Journal of Economics Bibliography
www.kspjournals.org
Volume 3 June 2016 Issue 2

After the Financial Crisis: Reforms and Reform Options for Finance, Regulation and Institutional Structure

By Hansjörg HERR †

Abstract. The finance dominated type of capitalism that has developed from the late 1970s and early 1980s on finds its nucleus in the deregulation of the national and international financial system and the switch to a shareholder oriented corporate governance system. Other aspects such as labour market deregulations (including policies to weaken trade unions), the aim of completely free trade around the globe, increasing freedom and power of multinational companies, and privatisation of formerly state functions also belong to the new regime. This finance dominated economic regime seems to be exhausted. The reforms implemented after the subprime crisis and the Great Recession are not sufficient to overcome the deeply rooted problems of the existing system. Reforms to the financial system did not substantially affect the functioning of the shadow banking system and the basic structures of the financial system were not changed. Both, the international financial system as well as the shareholder oriented corporate governance system werelargely spared from reforms. Further labour market deregulations are still on the agenda of governments and international institutions. Policies to change income and wealth distribution are not on the political agenda. What is needed is a comprehensive reform agenda which searches for a new relationship between institutions, government policies, and markets.
Keywords. Financialisation, Financial market regulation, Demand management, Income distribution.
JEL. E12, E44, F33, G28, P10.

1. Introduction

One outcome of recent intensive research on the financial system[1] has shown again that capitalism cannot be understood as a system which endogenously tends to the Welfare of Nations, as Adam Smith (1776)[2] called it, or to a Pareto-optimal equilibrium in which nobody can gain without reducing the welfare of somebody else (Pareto, 1909). Adam Smith's invisible hand, which was assumed to guide markets to a Pareto-optimal solution, does not exist. Unregulated markets lead to cumulative instabilities and / or potentially long-term stagnation with high economic and social costs. Economic thinking during the last decades was dominated by the assumption that markets would endogenously tend to Pareto-optimal constellations. Within this thinking deregulated financial markets played acentral role. They were considered as efficient and of key importance for the efficiency and dynamism of an economy. Institutions were shaped in such a way as to give financial and other markets as much freedom as possible. Reality did not conform to these theoretical considerations. The

† Berlin School of Economics and Law Badensche Str. 52, 10825 Berlin, Germany.
☎. ******
✉. hansherr@hwr-berlin.de

deregulated type of capitalism, which has been allowed to develop since the late 1970s / early 1980s, led to more economic instability, more economic crises, more social injustice, and not – as was expected – to a greater economic success than that of the Golden Age capitalism in the decades after World War II.

Radical changes in regulation and economic policy are needed to reform the existing apparently exhausted economic system to allow for a more prosperous future development. After the subprime crisis, starting in the US in 2007, and the worldwide Great Recession in 2009/10, reform steps in all Western countries in the field of financial markets were triggered. In G20 meetings reforms of the financial system were discussed and recommended to all members. Indeed, a whole set of financial reforms in many different areas were implemented. It will be discussed below in some detail which reforms were realised and whether the implemented reforms were sufficient to create a more stable financial system. The main argument will be that in spite of many reforms the fundamental design of the financial system was not changed, nor was there a plan to change it. The financial system must still be considered as potentially unstable.

Reforms in other policy areas were rather meagre. Policy makers and their advisers obviously followed the idea that excesses in the financial system were responsible for the subprime crisis and the Great Recession and the elimination of these excesses would be sufficient to allow a new form of prosperous and sustainable development. We believe that such an approach is wrong. A much more comprehensive reform agenda which goes beyond financial markets must be realised to allow for a new prosperity.

In section 2, major policy conclusions which are needed to reform the economy are summarised. These conclusions serve as a benchmark to judge the actual reforms which were implemented as a response to the subprime crisis and the Great Recession. Section 3 deals with the financial system. This section is the longest because, as mentioned, the substantial regulatory and institutional changes after the Great Recession were heavily focused on the financial system. Both the shareholder value corporate governance system and massive changes towards a more unequal income distribution are closely related with financialisation. They are analysed in section 4. The need for active macroeconomic demand management and control of inflation and the desirable institutions for this are discussed in section 5. Section 6 concentrates on the international dimension of financialisation. Section 7 concludes.

2. Major policy conclusions to reform the economic system

The analysis of financialisation (see especially the contributions in Hein, Detzer & Dodig (2015) affects not only the financial system in a narrow sense, but has indeed much broader implications.[3] Financialisation is a central element of a more general economic regime which developed after the breakdown of the post-second-world-war regime, originally rooted in the New Deal of the 1930s. The new economic regime, born out of this crisis in the 1970s, gained crucial speed after the elections of Margret Thatcher in 1979 and Ronald Reagan in 1980 (in the UK and USA respectively). Other countries, for example Germany, followed the principles of the new regime later. In the early 2000s this new finance dominated regime had been implemented by all Western countries, plus a great number of countries in the Southern Hemisphere, albeit to differing extents.

The core foundations of the finance dominated regime are deregulation of the national financial system, a market fundamental globalisation with free capital flows and free trade, a change in the corporate governance system towards a shareholder value system, deregulation of labour markets, a weakening of trade

unions, and an increasing power of multinational corporations and financial institutions. Other reforms are added, such as the establishment of independent central banks with the main focus on low inflation or waves of privatisation of state-owned enterprises (including public utilities). Government redistribution policies in many countries were scaled down, for example taxes for high income earners and for capital income were substantially cut. These radical changes in regulatory policy, including the reshaping of institutions and targets of economic policy[4], were analysed by different economic approaches, for example the French Regulation School, the US based Social Structures of Accumulation approach, and the contributions by several Post-Keynesian authors (see for an overview Hein, Dodig & Budyldina, 2014). David Harvey (2005) defined these fundamental changes as a "conservative revolution" shaping a market radical type of capitalism.

One of the effects of the conservative revolution was a substantial increase in income inequality and unequal distribution of wealth, especially in Anglo-Saxon countries. High wealth concentration typically leads to a cumulative process of further increasing inequality, with increasing concentration of wealth leading to faster and faster wealth accumulation, as wealthy households on average save more than poor households (Piketty, 2014). At the same time the level of uncertainty in society increased substantially. This was caused by the explosion of precarious jobs, which reflect the change in labour market institutions. But it was also caused by an increase in the depth and frequency of asset price bubbles and economic downturns and recessions. Last but not least, the level of unemployment from the 1970s on rose above the level recorded in the decades after World War II. From a Post-Keynesian perspective increasing income inequality leads in the long run to low GDP growth or even stagnation. The argument is that increasing income inequality constrains consumption demand. High income households consume more than poor income households. This implies that on a macroeconomic level increasing income inequality leads to a falling marginal propensity to consume out of income. Sooner or later such a development will dampen investment demand, because the build-up of production capacities without sufficient final demand makes no sense. There is not much hope for the idea that an increasing wealth concentration will at a certain point start to stimulate sufficient consumption demand of the superrich to stop the demand dampening effect of inequality. Accumulation of wealth in a capitalist economy is not driven by intertemporal utility maximisation. If this would be the case, the superrich would have stopped their wealth accumulation long ago and would have started to consume much more. Accumulation of wealth is an end in itself, driven by the logic of a capitalist economy, and is followed independent of the calculus to consume in the future. One motivation to accumulate wealth might also be to gain higher status and increasing economic and political power. More wealth makes the owner of wealth more powerful than less wealth. Of course, other demand stimulating factors can compensate a lack of consumption demand. For example high government spending during a war can lead to a high demand or high export surpluses (see below).

Before the Great Recession the dampening effects of higher income inequality and other policies to depress demand were camouflaged by two developments. Firstly, households took more credits for consumption, including investment in residential homes. There was certainly no master plan behind this development. However, one has to see that the deregulation of the financial system as part of the conservative revolution and the increasing debt quotas of private households compensated for the stagnating demand out of income for some time. A great number of countries followed this type of credit-consumption driven growth regime before the Great Recession. Prime examples are the USA, Great Britain, or

Spain. Other countries tried to solve domestic demand problems via export-led mercantilist strategies. The prime example for such a strategy is Germany. Both constellations are not suitable to overcome a lack of demand. The credit-consumption driven growth regime ended in the subprime crisis and the Great Recession. It is very doubtful whether this strategy can be revitalised and a new wave of unsustainable credit driven growth can be triggered – leading to the next big crash. The export-led mercantilist strategy is only possible for some countries and implies a negative-sum game for the world economy (Hein & Dodig 2015).

