables and publications.

2. Structure, content and method

The content of Work Package 3 can be decomposed into three parts. The first part, which spans deliverables D3.01 – D3.05, has covered theories of financial crisis, key works on previous financial crises, approaches towards changes in the relationship between the financial sector and the non-financial sectors of the economy (‘financialisation’) focussing on the effects on distribution, growth and crisis, in particular. The first part has ended with a review of the factors that generated and transmitted the recent financial crisis and which were discussed in the relevant literature. This has provided the theoretical backgrounds for the second part of this work package, the deliverables D3.06 and D3.08, in which the long-run development of the relationships between the financial and the non-financial sectors of the economy and the effects of these developments on the current financial and economic crises have been analysed. This analysis has covered a set of

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1 For more information on the project see: www.fessud.eu.
11 European Union countries (Estonia, France, Germany, Greece, Hungary, Italy, Poland, Portugal, Spain, Sweden, UK) and four non-EU countries (Japan, South Africa, Turkey, US). Furthermore, three important sectors or markets (currency, energy, residential housing) have been included. Against this theoretical and empirical background, in the third and final part, the country and sectoral/market studies synthesized in deliverables D3.07 and D3.09 have developed typologies, stylized facts and general results, allowing to draw some conclusions for future developments and for economic policy requirements. The European dimension has been included in deliverables D3.10 and D3.11, and lessons for future structural, financial, distributional and macroeconomic policies aiming at a more resilient financial and economic system are to be drawn explicitly in the current synthesis deliverable D3.12.

The methods applied in Work Package 3 and the related deliverables have been wide ranging and have allowed the tackling of the problems and research questions from different angles. Deliverables D3.01, D3.04 and D3.05 have provided systematic reviews and comparisons of theories of financial crisis in general, on the one hand, and theories explaining the recent financial and economic crisis in particular, on the other hand. Deliverable D3.02 on previous financial crises triggering stagnation has applied the method of theoretically guided case studies, focusing on the Great Depression of the late 1920/early 1930s, the Latin American debt crisis of the 1980s and the Japanese crisis of the 1990s and 2000s. Deliverable D3.03 has combined a comparative literature review on the long-run development of the relationship between financial and economic sectors with the presentation of a range of small scale analytical stock flow consistent models. This has allowed identifying the potential effects of an increasing dominance of finance on the macro-economy through various channels (distribution, investment, consumption, current account). Deliverables D3.06 and D3.08 have provided theoretically informed case studies on the development of the long-run relationship between the financial and the economic sectors and the effects of these on the financial crisis for a set of countries and relevant

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Two further studies on Iceland (Gudmundsson 2015) and the Netherlands (Bezemer/Muysken 2015) applying a similar approach were presented at FESSUD conferences and workshops and included in the FESSUD Studies on Financial Systems series. Raza et al. (2015) have also contributed a comparison of financialisation in Ireland and Iceland. Drawing on their FESSUD research, Hein/Detzer (2014, 2015a, 2015b) have provided a more detailed analysis of the effects of financialisation on income distribution in Germany, and Detzer/Hein (2014b) have focused more closely and in detail on financialisation and the crisis in Germany.
markets and sectors. These case studies have made use of a combination of comparative institutional analyses, and literature and data analyses, which have been selectively supplemented by econometric regressions. Finally, the syntheses of country and market/sectoral studies, as well as the overall synthesis have drawn on the theoretically informed case studies to derive typologies, and to identify the required characteristics of a more resilient financial and economic system, as well as lessons for future structural, financial, distributional and macroeconomic policies.

3. Review of theoretical and historical analyses

The development of the theoretical and historical backbone in the first part of the work package contained the following steps:

- a review of the empirical and theoretical literature on the effects of changes in the relationship between the financial sector and the non-financial sectors of the economy associated with ‘financialisation’ on distribution, growth, instability and crises (D3.03),
- a review of the literature and of different schools of thought on financial crises (D3.01),
- a review of the literature on previous financial crises leading to stagnation (D3.02),
- a review of the literature on the different factors which have been put forward in order to explain the financial and economic crises starting in 2007 (D3.04 and D3.05).

3.1 Long-run effects of financialisation on distribution, growth and instability

In the review of the empirical and theoretical literature on the effects of changes in the relationship between the financial sector and the non-financial sectors of the economy associated with ‘financialisation’ on distribution, growth, instability and crises (Hein/Dodig 2014, 2015), four channels of transmission of financialisation to the macro-economy were identified and examined: first, the effect on income distribution; second, the effects on investment in the capital stock; third, the effects on household debt and consumption; and fourth, the effects on net exports and current account balances. For each of these channels some empirical and econometric literature supporting the presumed channels was surveyed, some theoretical and modelling literature
examining the macroeconomic effects via these channels were reviewed, and finally, small analytical stock-flow consistent models generating the most important macroeconomic effects were presented.

Summing up, Hein/Dodig (2014, 2015) showed that, against the background of redistribution of income at the expense of the labour income share, and of low labour incomes in particular, and depressed investment in the capital stock, each a major features of financialisation, short-to medium-run dynamic ‘profits without investment’ regimes may emerge. These regimes can be driven by flourishing debt-financed and wealth based consumption demand or by rising export surpluses, compensating for low income-financed consumption demand and weak or falling investment in the capital stock. However, each type of these regimes, the ‘debt-led consumption boom’ type and the ‘export-led mercantilist’ type, contains internal contradictions: potentially rising household debt-capital or –income ratios in the first regime and rising foreign debt-income ratios of the counterpart current account deficit countries in the second regime. These problems may then finally undermine the sustainability of these regimes and lead to financial and economic crises.