The implications of this analysis are that a reform of the financial system – as the centre of instability – is urgently needed. But to reform the financial system is not enough. Even radical reforms of the financial system are not sufficient to establish a sustainable and prosperous economic development. An isolated reform of the financial system without implementing a completely new regime may reduce long-term growth as bubbles and credit expansions might be capped. To move towards a more stable and for the majority of people more beneficial type of economy, a whole package of deep structural reforms in different areas is required. Such reforms are only feasible if they are backed by a change in the political orientation of society, governments, and international institutions. A new 'revolution' is needed similar to the conservative revolution, with a new phase of institution building to create a new type of development model. Key dimensions of change would include the following elements:

"- Reregulating and downsizing of the financial sector,
- Redistribution of income (and wealth) from top to bottom and from capital to labour,
- Reorientation of macroeconomic policies towards stabilizing domestic demand at non-inflationary full employment levels,
- Recreation of international monetary and economic policy coordination." (Hein, 2015:17)

In the following sections we will discuss these different dimensions in more detail.

3. To make the financial system serve economic development and society

3.1. The endogenous instability of financial systems

Deregulated financial markets are endogenously unstable and tend to cumulative processes resulting in financial crisis. Several factors play together to make financial systems unstable.

Firstly, in asset markets there are no firm anchors for asset prices. Asset prices (for example share prices, prices for uncultivated land, or exchange rates) are not like normal product prices regulated by costs, or costs play only a very indirect and very long-term role to determine prices (for example in real estate, oil, or gold markets). Prices in these markets are driven by expectations. Expectations depend on a state of confidence or conventional judgment, as expressed by Keynes (1936; 1937), and not on fundamentals of a real sphere, as suggested by the neoclassical paradigm.[5] This implies that asset markets are characterised by waves of optimism, pessimism, and herding. For this reason, in deregulated asset markets all types of assets – stocks, residential property, currencies, gold, natural resources, etc. – show substantial phases of asset price inflations and deflations.

Secondly, such asset price bubbles are closely connected with credit expansion. It was Minsky (1975; 1982) who stressed that the rhythm of capitalist development is one of boom-bust phases. Boom phases are linked to credit expansion, asset price inflation and increasing leverage of firms, financial institutions, and private

households. During such periods of cumulative expansion the fragility of the financial system increases as both creditors' risk (the risk a credit cannot be paid back and collateral is insufficient) and debtors' risk (the risk that future uncertain cash flows are not sufficient to cover ex-ante fixed debt services) increase. Vital for such cumulative processes is that credit expansion is accommodated by the central bank. During an expansion period demand for central bank money endogenously increases via refinancing of commercial banks. It obviously makes a big difference whether credit expansions by the central bank are used to finance real activities in the economy or are used to finance speculative units in the economy within the shadow banking system. Of course, a central bank can stop unsustainable expansion phases by restrictive monetary policy. One of the problems in modern financial systems is that central banks have restricted themselves to only one instrument to fight against such destabilising processes, the refinancing interest rate in the money market. In the first decades after World War II central banks could use capital controls to regulate destabilising international capital flows to keep exchange rates stable and current account imbalances small. Lending and deposit rates of banks were in many countries directly controlled by the central bank; non-bank financial institutions were unimportant in some of the countries (continental Europe or Japan) or the relationship between commercial banks and the rest of the financial system was comprehensively restricted; and different domestic policy instruments existed to influence credit allocation and with it the investment dynamic in the economy. For example, residential property markets were comprehensively regulated (Evans & Herr, 2015). Central banks restricted in their policy instruments are almost unable to stop for example destabilising international boom-bust cycles, bubbles in residential property markets, or unsustainable expansions of consumption credits. And if they try to do this it becomes extremely costly in terms ofreal GDP growth and employment. To stop a real estate bubble, to give an example, enormous interest rate hikes may be necessary which in turn may substantially reduce output and employment and push the economy below its inflation target.

Thirdly, boom phases and credit expansion are usually connected with high investment in the real economy, high consumption demand, high GDP growth rates, and falling unemployment rates. Furthermore, boom phases are typically connected with over optimism from entrepreneurs investing in new machines etc., as well as banks, other financial institutions, and private wealth owners.

Boom phases have the potential for destabilising cumulative processes leading to fast economic growth with the danger of inflationary development, asset price bubbles, and fragilities in the financial system. Objective feedback mechanisms are based on increasing asset prices and high profits in the enterprise sector. High stock market, real estate, or other asset prices trigger higher consumption via a positive wealth effect and further stimulate real GDP growth. More dangerous is the increase of the value of collateral which stimulates further credit expansion as the risks of debtors and creditors seem to decrease. High profits based on high demand typically stimulate further investment. One of the strongest subjective feedback mechanisms is herding, which is well known in behavioural finance, as well as over-confidence and wishful thinking by economic agents. Storytelling by analysts and the business press to justify high asset prices and information cascades are other arguments to explain herding behaviour of financial institutions, firms, and private wealth owners (Hirshleifer & Teoh, 2003; Shiller, 2005). Many economists from different perspectives have analysed these destabilising processes (for an overview see Detzer & Herr, 2015a).

Similar to the start of a boom phase, many factors can be responsible for its end. One possibility is that the booming economy leads to a demand and wage cost

driven inflationary process, which is sooner or later stopped by monetary policy. Expectations of economic agents may change for many reasons. In a fragile constellation of the economy even otherwise unimportant events can lead to a sudden erosion of conventional judgement.[6] The most important objective feedback factor in this phase is the fall in asset prices which burdens balance sheets. A deflation in asset prices destroys equity, especially if equity was inflated before in the boom phase. Speculators expecting further increasing asset prices are not able to pay back their credits. Last but not least, the value of collateral shrinks. It is obvious that an asset price deflation in an environment of high leverages leads quickly to liquidity problems and to non-performing loans and solvency problems. Balance sheets of firms and private wealth owners suffer primarily from a shrinking value of assets. Financial institutions suffer in addition from non-performing loans. Low investment and consumption demand, low or negative GDP and income growth, and increasing unemployment all add to the accumulation of non-performing loans. As in the boom phase the most important subjective feedback mechanism is herding. In the bust phase the herding process is typically much faster and stronger than in the boom phase as asset markets can be gripped by panic. Hoarding of liquidity of all economic agents and radical credit rationing by financial institutions becomes an important ingredient of a cumulative bust phase. The general shortage of liquidity triggers fire sales of assets and speeds up the asset deflation process. Bust phases can lead to long-term stagnation or even cumulative deflationary developments. High non-performing loans can burden the economy and prevent a new expansion. Additionally, a depressed state of confidence can prevent a recovery of investment and consumption demand.

Boom-bust cycles belong to a capitalist development. However, they can unfold their dangerous potential only when financial markets are not sufficiently regulated. The 1950s and 1960s, for example, showed cyclical developments but managed – in spite of high GDP growth – to avoid dangerous bubbles and financial crises. From the perspective of the Keynesian paradigm it is obvious that a deregulated financial system leads to instability (see Minsky, 1975). The instability of deregulated financial markets became reality after the 1970s: for example, the internet bubble in the 1990s, the real estate and stock market bubbles in the 2000s, and the Great Recession in 2008/09 (with the following period of low growth). In addition, there were many boom-bust cycles and currency crises mainly found in emerging markets (Latin American crisis in the 1980s, Mexican crisis in 1994, Asian crisis in 1997, Russian crisis in 1998, crisis in Argentina, Turkey, and other countries in 2001/02, crisis in the Baltic countries, in Hungary, Iceland, and other countries in 2008/10).

3.2. The financial reforms after the Great Recession

In this section the financial reforms after the subprime crisis and the Great Recession are discussed in detail. We begin with the general philosophy of the reforms before details are discussed.[7]

3.2.1. The general philosophy of the reforms

The subprime crisis and its repercussion on the global financial system and the world economy convinced governments and supervisors across the world that financial market deregulation had gone too far. Steps were taken to re-regulate the financial system. The general orientation of the finance reforms was decided at the G20-meeting in November 2008 in Washington D.C. under the weight of the financial crisis and the collapse of Lehman Brothers (in September of the same year), the fourth biggest US investment bank at the time. The strategy was: "We will make regulatory regimes more effective over the economic cycle, while ensuring that regulation is efficient, does not stifle innovation, and encourages expanding trade in financial products and services" (G20, 2008:3). The G20-

meeting one year later in London strengthened this philosophy of reforms: "Financial markets will remain global and interconnected, while financial innovation will continue to play an important role to foster economic efficiency" (G20, 2009: v). To prevent an erosion of global financial markets and further strengthen them was a major concern of the G20 and international institutions. This has to be viewed against the backdrop of the management of the financial crisis after 2007, where the bail-out of banks and in some cases liquidation fell back on the national level for solutions, without much international cooperation.