Therefore, it is concluded that neither the ‘debt-led consumption’ nor the ‘export-led mercantilist’ regime should serve as a role model for the post-crisis development. The latter should rather focus on generating wage/income-led or domestic demand-led types of development by means of redistributing income towards labour and low income households, re-regulating financial sector to serve the non-financial sectors, re-creating the incentives for real investment in the capital stock, and stabilising macroeconomic policies coordinated at the international level.

3.2 Different schools of thought on financial crisis

In the systematic review and comparison of different schools of economic thought regarding the analyses of financial crises (Detzer/Herr 2014, 2015), first, approaches that consider financial crises as a disturbing factor of a generally stable real economy (Wicksell, Hayek, Schumpeter, Fisher, and the early Keynes) were reviewed. Then, approaches in which the dichotomy between
the monetary and the real sphere is lifted were considered (the later works of Keynes and Minsky). Lastly, behavioural finance approaches were covered. After having reviewed the different approaches, similarities and potentials for syntheses were examined.

In this context Detzer/Herr (2014, 2015) developed a theoretical framework, which is methodologically based on a Wicksellian cumulative process, while overcoming the neoclassical dichotomy. These aspects were combined with some ideas taken from John Maynard Keynes’s analysis of uncertainty, expectations and herding, Hyman Minsky’s analysis of debt ratios and changing leverages, Irving Fisher’s analysis of goods market and debt deflation, and different ideas stemming from behavioural finance. In this approach, a range of feedback mechanisms (rising profits, asset price inflation, increasing confidence, etc.) serve to explain a long-lasting expansion, after an initial positive trigger. However, in this phase vulnerabilities are built up, finally depressing the economy, with the feedback factors working in reverse as soon as the upswing ends.

The paper policy recommendations based on this theoretical framework are straightforward, as the authors explain. In particular, it is recommended to use financial regulation measures to prevent the build-up of vulnerabilities in the expansion period and to reduce some of the feedback mechanisms which exacerbate the booms and busts, in particular purely financial speculation. In the bust, deflation was identified as one of the most important negative feedback mechanism. Therefore it is argued that economic policy efforts should focus on avoiding deflation by means of wage and demand policies, in particular.

3.3 Previous financial crises leading to stagnation

The review of the literature on previous financial crises leading to stagnation included comparative case studies of the Great Depression of the late 1920s/early 1930s in the US, the Latin American debt crisis of the 1980s, and the Japanese crisis of the 1990s and 2000s (Dodig/Herr 2014, 2015). The following guiding questions were asked: What triggered big financial crises? Which factors intensified financial crises? And most importantly, which factors contributed most to preventing a rapid return to prosperity? The aim was thus to identify the stylised facts of previous crises, both in terms of the causes of the crises and of the difficulties in recovering from such crises.
The main conclusion from this paper is that stagnation after big financial crises becomes likely when the balance sheets of economic units are not quickly cleaned, when the nominal wage anchor breaks, and when there is no big and longer demand stimulus by the government. Some tentative conclusions for the recent financial crisis and the ongoing Euro crisis were drawn as well. The authors argue that, in particular, bail-out packages should have been combined with debt reliefs for households rather than focusing only on the stabilisation of big financial institutions. Labour market reforms and austerity policies in Southern European countries bear strong resemblance to those imposed on Latin American countries in the 1980s, worsening the downturn and leading to stagflationary tendencies. There is thus a risk of repeating Japan’s deflationary experience as several Euro area countries, most notably Greece, have been experiencing or are in danger of deflation due to one-sided focus on internal devaluation. Instead, nominal stabilisation, i.e. stable nominal unit labour cost growth and inflation, as well as demand enhancing policies would have been needed if a long period of stagnation were to be avoided. For the Euro area this should be accompanied with a more symmetric approach towards dealing with current account imbalances, with more expansionary policies of the surplus countries, in particular.

3.4 Explanations of the financial and economic crises starting in 2007

Finally, in the first part of this work package, the different factors, which were identified as responsible for the recent financial and economic crises, were reviewed. In the debate on the crisis, it has not been always entirely clear which factors might be considered to have generated the crisis and which were responsible for transmitting the crisis more widely (Evans 2014, 2015a). As it is generally agreed, the crisis was detonated in the US by the failure of complex securities based on subprime mortgages. Providing mortgages to households without a sufficient or secure enough income to meet the service payments was unsustainable. However, banks were eager to expand into more profitable areas and, with falling or stagnant wages, conservative governments
were keen to see an extension of home ownership. Packaging mortgages in complex securities displaced the impact of a declining capacity to service the loans but resulted in even greater losses when the crisis finally erupted. Nevertheless, while subprime mortgages involved a notoriously fragile financial structure, they represented only one – minor – dimension of the huge expansion of credit on which economic growth in the US had become increasingly dependent since the 1980s.

Mainstream explanations of the crisis have given considerable weight to the failure of risk management and this was indeed extraordinarily pervasive (Lagoa/Leao/Barradas 2014, 2015). Inadequate measures, widely overlooked factors, an over-confidence in numerical models, and so on, all served to ensure that the evolution of complex securities completely outstripped the development of risk management techniques. However extensive such failures, a narrow focus on risk management can obscure the fact that such failures only acquired their full significance as a result of the massive growth of financial capital, its expansion into ever more areas of economic activity, and its increasingly short-term focus on generating returns.

A related argument, which has had considerable influence on shaping official policy responses, concerns the role of perverse incentives (Gabbi/Kalbaska/Vercelli 2014, 2015). At every stage, from the selling of subprime mortgages, to their packaging in securities, the construction of complex CDOs and finally their rating by profit-driven agencies, the payment of rewards on the basis of short-term results encouraged a disregard of any consideration of longer-term financial sustainability. In this sense, perverse incentives played an important role in promoting the unchecked accumulation of unsustainable credit structures. However, as with the failure of risk management, the impact of perverse incentives could only gain such significance in a context where legal restrictions were being relaxed and financial capital was straining to expand.

The claim that the crisis was provoked by the over-expansive character of monetary policy in the US in the years prior to 2007 has won support amongst more conservative circles in the US, too (Evans 2015, Varoufakis 2014). Whether monetary policy was quite as expansive as it is sometimes claimed has been challenged. More significantly, since the 1980s economic growth in the US had been dependent on an ever expanding supply of credit. When this credit-driven expansion stalled in 1990, the Federal Reserve prevented a more serious recession by cutting interest rates and holding them down for several years. Then in 2001, following the collapse of the
so-called internet bubble, the economy again entered a recession and the Federal Reserve once more responded with a highly expansionary policy. Had it not done so, the US would almost certainly have experienced a far more serious crisis at that earlier time. In this way, the Federal Reserve’s accommodating monetary stance actually prevented more serious crises from occurring earlier – albeit at the cost of accumulating the tensions which finally burst out in 2007 and 2008.

Another factor which has been identified as generating the crisis involves the rapidly growing sums of capital which were striving to obtain ever higher returns (Szikszai/Badics 2014). Linked to the shifts in the distribution of income (see below), there was a major accumulation of financial assets by the better-off sectors of society. This was reflected in a strong growth of institutional investors, notably investment funds, and the rapid expansion of more speculative units, in particular hedge funds and private equity funds, all striving to raise their rate of return. There was also a major growth of large universal banks following the abolition of the legal distinction between investment and commercial, and for some years these succeeded in extracting exceptionally high profits from what is politely termed ‘proprietary trading’. At the same time, nonfinancial companies cut back on their fixed investment and turned increasingly to investments in financial assets to generate a higher rate of return. Ultimately, this search for higher returns all rested on the economy’s ability to generate an economic surplus. The creation of complex instruments could stretch and obscure this connection through seemingly impenetrable layers of financial transactions, but only for a time (Jurek/Marszalek 2014).

The widening global imbalances which emerged in the years leading up to the crisis have been identified by several authorities as a source of the tensions which led to the crisis (Carrasco/Serrano 2014, 2015). The IMF emphasised how lax policies and a low saving rate led to a current account deficit in the US; the Federal Reserve drew attention to a so-called savings glut in developing countries which led to large net inflows of capital into US financial assets. Contrary to some predictions, however, the crisis in the US was not the result of a sudden stop in capital inflows. The problem was not net inflows of capital, since investment from Asia was directed primarily at safe, low yield government assets; the problem was, rather, gross flows. Big European banks, in particular, borrowed large amounts in the US and invested the proceeds in risky, high-
yield financial instruments. The inflows associated with international imbalances could have been managed if there had been stricter controls on the expansion of credit. The origins of the crisis did thus not lie in current account imbalances but in the fragility of the US monetary and financial system and the massive, unchecked expansion of lending, it can be concluded. However, the international integration of financial markets and the financing of current account imbalances contributed to the rapid international diffusion of the crisis through financial contagion and international trade.

The deregulation of the US financial system from the 1980s has been identified as a major cause of the crisis (Orhangazi 2014, 2015). The steady elimination of the tight restrictions that had been introduced on banks in the 1930s resulted in a major growth of riskier forms of lending, the bundling of such loans into dubious securities, and the expansion of shadow banks to which assets could be shifted, accompanied by an increasing reliance on banks’ self-regulation. But the deregulation of the financial system was not simply a result of a shift by governments to more neoliberal policies. The existing system of regulation had ceased to be fully effective as banks had increasingly circumvented the old order through innovation and internationalisation. Banks played a very active role, promoting the process of deregulation through extensive lobbying and, aided by the widespread influence of neoliberal ideas, US governments responded by accommodating their demands.

Finally, major shifts in the distribution of income since the 1970s were a key underlying factor in generating the crisis in the US (Michell 2014, 2015). These shifts include the rising share of profits in national income, and the rising share of top earners in the distribution of waged or salaried incomes. As the incomes of many working- and middle-class households stagnated or even fell, they attempted to compensate by borrowing in order to finance the maintenance or the growth of consumption. One important way in which households raised funds was to borrow against the rising value of their homes, something which could only function so long as house prices were rising. Economic growth in the US became highly dependent on rising levels of household indebtedness – a pattern of development which clearly was not sustainable.
3.5 The causes of the current crises against the background of the long-run development of financialisation