At the same meeting in 2009 it was further decided to transform the Financial Stability Forum (FSF), which was founded in 1999 to promote international financial stability and to coordinate cooperation in financial market supervision, into the Financial Stability Board (FSB). The FSF was located at the Bank of International Settlement in Basel and had finance ministers and central bankers of the important Western industrial countries as well as important international institutions in the field as members. The FSB remained in Basel and now includes all G20-countries. It was given the task to coordinate and supervise the implementation of G20-decisions, which were seen as needed to make the financial system more resilient. In a report to the G20 at the end of 2014 the FSB (2014:1) wrote: "The job of agreeing measures to fix the fault lines that caused the crisis is now substantially complete." The FSB now concentrates on addressing new and constantly evolving risks and vulnerabilities in the international financial system. Work of the FSB is closely coordinated with the Basel Committee on Banking Supervision (BCBS) which is also located at the Bank for International Settlement and was founded in 1974. The BCBS has been a trendsetter for banking supervision since its creation.

3.2.2. Key reforms in detail

In the following paragraphs the major changes in financial market regulation will be sketched, without going into country specific details. Rules recommended by the BCBS played a paramount role in the regulation of banks and were a guideline for national legislation.

a) Capital holding of banks is considered as a cornerstone of banking regulation. In the first Basel Accord (Basel I) in 1988 it was agreed upon that banks should keep 8% of their risk weighted assetsas capital to cover their credit risks (risks of non-payment).[8] For market risks (risks of price changes in assets held) and operational risks (risks connected with the operation of the firm) no equity holding was needed. In Basel I in the so called standard approach four types of loans were differentiated and received different weightings. Sovereign debt in domestic currency had a weight of 0%, short-term bank credits 20%, residential mortgage credits 50%, and long-term other debt 100%. This led to certain distortions, for example banks chose to give short-term credits to save capital or to sell relatively safe credits in order to keep those with a higher risk (and therefore higher rate of return). Capital holding of banks was differentiated into different so called 'tiers'. Part of needed capital had to be held in Tier I, or core capital which existed of common stocks and retained earnings. And part was allowed to be held in Tier II, supplementary capital with a lower quality, for example debt convertible into equity, revaluation reserves from fixed assets or general provisions.

In 1996 (brought into effect in 1998) an amendment to the 1988 Basel Accord introduced capital holding for market risks. This was considered to be needed as banks increasingly entered the business of proprietary trading. A revolution in the calculation of equity holding took place because banks could use risk models to calculate the market risk and consequently capital holding. In 2004 Basel II (brought into effect end of 2006) risk models became even more important for the determination of banks capital holdings. Banks were now also allowed to

determine credit risk with the help of internal risk models. While big banks used their own risk models, for smaller banks a new standard approach was introduced, which more heavily relied on the risk assessment of rating agencies. Basel II also introduced capital holding for operational risks. These reforms were introduced under heavy pressure from the financial lobby. The aim was not only to take into account new developments in finance but to reduce capital holding and increase returns on equity (Helwig, 2008). Basel II and the earlier amendment had two negative effects. Firstly, it was used by banks to reduce their capital in relation to their asset holdings substantially. Secondly, risk models were based on historical data and, unsurprisingly, had a strong pro-cyclical effect. For example, default risks during the real estate booms in many countries before the outbreak of the subprime crisis were considered to be very low.

Reforming Basel II became one of the priorities of the financial market reforms after the Great Recession. The first version of Basel III was published in late 2009, but in the coming years several revisions took place. The most important changes found within Basel III (some to be realised as late as 2019) are: Firstly, the quantity and quality of capital holding was improved. In real terms, the definition of what constitutes capital in the different tiers became stricter and the percentage of capital as a percentage of assets increased compared to Basel II. In addition, a separate counter-cyclical buffer was introduced which allows regulators to increase commercial bank's minimumcapital to risk weighted assetsby up to 2.5% in a discretionary way. Secondly, in spite of the fundamental flaws of risk models their use was not given up in calculating minimum capital holding. However, in Basel III several regulations limit the negative effects of risk models. A leverage ratio was recommended. Banks are expected to keep 3% of their total assets - including both on and off-balance sheet assets – as capital. This implies that bank's assets are not allowed to exceed 33 times the bank's capital, independent of risk models. In addition, two liquidity ratios also independent of risk models were introduced.[9] Thirdly, already in 2009 capital requirements for risks that were not adequately captured in Basel II were revised, for example assets in the trading book, securitisation activities, or exposure to other financial institutions. In the European Union (EU), for example, the Basel III framework was not completely adopted. The financial industry lobbies against a strict leverage ratio. Also the counter party risk framework recommended by BCBS is not implemented.[10]

b) *Too big to fail* is a second key area of financial reforms (FSB, 2011a; 2014a; Tonveronachi, 2015:299f). The approach followed by the reform attempts was that systemic financial crises can be avoided, including fiscal costs, when all banks can be liquidated without negative external effects for the rest of the financial system and the economy as a whole. The aim of reformers in this area was to search for solutions which allow systemically important banks to survive in a crisis and, if not possible, to have an organised liquidation process in place. Systemically relevant financial institutions should be subject to higher capital and liquidity requirements, more intensive supervision, and effective resolution regimes. These institutions should "have sufficient capacity to absorb losses, both before and during resolution" (FSB, 2014a:4). In case of problems, the owners of a bank along with unsecured and uninsured creditors should suffer first, before external funds are used to save the bank. Deposits should in all cases be protected. The FSB recommended a substantially higher risk weighted capital holding for systematically important banks of between 1% and 2.5% of tier one capitaland a much higher unweighted leverage ratio of 6%. The so-called total loss-absorbing capacity of banks should be at least between 16% and 20% of risk weighted assets. Systematically important institutions have to develop a recovery and resolution plan which has to be assessed by supervisory authoritiesand has to be

updatedregularly. This should also help to organise international cooperation in case an internationally important bank breaks down. Last but not least, it is assumed that a single bank in spite of these regulations may not have the means to resolve in an orderly manner. For this purpose a resolution fund financed by the financial sector has to be built up to help institutions if needed. In the European Banking Union, recommendations of the FSB were more or less taken up. The size of the fund for the external help given to banks is 1% of insured deposits of all credit institutions, however this must be considered as relatively small.

c) Some *structural reforms* took place (Tonveronachi, 2015:304f). The most far-reaching is the Dodd-Frank Wall Street Reform and Consumer Protection Act in the USA, implemented in 2010. The Act includes the so called Volcker rule which restricts proprietary trading and close connections between commercial banks and hedge and other non-bank financial institutions. With his influential proposal, which pushed for the Act, Paul Volcker, former president of the Federal Reserve, followed the tradition of the Glass-Steagall Act from 1933 which enforced a strict separation between commercial and investment banking. The Glass-Steagall Act provided the US a stable framework for its economic development after World War II, but was stepwise replaced from the 1970s on by lax financial rules and supervision. However, Volcker's recommendation was substantially weakened. As a consequence the Dodd-Frank Act only enforces a soft separation between commercial banking and investment banking. In principle, commercial banks are allowed to take over investment banking functions when they are considered to be economically useful. In practice so-called positive market making activities are difficult to separate from types of proprietary trading that are considered dangerous. Also credit relations between commercial banks and the shadow banking sector are not cut. And there is no mechanism to control financial innovations which may be especially created to circumvent regulations. Overall the act allows a lot of discretionary decisions by supervisors and a lot of room for interpretation. Even softer is the Volcker style rule that was established as UK law. The same can be said for the case of the EU.

d) A relatively large number of smaller reforms in the financial system were implemented. For example, the Financial Stability Forum argued that "high short-term profits led to generous bonus payments to employees without adequate regard to the longer-term risks they imposed on their firms. These perverse incentives amplified the excessive risk-taking" (FSF, 2009:1). More or less in line with the FSF's argument, in the EU the Capital Requirements Directive IV regulated compensations of managers in the finance industry. In the centre of the regulation is the so called 100/200 per cent rule. According to this rule bonuses are not allowed to exceed 100% of an individual's fixed remuneration. Only a qualified majority of shareholders can increase the percentage to a maximum of 200%. Some countries introduced stricter compensation regulations.

e) One of the key factors for financial instability is the shadow financial system which grew to a large segment of the financial system in many countries. The main growth driver of the shadow financial system is its low level of regulation, making it attractive to transfer activities from the commercial banking system to the shadow financial system. In 2011 the assets of the shadow financial system in the USA were of a similar size to those of the commercial banking system. In the European Monetary Union (EMU) the asset size of the shadow financial institutions is about half the size of the commercial banking system (Bakk-Simon et al., 2012:5). There are big differences between countries. In terms of per cent of GDP at the end of 2014 the shadow banking system in the US was calculated to be 82%, in the UK 90%, and below 10% of GDP in countries like Turkey, Argentina, Saudi Arabia, Russia, or Indonesia. In countries with offshore centre function the

percentage can be much higher, for example in Switzerland the shadow banking system has 147% of GDP, in Ireland even 1190%. After the Great Recession the shadow banking system started to grow again (FSB, 2015). The philosophy to regulate the shadow financial system is not to regulate shadow entities directly, but indirectly through regulating the interaction between commercial banks and the shadow financial system. This is considered an appropriate way not to cut the efficiency and dynamic of the shadow financial system which is considered important for growth and productivity increase in economies. This is similar to trusting the cat to keep the cream. The shadow financial system must be considered as a key area which led to the subprime crisis and the Great Recession. A light regulation of this sector must be considered as completely misled.