Summing up the historical and theoretical part of the work package and putting the potential causes for the recent crises discussed in the literature into the context of the long-run development and effects of financialisation, we can conclude as follows. The increasing dominance of finance starting in the late 1970s/early 1980s in the US and the UK, and somewhat later in other countries, was associated with two fundamental and structural processes generating the contradictions of this phase of development and finally the financial and economic crises starting in 2007. The rising dominance of finance was built on the deregulation of the financial (and economic) system and it contributed to a massive redistribution of income at the expense of labour and low income households. These fundamental processes provided the conditions for the generation of major imbalances within the national economies, on the one hand: growing financial sectors and financial intermediation, rising claims on financial profits, weak investment in the capital stock, rising gross indebtedness of firms and households in particular, and rising debt-financed consumption. This rise of finance increased the pressure for further financial deregulation and income redistribution. On the other hand, also at the international level severe imbalances and fragilities were generated, which provided the conditions for the rapid international diffusion of the crisis through financial contagion and international trade: increasing financial integration, rising current account imbalances, and more volatile international financial flows, in particular. The generation of perverse incentives by the increasing dominance of finance, the failure of risk management within the financial sector, the creation of ever more complex and opaque financial instruments, as well as the expansionary monetary policies in the US in the early 2000s, could be seen as results or symptoms of the fundamental processes and its contradictions as mentioned above, which fed back and accelerated them. However, they only have limited, if any, stand-alone explanatory power as fundamental causes of the crisis.
4. Empirical results on the long-run effects of financialisation and on the recent financial and economic crises

The theoretical and historical studies of the first part of the work package informed the empirical studies of the second part. These contained the following types of analyses:

- 15 country studies on changes in the relationship between the financial and the non-financial sectors and the recent financial and economic crises (D3.06 and D3.07),
- three sectoral and market studies (residential housing, currency, energy) on changes in the relationship between the financial and the non-financial sectors and the recent financial and economic crises (D3.08 and D3.09),
- two studies on changes in the relationship between the financial and the non-financial sectors and the recent financial and economic crises and on causes and consequences of the financial crisis in the Euro area and the EU (D3.10 and D3.11).

4.1 Country studies on changes in the relationship between the financial and the non-financial sectors and the financial and economic crises

The country studies on the long-run effects of financialisation covered a set of 11 European Union countries (Estonia, France, Germany, Greece, Hungary, Italy, Poland, Portugal, Spain, Sweden, UK) and four non-EU countries (Japan, South Africa, Turkey, US). The structure for each of these studies was inspired by the review and presentation of theoretical models on the long-run effects of an increasing dominance of finance on the macro-economy through various channels in Hein/Dodig (2014, 2015) (see Section 3.1). First, the country studies provide a general overview of the long-run development in the era of financialisation since the early 1980s and present some initial ideas on the type of development before the crisis looking at the financial balances of the

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main economic sectors and at the growth contributions of the main demand aggregates: ‘export-led mercantilist’, ‘debt-led private demand boom’, or ‘domestic demand-led’. Second, the country studies examined the channels of transmission of financialisation to the macro-economy (distribution, consumption, investment, current account) in more detail. And third, the country studies contain an overview of the crisis and the economic policy responses towards this in the respective countries. Before we summarise the main findings following the synthesis of the country studies by Dodig/Hein/Detzer (2015, 2016), let us first define the demand regime typology used in this kind of analysis.

The debt-led private demand boom regime is characterised by negative financial balances of the private household sectors, in some countries accelerated by corporate deficits and thus deficits of the private domestic sectors as a whole, positive financial balances of the external sector, and hence, current account deficits, high growth contributions of private domestic demand, and negative growth contributions of the balance of goods and services. The extreme form of the debt-led private demand boom regime is the debt-led consumption boom regime, in which the private household sector is running deficits and private consumption demand is the main contributor to GDP growth. However, the broader concept of a debt-led private demand boom regime also includes deficit financed expenditures by the non-corporate and the corporate business sectors for private investment purposes.

The export-led mercantilist regime is characterised by positive financial balances of the domestic sectors as a whole, and hence negative financial balances of the external sector, and thus, current account surpluses. The growth contributions of domestic demand are rather small or even negative in certain years, and growth is mainly driven by positive contributions of the balance of goods and services and hence rising net exports. A weakly export-led type is characterised by positive financial balances of the domestic sectors as a whole, negative financial balances of the external sector, and hence current account surpluses, positive growth contributions of domestic demand, but negative growth contributions of external demand, and hence positive but falling export surpluses.

The domestic demand-led type is characterised by positive financial balances of the private household sector as well as of the external sector, and hence, current account deficits. Here it is
usually the government and, to a certain degree, the corporate sector, running deficits. We have positive growth contributions of domestic demand without a clear dominance of private consumption, and negative growth contributions of the balance of goods and services. Low-growth mature economies driven by domestic demand can be distinguished from high-growth catching-up domestic demand-led economies.

Based on the country studies and some additional data analysis, Dodig/Hein/Detzer (2015, 2016) clustered the 15 countries according to the typology of demand regimes for the trade cycle of the early 2000s before the crises. They found that a debt-led private demand boom regime prevailed in the US, the UK, Spain, Estonia, Greece, and South Africa, while an export-led mercantilist type was found for Germany, Japan, and Sweden. As already mentioned, these two types of regimes contained internal contradictions, with respect to household debt and with respect to foreign debt of the counterpart current account deficit countries, which may finally undermine the sustainability of these regimes and lead to financial and economic crises. For France, Italy and Portugal, a mature domestic demand-led type of development was found for the cycle before the crisis, and for Hungary, Poland and Turkey a catching-up domestic demand-led regime dominated.