The shadow financial system is comprised of a number of diverse sectors. In the discussion of the different sectors we follow the five worksteams which were established by the FSB to develop rules for the shadow financial system (for the following paragraphs see Bankenverband, 2014; FSB, 2011b).

The first worksteam discusses banks' interactions with shadow banking entities. Four approaches were taken (currently only partly realised). Firstly, banks were forced to consolidate balance sheets to include off-balance-sheet activities. Secondly, prudential limits to banks' large exposure to shadow entities were implemented. For example, in the US the exposure of banks to shadow entities holding assets of more than 500 billion US-dollars is not allowed to exceed 10% of their assets. Thirdly, higher capital requirements were established for banks when lending to shadow entities or securitising and selling credits. Fourthly, transparency was increased. For example, banks have to report off-balance sheet activities and exposures to shadow entities to supervisors.

The second worksteam focuses on money market funds, which over the last few decades increased significantly in size and play an important role in the money market.[11] Money market funds are a close substitute to banks and were first founded in the USA in 1971 to bypass US-Regulation Q, a regulation that prohibited interest rates on demand deposits. This explains why investors buy shares of such funds and most of the funds buy back shares any time at a constant net value. Money market funds invest their money in short-term assets, usually not longer than one year, and realise a return for investors that corresponds roughly to the money market interest rate. In substance, shares of money market funds are very close substitutes to bank deposits, while money market funds themselves can take over bank functions, however without access to central bank money. During the financial crisis money market funds had to be bailed out by central banks, as investors in situations of high uncertainty chose to withdraw their money and keep it in better insured bank deposits. Regulations of these funds go in the direction to restrict their maturity transformation and the type of assets they are allowed to invest in. The requirement of a certain liquidity holding, loosening the right of investors to withdraw their investment immediately, and giving up the principle to guarantee a nominally fixed net value of withdrawals are also in debate. Due to lobbying of financial institutions the last two points are not likely to be realised, as they would destroy the specific characteristics of investment in these funds that make them a close substitute for bank deposits.

The third worksteam discusses other shadow banking entities. This sector is made up by a huge number of different types of institutions (investment funds, private equity funds, hedge funds, securitisation entities, trust companies, etc.) each with differing business models. A finance company can quickly change its legal form and can permanently produce new innovation to circumvent regulations. In addition there is no agreement among different jurisdictions as to which extent these shadow institutions should be regulated. It should be of no surprise that even

the Association of German Banks writes about the regulation of these entities: "Yet this task has proved remarkably difficult" (Bankenverband, 2014:23). The FSB recommended that supervision should focus on the functions that shadow institutions take up and regulate them accordingly. The key policies in this field are to create more transparency by forcing shadow entities to give information about their activities to supervisors. In addition, managers, for example those of hedge funds, must satisfy certain qualifications in the field of risk and liquidity management. If supervisors judge leverages as posing a systemic risk they can impose restrictions. In substance no rules comparable to banking supervision are stipulated – not even light ones. The EU followed to a certain extent this methodology. In the US a different route was taken. The Dodd-Frank Act gave the Financial Stability Oversight Council the responsibility and power to supervise the shadow financial system and to isolate systemically important financial institutions. These could be forced by supervisors to follow the same supervision rules as banks. So far only a small number of institutions were classified as systemically important, those include AIG, GE Capital, and Prudential Financial. Smaller institutions remain largely unregulated.

The fourth worksteam deals with securitisation. The general approach here is to enforce originators or sponsors (organisers of securitisation) to keep a certain percentage of securitised assets ontheir balance sheets. The retention rate in the EU and US of 5% is very low. In addition, the construction of financial products has to be made transparent for a buyer of such products. Especially the risk involved in complex financial products should be transparent. Furthermore, rating agencies have to disclose their method of risk calculation for financial assets.

The fifth and last worksteam concentrates on *repurchase agreements (repos) and security markets*. Repo (sale with repurchase agreement) and security markets are very important for liquidity and investment purposes of banks *and* shadow banking entities. In big anonymous markets credits between financial institutions work, in contrast to traditional smaller and sometimes oligopolistic money markets in the past, on the basis of collaterals. Repurchase agreements, which are mostly short-term, satisfy this need. However, several risks are involved in these markets. Based on the pro-cyclical development of asset prices these markets add to pro-cyclical liquidity and credit expansion. As important, in periods of falling asset prices and/or abreakdown of confidence in the liquidity or solvency of counterparties these markets can suddenly dry up, producing deep repercussions for the whole financial system. Little has been done to regulate these markets. However, financial entities are forced to report the volume of repos. Currently it is also discussed whether to enforce a minimum haircut, meaning to enforce a minimum difference between the market value of an asset and its value as collateral. Rehypothecation plays a big role in shadow financial market activities. It means that the same collateral is used several times to secure differentloans. It has been estimated that in the US before the outbreak of the subprime crisis around half the shadow financial system activities used rehypothecation and on average rehypothecation had a factor of four, meaning that the same asset is used four times as collateral. Moreover most of these transactions were carried out in London where there was no cap on rehypothecation (Singh & Aitken, 2010). Until today rehypothecation is not strictly controlled.

The last area of concern was the market for derivatives. Some types of derivatives were always traded in organised derivative exchange markets (or electronic trading platforms). These exchanges take over important functions. For example, they clear positions, take over counterparty risks, or lead to a standardisation of contracts. Entities that adopt risk are forced to keep deposits at the exchange or provide collateral of a defined quality. However, most derivatives

before 2007 were traded over the counter (OTC) outside of organised exchanges. The volume of OTC trade stagnated during the years after the subprime crisis, however, at the end of June 2015 the gross market value of outstanding OTC derivatives was $15.5 trillion US-dollar. Overall the market has a value comparable with the US GDP in 2015 (BIS, 2015). These OTC markets were largely unregulated. For example, there was no minimum of cash or collateral holding by the risk takers operating within the derivative markets. This implies, for example, that a speculative economic unit could take over unlimited risks with no or almost no own capital. In 2009 the G20 leaders agreed that all standardised OTC derivative contracts should be traded on exchanges which take over the functions mentioned above. Non-centrally cleared contracts should become subject to capital requirements. In addition OTC contracts should be reported to supervisors. Regulations in the EU and US largely followed the G20 recommendations. However, there are many exceptions and loopholes which weaken these regulations.[12] For example, in credit default swap markets the share of outstanding contracts cleared through central counterparties was only 31% in the first half of 2015 (BIS, 2015).

3.2.3. Assessment of financial market reforms

The reforms recommended by the G20, the FSB, and the BCBS, as well as the reforms implemented after 2007, did not fundamentally change the financial system. The logic of financialisation has not been stopped, nor was it the aim for it to be stopped. The general approach of financial market reforms has been the assumption that before the subprime crisis financial regulation had some short-comings and led to some excesses which had to be repaired, but not that the basic structure of the national and global financial systems should be changed. The assumption of the efficiency of financial markets plus the positive role of financial innovation (in a largely unregulated financial system) for both economic growth and in producing a dynamic economy still form the basis of financial market reforms.

This becomes especially clear when one looks at the regulation of the shadow financial system and financial innovation. Shadow financial institutions are understood as a key element of a vibrant economy. Controls on the shadow financial system by G20, FSB and national governments followed the philosophy to improve the control of commercial banks including the relations between commercial banks and shadow financial institutions. Direct regulations of shadow financial institutions are extremely weak, covering in most cases only some transparency rules and the demand for minimum qualifications for managers. In addition, regulators in the United States were given a lot of discretionary room. This leaves a lot of room for both lobbying from the financial sector and political pressure. No control mechanisms were implemented to control financial innovations. And this in spite of the fact that financial innovations in many cases have been created to circumvent financial market regulation, avoid tax payments, and reduce transparency with the aim of rent-seeking by financial institutions (Stiglitz, 2012: 16). In the whole reform agenda there is no policy which cuts down the role and size of the financial system in general and especially of the shadow financial system. In addition, there is no mechanism to control financial innovation and reduce the complexity of the system.