For the period following the outbreak of the crises (2009-14), Dodig/Hein/Detzer (2015, 2016) found that countries belonging to the export-led mercantilist group, in particular Germany and Sweden, recovered quickly because their domestic balance sheets were largely in order, the financial crisis was contained by immediate government responses, and these countries also benefitted from the recovery of the world economy. In the post-crisis period, however, only Germany has clearly remained an export-led mercantilist economy. Japan and Sweden have become weakly export-led, with continuing (high) current account surpluses, but on a declining trend. Average growth contributions of net exports in the crisis/post-crisis period were negative in these two countries. However, looking at annual data, Sweden returned to positive growth contributions of net exports in the years 2010 – 2013 again.

The debt-led private demand boom economies, as well as the domestic demand-led economies, with monetary policy autonomy were successful in stabilising the financial sector and the economy by high government deficits in the course of the crisis. However, they have had lower
growth rates and to a large extent have been relying on public sector deficits. For the debt-led private demand boom countries in this group, the US, the UK, and South Africa, there are some indications of a shift towards domestic demand-led growth accompanied by an improvement of the financial balances of the private sector. For the catching-up domestic demand-led countries in this group, consisting of Turkey, Hungary and Poland, a rather quick recovery of financial inflows was observed. However, such economies – with their own but not leading currencies – could be prone of accumulating private and/or public debt in foreign currency during a boom, which would increase financial fragility again.

In the debt-led private demand boom economies, as well as in the domestic demand-led economies, without monetary policy autonomy, macroeconomic stabilisation was terminated first by financial market pressure and then by fiscal austerity. This refers to six Euro area countries (Estonia, France, Greece, Italy, Portugal, and Spain) which then have been showing a movement towards export-led mercantilism, mainly through a contraction of domestic demand and imports, in the crisis/post-crisis period. However, it is unclear whether this regime can be maintained if domestic demand should recover.

What conclusions can be drawn from these developments for the perspectives of the world economy? According to Dodig/Hein/Detzer (2015, 2016), the tendency towards balanced or surplus current accounts in several former current account deficit countries seems to be based to a large extent on the contraction of domestic demand and imports, and thus on ‘stagnation policies’ (Steindl 1979). Of course, this has a depressing effect on overall global economic activity. And to the extent that export-led strategies will be maintained in the medium run, they face a fallacy of composition problem. Therefore, if pre-crisis export-led mercantilist economies continue to stick with their model and some previously debt-led private demand boom and domestic demand-led economies turn towards export-led strategies, counterpart current account deficit countries are required by definition. Currently it seems that these will either be some mature economies, which have now become domestic demand-led relying on sustained public sector deficits, as well as some catching-up economies relying on a combination of public sector and private sector deficits and the counterpart capital inflows.
Of course, this constellation suffers from two risks: First, high government deficits and debt in mature domestic demand-led economies as stabilisers of national and global demand may be reversed for political reasons (debt ceilings, debt brakes), although there may be no risk of over-indebtedness of governments, if debt can be issued in the own currency and is backed by the respective central bank. Second, capital inflows into catching up domestic demand-led economies may be unstable and face ‘sudden stops’ because of changes in expectations and/or over-indebtedness in foreign currency in these countries.

Therefore, Dodig/Hein/Detzer (2015, 2016) conclude, if this global constellation cannot be overcome by a more balanced development based on expansionary contributions by the current account surplus countries as a first best solution, economic policy making in two areas would have to be re-thought and re-assessed. First, the role of public deficits and debt in order to provide global demand at a reasonable growth rate would have to be accepted, in particular for governments being able to go into debt in their own currency. Second, the stable recycling of current account surpluses of mature export-led economies towards the high-growth catching-up countries financing their current account deficits would have to be provided in order to avoid unsustainable booms, ‘sudden stops’, capital flight and crises.

4.2 Sectoral and market studies on changes in the relationship between the financial and the non-financial sectors and the financial and economic crises

The sectoral and market studies on energy, currency and residential housing were each supposed to follow a common structure: First, the long-run empirical developments in the respective market or sector should be covered; second, institutional changes should be dealt with; and third, an interpretation of the development of the respective market or sector against the background of financialisation, as well as consequences for the overall economy should be provided. Drawing on the studies by Ruzzenenti (2015) on the energy sector and by Lis (2015) on residential housing, as well as on own literature and data research, Evans/Herr (2015) have derived and summarized the following results.4

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4 See also the study by Simon/Szikai (2015) on currency.
The markets for foreign exchange, energy and residential housing have all been strongly affected by the deregulation and expansion of the financial sector. One key result was that, as a consequence of deregulation, these markets have begun to follow the logic of asset markets. This first occurred in the case of the foreign exchange market from the 1970s onwards, but has also become true of residential housing markets since the mid-1990s, and energy markets since the early 2000s.

The transition to functioning as asset markets has resulted in attracting more speculative-oriented investors to the three markets. This has been most marked in the case of foreign exchange markets, where some 95 per cent of market trading was dominated by financial institutions – predominantly large banks – taking short-term positions in currencies. But it has also become true of the energy markets, where new instruments have made it possible to open and close speculative positions very rapidly, and – to a slightly lesser extent – of residential property markets. The close link between the different markets was demonstrated in the first half of 2008 when, following the collapse of complex securities based on house mortgages in the US, there was a major inflow of short-term capital into energy and other commodity markets prompting an unprecedented spike in prices.