However, governments and international institutions had the strong desire to find regulations which would allow the liquidation of financial institutions without the huge financial costs which were connected with the bailout of financial institutions during and after the subprime crisis. This explains why highercapital requirements and policies to solve the too-big-to-fail problem were the focus for reformers. A new political balance was created in which the protection of

government budgets has a much larger focus then before, while simultaneously leaving the foundations of the financial system unaltered (Tonveronachi, 2015:294).

There is the danger that even more financial transactions will be shifted from the commercial banking system, a system which now has to follow stricter regulations, to the shadow financial system, which remained largely unregulated. There are no provisions which could prevent such a regulatory arbitrage. The International Monetary Fund (IMF) (2014:65) writes: "The current financial environment in advanced economies remains conducive to further growth in shadow banking. Many indications there point to the migration of some activities – such as lending to firms – from traditional banks to the nonbank sector." In addition, national regulations, especially of the shadow financial system, remain different across different jurisdictions and some countries try to defend or develop their position as financial centres with lax regulations. Regulatory arbitrage is the result of such differences in national legislation. In some countries, first of all in the US, relations between the commercial banking sector and the shadow financial sector are restricted. But even in the US there still remains too much room, so that commercial banks are able to feed the shadow financial sector with credit and become negatively affected by crises of shadow financial institutions. The possibility that credit creation refinanced by central banks is used for speculative purposes is not eliminated. In the UK or in Europe regulation between the commercial banks and the shadow financial system are even weaker.

The FSB (2014) argues in a paper titled Financial Reforms: Completing the Job and Looking Ahead: "The job of agreeing measures to fix the faulty lines is substantially complete" (FSB, 2014:2). In this context the too-big-to-fail problem plays a big role and is solved according to the FSB. "The endorsement by Leaders of proposals to end Too Big To Fail in the banking sector will be a watershed" (FSB, 2014:1). Such a statement seems to be overly optimistic. Banks were forced to keep higher capital buffers and in the US a small number of large-scale systemically important institutions must follow stricter rules. Also banks have to develop 'last wills', how to be liquidated in case of insolvency. Funds financed by the financial sector are built-up and designed to step in, in case the capital of a bank is not sufficient. The argument that the financial system is safe when all big banks individually keep higher equity and banks have a last will on how to be liquidated is based on microeconomic thinking. Such a microeconomic perspective does not take into account that equity and last wills are of limited value when in a systemic crisis many big banks come into problems, as for example during the subprime crisis. Yet in a systemic crisis it is still more than likely that governments will again have to save financial institutions. In a systemic crisis small banks also create problems, where a compounding effect is produced though multiple small banks simultaneously developing problems.

It is not only an economic problem that the backbone of the international banking system is made up of a relatively small number of internationally active very large banks. Following the BCBS methodology in 2011 the number of internationally systemic important banks was as small as 29 (FSB, 2011). This implies an incredible concentration of economic and political power in a few hands. Such huge banks are economically not necessary. There are economies of scale and scope in banking, but these are limited (Detzer et al., 2013: chapter 9). One could argue that such a small number of banks could potentially stabilise the international financial system through oligopolistic control, comparable with the big London based banks during the Gold Standard before World War I, a situation that created an implicit cartel to stabilise financial markets and even the international financial system at that time (Polanyi, 1944). However, the banks and

their general financial environment today are not comparable with the oligopoly of a handful banks in London during the Gold Standard.

One of the vital links between the financial system and economic development in general is corporate governance of big companies. In the 1980s financialisation turned corporate governance, especially in Anglo-Saxon countries, from a stakeholder system to a shareholder corporate governance system with deep consequences for income distribution and investment behaviour. This point is not even mentioned in reform agendas of the G20, FSB, and national governments.

Probably the biggest shortcoming of financial market regulations after the subprime crisis is a complete lack to challenge the financial instabilities caused in global financial markets. There is complete silence in G20- or FSB-publications in the field of exchange rate regimes, international capital flows, and current account imbalances. Not even small reforms are undertaken or planned in these areas. This happens in spite of the fact that global imbalances are one of the causes of economic instability and a great number of financial crises. International financial markets were one of the key channels through which the US subprime crisis of 2007 was spread across the world and would have, without heavy government intervention, caused the meltdown of the global financial system. And there is evidence that completely free capital flows do not in any way contribute to positive economic development (for an overview see Stiglitz, 2004; Rodrik, 1998). In the next subsection it is shortly discussed which measures are needed to reform financial systems in a more fundamental way.

3.2.4. Needed financial market reform

Deeper financial market reforms have to fulfil different purposes. Financial markets should not become a source of economic instability. This does not mean that good regulations completely avoid mistakes of financial institutions and misinvestment can be avoided. Financial institutions will make mistakes, as do all institutions. However, if this happens they should be sanctioned and, following market rules, owners should bear the losses. If necessary, nationalisation orliquidation of financial institutions should not be a taboo. *Systemic* financial crises have to be avoided. They are harmful for economic development and costly for public households or whole groups in society, for example the unemployed in a financial crisis, which are not responsible for the crises. The decades after World War II under the umbrella of the Bretton Woods system is a period that provides an example of such a stable regime without systemic crises. From the perspective of current mainstream thinking the Bretton Woods area was an area of financial repression which can only lead, in contrast to the historical reality, to bad economic and social results. Secondly, the financial system should stimulate economic development, including innovations in the real economy and small- and medium-sized companies. For this purpose sufficient credit and low interest rates are needed. The decades after World War II illustrate that a 'boring' financial system is able to support a prosperous economic development. Thirdly, the financial system has to provide safe assets for households and firms to be able to transfer wealth from the present into the future. Real rates of return should be positive, but there is no need for assets to create high returns and speculative gains. Reforms of the financial system in a more narrow sense should include the following elements (see also Dullien at al., 2011f).

A key element of any reform of the financial system must be a clear separation between commercial banks and the speculative and risk-oriented non-bank financial institutions *or* a regulation of the shadow financial system similar to the banking system. For the first option, the USA under the Glass-Steagall Act from the 1930s as part of the New Deal is the classical example. The second option correspondents to continental Europe or Japan after World War II when investment

banking in these countries played no role. Given the existing structure of the financial system for most countries, the first option seems to be more realistic. In any case the constellation has to be stopped that allows money creation by the central bank to be used by commercial banks to finance poorly regulated non-bank-financial institutions which follow speculative and risky strategies. Of course commercial banks should be controlled in a way to avoid proprietary trading. State-owned and collectively owned financial institutions could add to the stability of a financial system. A financial system along these lines implies three elements:

a) Proprietary trading is completely forbidden for commercial banks.
b) Commercial banks are not allowed to own non-bank financial institutions and vice versa. Also holding models of commercial banks and other financial institutions should not be allowed. This would also help to solve another problem, that of institutions that are too big to fail.
c) Commercial banks are not allowed to give any credit to non-bank financial institutions.

Such a regulation would mean that non-bank financial institutions have to tap the non-bank sector, especially private households, to get funds for their activities. This would reduce the leverage and the size of the shadow financial system substantially. Such a system would still allow sufficient venture capital for start-ups and other risky activities, but the sector would be small. Non-bank financial institutions under such a regulation could default without the danger of a systemic financial crisis and the need for government interventions. Cutting the links between commercial banks and non-bank financial institutions would lead the latter to shrink in size and importance.

Financing of the real estate sector, which is of key importance for the welfare of a society, has to again be especially regulated, as was the case in all western countries after World War II. This would stabilise the financial system and reduce its pro-cyclical character (Cardarelli, Igan & Rebucci, 2008). For example, too high credits going to the real estate sector should be curbed by higher equity holding for real estate credits, lower loan-to-value ratios, etc. In case of insufficient housing space for poorer groups in society government subsidised credits to building societies or private households can help to improve the situation. A governmentally organized rental market may also be a substitute for ownership.

All financial institutions should be made transparent and regulated, from hedge funds to private equity funds and traditional investment banks. Regulation means that such institutions inform the public about their activities, that they must keep a certain amount of equity, that supervision agencies control the business model of such institutions, etc. Only such a policy would eradicate the dangerous elements of the shadow financial system.

The too-big-to-fail problem has to be solved by making financial institutions smaller.[13] As mentioned above, economies of scale and scope of very big banks are limited. Therefore efficiency would not suffer from restricting the size of banks. Smaller banks would make it easier to unwind financial institutions. It would also reduce the concentration of power into single institutions.

Developments towards systemic financial crises in many cases cannot be detected by supervising single financial institutions. A macro-prudential supervision is needed to detect unsustainable developments in certain economic areas, for example the real estate sector or foreign indebtedness in foreign currency, or the financial system in general. An institution which unites supervision agencies, central banks, and independent experts could be a model (see ECB, 2014:135ff). The European Systemic Risk Board (ESRB), hosted and supported by the European Central Bank (ECB), was established in late 2010 is going in the right direction.

Securitisation can fulfil important functions of transferring risks to agents which are able to carry the risk. But it involves also the problem of moral hazard as the originator of a loan can transfer the credit risk to another agent. The solution is that the originator of loans must be forced to keep substantial parts of the loans, including a large part of the first loss piece [14] in its own books. However, securitisation should be limited to the extent that commercial banks should be required in their core activities to follow the traditional business model of a bank, that is making a loan and keeping it until it is paid back. Also, to create transparency only one type of credit should be securitised. Any investor can then mix his portfolio according to her or his own needs. Furthermore, a securitised debt should only be allowed to be repacked once.

Rehypothecation should be strictly limited. Money market funds fulfil the same functions as banks and should be regulated like commercial banks.

Derivatives should be traded only in regulated and controlled markets. Derivatives have to be standardised, checked and approved by a state-run supervisoryagency before they are allowed to be used. By means of such measures the risk of derivatives would not disappear and they could further take over useful functions, but they would be made more transparent. Such measures would reduce the economically harmful complexity of the market and reduce tax or other types of regulatory arbitrage. There are derivative markets where only certain agents with special licences should take part. For example, market participants in future markets for oil, food, or other natural resources should have something to do with these markets directly and not only use it for speculation (Evans & Herr, 2015). Equity holding of financial institutions could be substantially increased. Basel III recommendations cautiously go in this direction (see above). Admati Anat & Martin Hellwig (2013)[15] recommend equity holding of 25% of banks assets as a big buffer against bank losses. Independently whether one follows this recommendation a substantially higher equity holding of banks than in Basel III recommended is useful. Also, such high equity holding does not cut credit supply as healthy banks should have no problem to issue new shares to continue and expand their business. Also the role of risk models in determining equity holding of financial institutions should be reduced. One method could be a standard approach with fixed ratios of equity holding according to the type of credits - a bit more differentiated than in Basel I - and a limited role of risk models for equity holding.Also the introduction of a relatively high leverage ratio independent of the risks of banks' assets would be useful.

The role of rating agencies should be reduced. This automatically happens when all financial products are standardised, checked and approved by a supervisory body and banks equity holding depends at least to a large extent on a standard approach. The costs of rating should be borne by the buyer of financial products and not by the seller, as is still normal practice today. Finally, rating agencies should be supervised by government institutions. Public rating agencies could break the cartel that currently exists, consisting of the three dominant global private rating agencies.[16]

Tax policy can reduce asset price bubbles by strictly taxing speculative gains. Regulations to force investors to keep assets for a certain period of time can also reduce the incentive to speculate. For example, if a private equity firm were forced to hold a company for at least five years, the incentive to pursue an unfriendly takeover of a company, cut it into pieces and sell the pieces for a quick profit would be reduced. Also, taxing high income and especially bonus payments as well as remuneration in the form of shares can change the incentives of management in financial institutions.

4. Corporate governance and income distribution

Financialisation has been not restricted to the financial sector. It is part of a comprehensive change of the economy and society as a whole. Two developments are closely connected to the fundamental changes during the last decades. The first one is radical change in corporate governance especially in Anglo-Saxon countries. The second is a change in income distribution which affected all countries, with the Anglo-Saxon countries and some developing countries being particularly affected (Piketty, 2014).

4.1. From the stakeholder to the shareholder corporate governance system

A major transmission mechanism of financial power and its inherent 'logic' into the corporate sector is the shareholder-value approach, developed in the 1980s alongside the changes to the financial markets. Pioneers for the new corporate governance philosophy were Jack Welch, CEO of General Electric, and Alfred Rappaport (1999). Under the previous stakeholder system, a company's management had to always search for a certain compromise between the different stake holders in the company (in particular; owners, employees and their representation trade unions, creditors, customers, and the local community where the company is located). Further, under a stakeholder system a company would make profits, but it would not systematically try to increase profits with all means available. Corporate management frameworks based on shareholder-value logic are supposed to increase profits whenever possible. In order to create an optimum incentive structure in the interest of owners, the management is rewarded in part by share options and bonus payments based on profits and/or the development of share prices. The shareholder-value approach has led to obscenely high management salaries. In the United States, where the dominance of the financial sector has gone furthest, management pay in relation to that of the average worker has risen from 30:1 in the 1970s to as much as 500:1 today. These figures show that the original aim of shareholder value, which was to subject management solely to the interests of the owners, has had only limited success. Instead, management has been able to assert its own interests and enrich itself at the expense of the shareholders and workers (Philippon & Resheff, 2009; Herr, 2010).

In any case the shareholder value system has pushed up profit rates or has at least prevented their fall. Institutional investors, private equity funds, and other owners pressed management to increase profits whereas the bonus system induced management to follow this demand. The increase in the profit share in many Western countries after the 1970s is at least partly founded in the switch to the shareholder corporate governance system.

The shareholder value system also triggered other developments. It led to a generally short-term orientation of management (even criticised by Rappaport, 2005). To increase profits within a short-term horizon is in the interest of owners which look for high returns in the short-term and in the interest of management which is in office only for a certain period of time. Other agents in a company with more long-term horizons, especially employees and the local community became disempowered. These developments must be considered as harmful for the long-term investment dynamic and the long-term development of economies. Two effects are important here. Firstly, with financialisation the pressure to distribute profits via dividend payments increases substantially. This decreased retained profits which before the 1970s were important to finance investment and reduce the indebtedness of companies. In addition, even companies with high profits did not automatically invest. Before the 1970s there was a relatively close link between high current profits and the incentive to investment, but this link broke. High

profits no longer automatically lead to high investment. From a theoretical perspective this possibility is not a surprise.[17] But it is worthwhile stressing this fundamental change in investment behaviour of companies which led to 'profits without investment' regimes (Hein, 2012; Hein & Dodig, 2015).

4.2. Changing income distribution

The finance dominated economic regime of the last decades led to a substantial change in income distribution (see for details Gallas et al., 2016). Increasing inequality can become a serious problem for sustainable long-term growth. Here we look at the factors which led to the change in income distribution. Personal disposable income distribution depends on functional income distribution, dispersion of wages and profits, and on government redistribution policies.

We start with the most important factors influencing functional income distribution. Firstly, in a Keynesian tradition functional income distribution relies on the general profit rate which, together with the capital stock, determines the profit share. The wage share then is the result.[18] In this tradition the marginal productivity of capital and labour cannot be used to explain income distribution.[19] What determines the profit rate? The (long-term) interest rate must be considered as a minimum for the general profit rate and is determined in the asset market.[20] However, powerful agents in the asset market can push companies to a general profit rate above the interest rate. This implies that the general profit rate depends on the interest rate and power of financial systems to set the convention on how high a profit rate should be. Falling wage shares during the last decades can be explained with reference to the deregulations that have increased the power of the financial system. The change in the corporate governance system from a stakeholder system to a shareholder system symbolises this development. Weaker trade unions add in an indirect way to the tendency of higher profits. Strong trade unions may demand higher wages if profits in companies are high. "It follows that a high ratio of profits to wages cannot be maintained without creating a tendency towards higher costs" (Kalecki, 1954:18). In monopolistic competition or in case of oligopoly or monopoly firms do not want to increase prices too much because of the danger of lower demand and "this adverse effect upon the competitive position of a firm or an industry encourages the adoption of a policy of lower profit margins" (Kalecki, 1954:18). Weaker trade unions have also been adding to the erosion of working conditions for many workers and the explosion of precarious work.

Secondly, a further argument for increasing profit rates, already stressed by Kalecki (1954), is an increase in the monopolistic power of firms. If firms successfully follow a rent-seeking strategy, by striving to become a monopoly, colluding together in cartels, or following non-price strategies of competition, profits will go up. Stiglitz (2012) convincingly argues that during the last few decades rent-seeking behaviour, especially in the financial system, became epidemic and increased profits (see also Hein, 2014).

Thirdly, when the government privatises companies the aggregate value of capital striving for profit increases, as opposed to before where companies would follow a strategy of cost coverage.[21]

Let us come to profit dispersion to households with differing levels of income. Concentration of wealth is the result of a cumulative market process. The higher wealth concentration becomes, the faster the concentration will further increase. Of course this argument is based on the assumption of a higher saving rate of high income households than of low income households. This assumption is plausible and empirically supported (see for example Saez & Zucman, 2014; Piketty, 2014). Without inheritance tax or other taxes on high wealth, endogenous wealth concentration cannot be stopped.