According to Evans/Herr (2015), an important feature of this shift to behaving as asset markets is that prices are driven by long-term expectations which lack a firm anchor and which can move within a very wide, weakly defined range. This is especially true in the case of currency markets and also for energy markets, although somewhat less so for residential housing markets. With weak long-term anchors, prices are subject to extensive short-term speculation. The increased importance of speculative positions has resulted in a marked rise in medium-term price volatility in which investments have been driven by boom-bust cycles. This was evidenced between 2002 and 2008 by the strong rise – and subsequent decline – in the value of the euro, in energy prices and, although it began even earlier, of house prices.

The marked instability of the three markets has contributed to greater instability in the broader economy. One direct effect has been that uncertainty about future price developments in the three markets has increased overall uncertainty in the economy. More specifically, the cumulative impact of price rises has contributed to the rise in indebtedness and to an
accumulation of financial tensions which can culminate in a crisis. This can then lead to spill-over effects, which have an impact on the entire economy.

These results lead to a very clear policy conclusion. The deregulation of currency, energy and housing markets has led to far greater price volatility and the rise of unsustainable price bubbles which, when they burst, can pose a significant threat to financial and economic stability. In order to guard against this in the future, it is therefore important that these three markets should be subjected to new and appropriate forms of regulation, Evans/Herr (2015) argue.

4.3 Changes in the relationship between the financial and the non-financial sector and causes and consequences of the financial crisis in the Euro area and the EU

Analysing the changes in the relationship between the financial and the non-financial sectors for the European Union and the Euro area, and the consequences of the financial crisis in particular, Carrasco et al. (2015, 2016) have argued that the impact of the financial crisis and of the Great Recession on GDP has been more pronounced in the Euro area than in the non-euro EU. Among the Euro area members, the new member states were hit the most. For the first part of the analysis, EU member countries were classified in three groups: First, the original EMU-11, including Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain; second, the EMU-6 of those countries that joined the euro after 1999, including Cyprus, Estonia, Greece, Malta, Slovenia and Slovakia; and third, the EU-10 group of economies that do not belong to the Euro area, including Bulgaria, the Czech Republic, Denmark, Hungary, Latvia, Lithuania, Poland, Romania, Sweden and the United Kingdom. The analysis covers the period from 2003 to 2012/13.

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5For some further aspects of the macro- and microeconomic effects of financialisation on EU and Euro area countries, see Altuzarra et al. (2015). They show that the amount of external funds obtained by non-financial corporations (nfcs) usually exceeds the required funds to finance productive investments in those companies, with these “excessive” external funds being used for the acquisition of financial assets. Furthermore, their econometric analysis indicates that the growth of bank credit to the nfcs has not contributed positively to economic growth in the EU.
Given that GDP collapsed most in the EMU-6 group, it comes with no surprise that those countries suffered most from an increase in unemployment. However, although the EU-10 was hit less by the crisis, unemployment increased more than in the old EMU-11, which showed the best performance among the three groups in this respect. These differences in unemployment development had an impact on the course of distribution, too. In the EMU-11 the wage share in 2013 was even higher than before the crisis, whereas in the EU-10 and the EMU-6, the wage share in 2013 had fallen below the pre-crisis levels. And while the fall of the wage share in the EU-10 stopped in 2011, in the EMU-6 it continued until 2013.

With regard to inflation, the authors find a marked divergence, in particular between the EMU-11 and the EMU-6. Whereas the former group on average over the period 2003-13 had an inflation rate in line with the ECB inflation target of below but close to 2 per cent, the latter group’s rate was one percentage point above the ECB’s target on average over the ten years, indicating a considerable loss in price competitiveness. However, with the acceleration of the euro crisis and the austerity policies implemented in particular in the Euro area periphery, the inflation rates of the EMU-6 have fallen below the ones of the EMU-11 in 2012 and 2013. The divergence in price competitiveness together with higher rates of growth in the EMU-6 than in the EMU-11 in the period before the crisis meant positive current account balances for the EMU-11 with a rising tendency since the Great Recession 2008/9. The EMU-6 showed rising current account deficits before the crisis, which, however, have been shrinking since the crisis and almost reached balance in 2013. The EU-10 had slightly negative current accounts throughout the whole period. Overall, Carasco et al. (2015, 2016) conclude that the EMU-6 countries, i.e. those counties that joined the Euro area after its creation in 1999, were affected most by the crisis, much more than the other euro countries and the non-euro EU economies.

Moving from the consideration of groups of countries towards the country level in the second part of their analysis, and checking for tendencies towards convergence or divergence for the period 1995 to 2013 in the Euro area, Carasco et al. (2015, 2016) found that before the crisis there was a convergence process in some macroeconomic and financial data of Euro area economies. This was true for potential GDP growth, the output gap, employment and unemployment rates, adjusted wage shares and Gini coefficients for disposable household
income, CPI inflation, as well as government deficit- and debt-GDP ratios. However, for GDP per capita growth, GDP growth, real wage growth, real unit labour costs, current account balance-GDP ratios, financial asset- and financial liabilities-GDP ratios either no convergence or even divergence was observed even before the crisis. With the onset of the crisis in 2009, however, strong diverging processes for all the variables mentioned seem to have dominated. The only exceptions are real unit labour costs and CPI inflation. For the latter the authors even observe convergence from 2009-2013.

If the tendencies towards divergence continue, heterogeneity in the Euro area will rather increase than decrease, Carasco et al. (2015, 2016) argue. Thus, the Euro area will become even more susceptible to asymmetric shocks. This diagnosis seriously questions the current setup of economic policy making in the Euro area: Centralised monetary policies applying a single short-term interest rate as a main tool; no considerable federal budget and seriously constrained fiscal policies at the national levels which are unable to compensate for the lack of aggregate stabilization by the central bank in a deflationary environment and for the asymmetries within the heterogeneous currency union; and the non-existence of a wage and incomes policy targeting the stabilization of aggregate demand and inflation as well as the asymmetries and imbalances which have derived from growth and inflation differentials in the past.

5. Conclusions and implications for a more resilient financial and economic system

Summing up the findings of the work package, we can argue that the increasing dominance of finance starting in the late 1970s/early 1980s in the US and the UK, and somewhat later in other countries, was associated with two fundamental and structural processes generating the contradictions of this phase of development of modern capitalism and finally the financial and economic crises starting in 2007. The rising dominance of finance was built on the deregulation of the financial (and economic) system and it contributed to a massive redistribution of income at the expense of labour and low income households. These fundamental processes provided the conditions for the generation of major imbalances within some of the national economies, on the one hand: growing financial sectors, rising claims on financial profits, weak investment in the
capital stock, rising indebtedness of firms and households in particular, and rising debt-financed private sector demand, and private consumption in some countries, in particular. This debt-led private demand boom regime, including the debt-led private consumption boom type as an extreme, turned out to be unsustainable and finally generated the financial crisis and the Great Recession. On the other hand, at the international level severe imbalances and fragilities were generated, too, which provided the conditions for the rapid international diffusion of the crisis through financial contagion and international trade: increasing financial integration, rising current account imbalances, more volatile international financial flows, as well as major international markets and sectors (residential housing, energy, currency) moving towards asset markets with prices driven by expectations without any clear anchor.

With the financial and economic crises, the debt-led private demand countries, as well as the export-led mercantilist countries, were heavily affected, as were the domestic demand-led economies through the financial contagion, international trade and expectations channels. The export-led mercantilist group countries, in particular Germany and Sweden, recovered quickly from the crisis, sticking, more or less with their model. The former debt-led private demand boom economies, as well as the domestic demand-led economies, with monetary policy autonomy were successful in stabilising the financial sector and the economy by high government deficits in the course of the crisis. For the debt-led private demand boom countries in this group, the US, the UK, and South Africa, there are some indications of a shift towards domestic demand-led growth stabilised by government deficits. For the catching-up domestic demand-led countries in this group, Turkey, Hungary and Poland, a rather quick recovery of financial inflows was observed, so that they continued with their pre-crisis model. The former debt-led private demand boom economies, as well as the domestic demand-led economies, without monetary policy autonomy, i.e. the Euro area countries Estonia, France, Greece, Italy, Portugal, and Spain, have had severe problems in recovering and are still struggling with the crisis – mainly with the third stage, the euro crisis and its outfalls. These countries have shown a movement towards export-led mercantilism in the crisis/post-crisis period, mainly through a contraction of domestic demand and imports. However, it is unclear whether this regime can be maintained if domestic demand should recover.
This constellation, together with highly unregulated international financial markets, suffers from severe risks: First, high government deficits and debt in mature domestic demand-led economies as stabilisers of national and global demand may be reversed for political reasons (debt ceilings, debt brakes), although there may be no risk of over-indebtedness of governments, if debt can be issued in the own currency and is backed by the respective central bank. Second, capital inflows into catching up domestic demand-led economies may be unstable and face ‘sudden stops’ because of changes in expectations and/or over-indebtedness in foreign currency.

As an immediate short-run stabilisation of such a constellation, economic policy making in two areas would have to be re-thought and re-assessed. First, the role of public deficits and debt in order to provide global demand at a reasonable growth rate would have to be accepted, in particular for governments being able to go into debt into their own currency. Second, the stable recycling of current account surpluses of mature export-led economies towards the high-growth catching-up countries financing their current account deficits would have to be provided in order to avoid unsustainable booms, ‘sudden stops’ and capital flight.

In the long run, however, the underlying structure of the current constellation still dominated by financialisation would have to be challenged and changed. This should have four dimensions:

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

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

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6For the Euro area, this would mean the unconditional backing of government debt of member countries by the ECB, as suggested by De Grauwe (2011) and Hein/Detzer (2015c, 2015d), for example.

7See Hein/Detzer (2015c, 2015d) for an outline of how this stable recycling could be facilitated in the Euro area.