Increasing wage dispersion is the quantitatively most important factor to explain changes in personal market income distribution in most countries during the last few decades. Wage dispersion is indirectly related to financialisation and reveals that financialisation is a part of a policy package which also includes deregulations in labour markets and disempowering trade unions. In most countries, wages account for more than 60% of market income. This means that changes in wage dispersion have big effects on the distribution of market income. The OECD (2011) calculated that between the mid-1980s and the mid-2000s, over 70% of changes in disposable income distribution in member countries were caused by increasing wage dispersion. The main reason for increasing wage dispersion can be found in weaker trade unions, deregulation of labour markets, increasing frequency of precarious jobs, and in a higher level of unemployment in many OECD countries. A segment of very high wages was led by management salaries which changed the convention about acceptable wage dispersion (see Herr & Ruoff, 2015).

Finally, tax policy plays an important role altering market given income distribution. The same is true for government expenditures and the provision of public goods. Over the last decades government redistribution policies became weaker in many OECD countries and added to the inequality of disposable income.

5. Management of aggregate demand and inflation and preconditions for this

In the Keynesian paradigm, output depends on aggregate demand, while aggregate demand itself depends on investment demand, consumption demand, government demand, and exports minus imports. Focussing on demand elements, a stable development implies a stable development of the different elements of demand *and* a certain proportion between these different demand elements. If aggregate demand is very volatile or stagnates over long periods, economic development (including employment) will not be sufficient. Also, the structure of demand is important to allow a sustainable development. If investment demand is very high and capacities are built up which later cannot be used, investment demand will also weaken. If other demand elements excluding investment are very dynamic, aggregate demand will sooner or later hit full capacity utilisation. In such a case, demand inflation is triggered even in a situation of high unemployment.

Unregulated capitalist economies do not tend to stable demand development and growth which is sufficient for full employment. And they do not guarantee a needed proportional development of demand elements. Even in the absence of deep crises like the Great Depression or the Great Recession "prevailing institutional and psychological factors, can interfere, in conditions mainly of laissez-faire, with a reasonable level of employment and with standard of life which the technical conditions of productions are capable of furnishing. (…). This disturbing conclusion depends, of course, on the assumption that the propensity to consume and the rate of investment are not deliberately controlled in the social interest but are mainly left to the influence of laissez-faire" (Keynes, 1936:219). Income distribution and the level of uncertainty in life are main factors for the propensity to consume and consequently for consumption demand. The different demand elements are in the following section discussed in more detail (see also Dullien et al., 2012).

Investment demand is potentially very unstable. It depends on both "animal spirits" (Keynes, 1936) or "entrepreneurship" (Schumpeter, 1926) and on cheap, long-term, and sufficient financing. If commercial banks go back to the core business model of financing enterprises and (to a sustainable extent) private

households, and if monetary policy supports credit expansion to the enterprise sector, the basis for sufficient financing of investment is given. Money in the Keynesian paradigm is not neutral in both the short- and the long-term. The implication is that central banks, in contrast to monetarist approaches, should not only have a low inflation rate as a target, but also GDP growth and employment. This does not mean that central banks should not aim for a low and stable inflation rate but that they have to find a compromise with other targets of a central bank.

Animal spirits or entrepreneurship are sociological categories and do not depend on objective economic factors, such as the marginal productivity of capital (as is the case of the neoclassical paradigm). There is no guarantee that investment brought about by private initiative is enough to stabilise the economy and guarantee full employment.

Keynes thus made more far-reaching proposals: "I conceive, therefore, that a somewhat comprehensive socialisation of investment will prove the only means of securing an approximation of full employment; though this need not exclude all manner of compromises and of devices by which public authority will co-operate with private initiative. But beyond this no obvious case is made for a system of State Socialism" (Keynes, 1936:378). He strongly argued for a public-owned enterprise sector and for all versions of half-public-owned organisations (Keynes, 1926). There is certainly no need to privatise natural monopolies which have to be regulated anyway. And there is a lot of room for organisations like cooperative building societies. Moreover, due to high risks and lumpy investments, some of the strategic sectors such as renewable energies might need direct government involvement. This could all stabilise macroeconomic investment demand and structure it in a sustainable way. A large public and non-profit oriented enterprise sector leads also to a change in income distribution as this sector contributes to an increasing wage share.

Consumption demand is by far the quantitatively most important demand element and depends on many factors. An important one is income, which in a Keynesian tradition depends on autonomous demand elements, especially investment demand. But consumption demand also depends crucially on income and wealth distribution. Policies to create a more equal income distribution are needed to allow sufficient demand for a sustainable growth process. Given the developments during the last decades without a radical change towards a more equal income distribution a new phase of prosperity does not seem to be possible.

A whole bundle of measures are needed to make income and wealth distribution more equal. Key policies to increase the wage share are the control and downsizing of the financial system, policies against rent-seeking, and the creation of a large non-profit sector within the economy. Profit dispersion depends on wealth dispersion. Policies to reduce wealth dispersion also lead to a more equal income distribution. Piketty (2014), for example, recommends a global wealth tax to make wealth distribution more equal. High inheritance taxes also seem to be important in this respect.

Policies to increase union density reduce wage dispersion (see Herr & Ruoff, 2015). But even in countries with relatively low union density, the wage bargaining system can help to prevent high wage dispersion. Firm based wage bargaining should be overcome as this tends to high wage dispersion. Sectoral level negotiations do not automatically lead to low wage dispersion. To realise this aim vertical and horizontal coordination of wage development is preferable. An extension mechanism can support wage bargaining coverage. Also, strong employers' organisations are needed; otherwise unions have nobody to negotiate with. The Austrian system which forces all firms to be part of employers' organisations is an interesting model. Statutory minimum wages can directly

compress wage dispersion from below. Labour market regulations have to restrict or prevent precarious working conditions, such as temporary employment. Such policies reduce uncertainty and stabilise consumption demand.

Finally many government policies can contribute to a more equal distribution of disposable income. Especially important is tax policy, the provision of public goods, and the development of social security systems with a broad coverage.

Government demand is an important factor in stabilising aggregate demand. In addition, government demand influences allocation and distribution – and also in an indirect way growth. Active anticyclical fiscal policy can contribute to dampen business cycles, prevent cumulative shrinking processes in a crisis situation, and increase long-term growth. In principle, the government budget can be divided into a consumption budget and an investment budget. There is no good argument that governments cannot become indebted to finance public investment. The consumption budget should become balanced over the business cycle. Within the Keynesian camp there are positions that debt-financed fiscal stimulation is sufficient to create full employment and that high government debt is never a problem (see Lerner, 1943 or Wray, 1998). In spite of the fact that there is no clear evidence that there is a threshold after which point government debt becomes a problem, high stocks of government debt make public households vulnerable to interest rate and other shocks. Furthermore, high government debt can lead to higher inequality when interest rates become high in a constellation of high government debt which is held by the rich and taxes are paid by the whole society. The burden on fiscal policy is substantially relieved as soon as investment demand is directly stabilised by a big public and non-profit enterprise sector (see above).

Net export demand is the last demand element. We discuss it below when we discuss reform options for the international financial system.

Creating a nominal wage anchor to stabilise the price level

Implicitly in the above debate it was argued that changes in the nominal wage level do not change functional income distribution. Indeed, in Keynesian (1930; 1936) and Kaleckian (1954) economics unit costs determine prices.[22] Firms follow mark-up pricing and roll-over costs. When oil prices increase firms will increase prices; when value-added tax increases, prices increase; when the currency depreciates and imports become more costly, prices rise, and when wage costs increase, prices will also increase. Wages for firms are obviously costs which are rolled over. In fact, unit labour costs are the most important cost factor, namely because prices of intermediate and capital goods used by a company also depend on wage costs and in the end almost all costs in a closed economy can be traced back to wage costs. As costs of inputs of reproducible goods depend on unit labour costs the latter determine the price level.[23] The close relationship between unit labour costs and price level changes leads to the conclusion that unions and employers can only negotiate the nominal wage level and not the level of real wages. "There may exist no expedient by which labour as a whole can reduce its real wages to a given figure by making revised money bargains with entrepreneurs" (Keynes, 1936:13).

Several clarifications are needed to understand these arguments correctly. Firstly, in the short-term, supply and demand inequalities can influence the price level independently of costs. Secondly, exchange rate movements via changing import prices lead to price level changes. Thirdly, profit mark-ups can change, for example when firms are pressured by financial institutions to increase profits or markets become less competitive. Fourthly, higher food and natural resource prices influence the price level. Fifthly, changes in the tax system can also influence the price level. However, in the medium-term cumulative inflationary or deflationary processes are only possible if wage-price spirals exist. Typically such a spiral starts

with a price level shock triggering nominal wage increases. The paramount importance of wage development for price level development is shown by the very high empirical correlation between unit labour costs and price level changes in spite of all the factors mentioned above (Herr, 2009).