8For similar ideas and more extensive elaborations see for example the ‘wage-’ or ‘mass income-led’ recovery strategies proposed by the ILO (2012), Lavoie/Stockhammer (2013a, 2013b) and Stockhammer/Onaran (2012, 2013), among others, as well as the more encompassing notion of a ‘Global Keynesian New Deal’ by Hein (2011, 2012, Chapter 7), Hein/Mundt (2012) and Hein/Truger (2011, 2012/13). See also, with different terminologies but similar contents, the suggestions by Palley (2012, Chapter 9, 2013, Chapter 12) and UNCTAD (2009), among others.
real GDP growth. This has at least three dimensions: First, measures which increase transparency in financial markets should be introduced, in order to reduce the problems of uncertainty, asymmetric information, moral hazard, and fraud, which are inherent to and were widely observed in this sector, in particular. These measures include the standardisation and supervision of 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, insurances, hedge funds, private equity funds, etc.) should be introduced. Since rating can be considered a public good, independent public rating agencies will have to be introduced replacing the private ones. Diversity in the banking sector should be increased in order to increase resilience. Therefore public and cooperative banks supplying credit to households and small firms and thus competing with private banks should be strengthened. In addition, the role of local banks, with special knowledge and a particular interest in their regions (solving some of the information asymmetry and moral hazard issues), should be stressed instead of trying to create international financial champions. Financial institutions with systemic relevance should be in public ownership, because stability of these institutions can be considered to be a public good, too. Second, re-regulation should generate incentives for economic actors in the financial and non-financial sectors 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 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 credit controls, asset-based reserved-requirements and counter-cyclical capital requirements for all financial intermediaries, should be
introduced, and a general financial transactions tax in order to slow down activity in the financial sector should be implemented.

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

The re-orientation of macroeconomic policies – in particular in current account surplus countries – should aim at improving domestic demand, employment and hence also imports into these countries. First, interest rate policies of the central bank should abstain from attempting to fine tune unemployment in the short run and inflation in the long run. Central banks should instead target low real interest rates in order to promote real economic activity. A slightly positive real rate of interest, below the rate of productivity growth, seems to be a reasonable target: Rentiers’ real financial wealth will be protected against inflation, but overhead costs for firms will be
reduced, allowing for a shift of income distribution in favour of labour with stimulating effects on aggregate demand. Further on, central banks must act as a lender of last resort in periods of liquidity crisis, not only for the banking system but also for the government. The latter provides the conditions for fiscal policies to fulfil its stabilising role.

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

Incomes and wage policies should take over responsibility for nominal stabilisation, i.e. stabilising inflation at some target rate which contributes to maintaining a balanced current account, to the extent that exports and imports are sufficiently price-elastic. In order to contribute to rebalancing the current accounts, nominal wage growth in the current account surplus countries will have to exceed the benchmark of national long-run productivity growth plus the inflation target for an interim period, whereas nominal wage growth in the deficit countries will have to fall short of this benchmark during the adjustment process, however, without driving the economy towards deflation.

The re-creation of international monetary and economic policy coordination would have to make sure that ‘export-led mercantilist’ strategies no longer pay off. This implies that targets for current account balances have to be included into international policy coordination at the regional
and the global level. At the global level the return to a cooperative world financial order and a system with 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 an obvious blueprint to be further developed for this purpose.
References


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Appendix: Deliverables and Publications related to FESSUD Work Package 3 'Causes and consequences of the financial crisis'

**D3.01: Paper on theories of financial crisis**

**D3.02: Literature review of key works on previous crises**

**D 3.03: An overview paper on changes in the relationship between the financial sector and the non-financial sectors of the economy ("financialisation"), and the effects on distribution, growth and crisis**

**D 3.04 A series of papers on the factors generating and transmitting the financial crisis**


D 3.05 An overview paper on the factors generating and transmitting the financial crisis

D 3.06 A series of papers on changes in the relationship between the financial and the non-financial sectors and the and the present financial and economic crisis: country studies


3.07 A synthesis paper on the results from papers under D3.06 (country studies)


D 3.08 A series of papers on changes in the relationship between the financial and the non-financial sectors and the present financial and economic crisis: sectoral and market studies (housing, currency, energy markets)


D 3.09 A synthesis paper on the relationship between financial and non-financial sectors from the sectoral and market studies


D 3.10 Paper on changes in the relationship between the financial and the real sector and the present financial and economic crisis: effects on euro and non-euro area countries and the coherence of the monetary union

D 3.11 Report on causes and consequences of the financial crisis in the EU. It is intended to cover the EMU as a whole and the member countries inside and outside the EMU mentioned above

D 3.12 Synthesis Report on characteristics of more resilient financial and economic systems
Financialisation, Economy, Society and Sustainable Development (FESSUD) is a 10 million euro project largely funded by a near 8 million euro grant from the European Commission under Framework Programme 7 (contract number : 266800). The University of Leeds is the lead co-ordinator for the research project with a budget of over 2 million euros.

**THE ABSTRACT OF THE PROJECT IS:**

The research programme will integrate diverse levels, methods and disciplinary traditions with the aim of developing a comprehensive policy agenda for changing the role of the financial system to help achieve a future which is sustainable in environmental, social and economic terms. The programme involves an integrated and balanced consortium involving partners from 14 countries that has unsurpassed experience of deploying diverse perspectives both within economics and across disciplines inclusive of economics. The programme is distinctively pluralistic, and aims to forge alliances across the social sciences, so as to understand how finance can better serve economic, social and environmental needs. The central issues addressed are the ways in which the growth and performance of economies in the last 30 years have been dependent on the characteristics of the processes of financialisation; how has financialisation impacted on the achievement of specific economic, social, and environmental objectives?; the nature of the relationship between financialisation and the sustainability of the financial system, economic development and the environment?; the lessons to be drawn from the crisis about the nature and impacts of financialisation? ; what are the requisites of a financial system able to support a process of sustainable development, broadly conceived?’
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