If wage increases are too low disastrous deflation must be expected. If wage increases are too high an overly high inflation results, this will then sooner or later be fought by the central bank. How should nominal wages increase to establish a nominal wage anchor (an important stabilising element of a capitalist economy)? The average nominal wage rate per hour should increase according to medium-term productivity changes plus the target inflation rate of the central bank (Herr & Horn, 2012).[24] Medium-term productivity is preferred as statistically measured productivity is influenced by the business cycle. In the ideal case the above wage norm should be a guideline of wage increases in all sectors of the economy. Using sectoral productivity as a guideline for sectoral wage development would mean that in some industries - for example the car industry - nominal wages (and real wages) would increase permanently and in other sectors - for example the elderly care industry - nominal (and real) wages would increase at a lower rate or stagnate completely. Even worse is firm-level productivity as a guideline for firm-level wage development. Such a wage guideline would lead to exploding wage dispersion and reduce the innovative power of an economy. The target inflation rate of the central bank is the medium-term inflation rate central banks officially announce or implicitly prefer.

To realise the wage norm a high coordination of the wage development in a country is needed. For this, strong trade unions and strong employers' associations are needed which coordinate wage development according to macroeconomic needs. Japan, for example, shows how disastrous too low a wage increase can be. The country has and continues to suffer since the 1990s from deflationary developments (Herr, 2015).

Macroeconomic management under financialisation

It is not the place here to give an overview about macroeconomic policy in Western countries during the period of financialisation. Different countries followed their own policies and strategies (among many other analyses see Hein, Detzer & Dodig, 2015; Herr & Kazandziska, 2011). But what can be done here is to judge the institutional conditions for macroeconomic management and their development.

During the last decades many central banks switched to inflation targeting (for example Bank of England, Bank of Canada, Reserve Bank of Australia, Bank of Korea, South African Reserve Bank, Bank of Japan) regimes or otherwise postulate price level stability as their only goal (for example the ECB). Such institutional arrangements are harmful for economic growth. As mentioned above, central banks should search for a compromise between price level stability and other macroeconomic goals, as for example the US Federal Reserve. Problematic is also that central bank restricted themselves more and more to interest rates as the main policy instrument.

There are no reforms at all in Western countries to develop efficient instruments to directly stabilise investment. The opposite happened. Under the neoclassical ideology waves of privatisations made the public sector smaller. State-owned companies in the enterprise sector, public utilities are partly privatised as well as half-state owned non-profit institutions like building societies (see for example Teles, 2015). The power of governments to influence or even control the volume and structure of investment has overall decreased.

Consumption demand in many countries has been suffering from changing income distribution. Especially in Anglo-Saxon countries a new prosperity without

a fundamental change in income and wealth distributions seems to be unlikely. There have been no policies to create a more equal income and wealth distribution. There are even no fundamental policies to stop a further development of even higher inequality.

In many countries, especially in the European Monetary Union, fiscal policy became restricted by legal regulations like debt-breaks.

Institutions which could help to realise the wage norm and establish a nominal wage anchor became in almost all countries weaker or even disappeared. Trade unions and collective wage bargaining in many countries are pushed and restricted to the firm level. Deregulations of labour markets have reached a dimension which does not exclude falling nominal wages and deflationary developments in a future sharp recession.

Overall, after the Great Recession no reforms were executed which allow for a more coordinated and strong macroeconomic management leading the economy to, as Keynes expressed it, a reasonable level of employment and standard of life which the technical conditions of productions were capable of furnishing.

6. The need for international coordination

Since the beginning of the wave of deregulation of the domestic and international financial systems in the 1970s, the world economy has become more and more unstable. In the international sphere there are several critical dimensions of importance (Herr, 2011). Firstly, after the 1970s international capital flows increased in magnitude while at the same time becoming more unstable. This led to exchange rate volatility and exploding current account imbalances. Secondly, the liberalised international financial system produced a long sequence of currency crises, which at the same time led to domestic financial crises in developing countries and also added significantly to financial crises in the capitalist centres (Bonizzi, Laskaridis & Toporowski, 2015). The subprime crisis found its origin as the first global financial crisis in the capitalist centres. It started in the US and very quickly spread via global financial market links to other Western countries and triggered the Great Recession (see the case studies in Hein, Detzer & Dodig, 2015; Detzer et al., 2013). Thirdly, the international role of the US dollar has been changing over the decades. It is still number one in the world economy, but, compared with the first decades after World War II, other currencies are now gaining strength; in particular the euro has become a challenging contender. There is a clear competition between different currencies which take over international functions, sparked by private wealth owners, financial institutions and big companies which chose between different currencies to hold their liquidity or to invest in bonds or other assets. Changes in expectations then can lead to massive portfolio shifts, exchange rate shifts, and current account constellations. Fourthly, compared to the first decades after World War II for the world economy important natural resource prices like the price for oil and gas became destabilised with sharp medium-term increases and decreases. Speculation in future markets for commodities (including food markets) which became widespread in the last decade at least added to the volatility (Ruzzenenti, 2015). Such medium-term shocks of key prices for the world economy lead to exchange rate and current account turbulences, to inflationary price hikes, and destabilises whole countries. Fifthly, there is no coordination economic policy among the key countries in the world. In addition to unstable capital flows some countries like Germany, China, and Japan follow an aggressive mercantilist strategy and push for current account surpluses, while others, for example the USA or the UK, are being pushed into deficits. The

system described increases the level of uncertainty in the world economy; it leads to permanent shocks and prevents a stable development of the world economy.

To give globalisation a stable institutional framework the world economy has to come back to a system of stable exchange rates, which at the same time prevent destabilising current account imbalances. Stable exchange rates do not necessarily mean completely fixed central rates with a small band. Systems with institutionally fixed exchange rates could be combined with the possibility of realignments, as in the Bretton Woods System or the European Monetary System. Managed floating, with clear upper and lower limitations, can also be considered a stable exchange rate regime.

In negotiations about the Bretton Woods System, Keynes' (1969) ideas can still be used as a starting point for a debate about the international financial system. He recommended a system with fixed exchange rates that should only be realigned in cases of big current account surpluses or deficits. Before exchange rates are adjusted, other types of economic policies should be used. Surplus countries need to follow expansionary monetary and fiscal policy to stimulate their economies, while deficit countries should follow a relatively restrictive economic policy. Keynes obviously believed that exchange rate shocks are difficult to digest for many countries – they produce price level shocks and destabilise domestic asset markets, especially if countries are indebted in foreign currency. However, as current account imbalances should not become too big, controlled exchange rate adjustments also play a role in Keynes' proposal. Beggar-my-neighbour policies should not be tolerated and countries should be forced to develop their own sources for demand. What is important is that not only countries with current account deficits should fight against imbalances – what is usually the case in unregulated market economies – surplus countries should also actively follow policies to adjust current accounts.

Keynes recommended a system which would levy a tax both paid by current account deficit and surplus countries. The tax could be paid to an international institution and the tax rate could be increased with the increase of the current account imbalance measured in per cent of GDP. Such a tax is not unproblematic. It increases the current account deficit in the deficit country when the fine is transferred to an international institution. And it dampens demand in the surplus country when the government has to pay the fine and does not compensate this via higher public indebtedness. Other instruments to enforce an adjustment should also play a role. For example, deficit countries could be allowed or even encouraged to use tariffs to reduce imports – for example a general import tax which would simulate an exchange rate adjustment. Another possibility is to use controlled exchange rate adjustment more frequently when needed.

To realise relatively stable exchange rates and prevent high current account imbalances, which the market mechanism is not able to do, coordinated worldwide economic policies including regulations of international capital flows are needed. This does not mean that international capital flows are completely suppressed. But certain types of capital flows, such as part of portfolio investment or short-term credits, do not support economic growth and add only to the volatility of capital flows. Central bank interventions in foreign exchange markets and a strong supranational institution like the International Monetary Fund (to help countries under devaluation pressure) are also ingredients of such a system.

It is worthwhile noting that Keynes preferred a regulated international system like the one he recommended during the Bretton Woods negotiations. However, he believed that in a constellation of an unregulated and unstable international system a national way including strict cross border capital controls and even trade regulations is a way of gaining economic prosperity. In the present situation, a

policy of national self-sufficiency is not promising for small and even bigger countries. For big economic blocks like the euro-area (including countries with close relations to Europe) such an option is feasible but not preferable. Without a policy to delink with the world economy the EMU could follow a system of managed floating with heavy central bank interventions and selected capital controls to keep the current account more or less balanced. In such a scenario the EMU would become a block of stability and trade protection would then become the last instrument in the fight against beggar-my-neighbour strategies of other countries.

James Tobin (1978) recommended an international transfer tax for all foreign exchange transactions to make capital flows more stable. The aim of such a tax is, as Tobin expressed it, to throw sand in the wheels of the fast and liquid international exchange markets. According to Tobin, such a tax would not disturb international trade and long-term capital flows, as the tax rate is low. However, it would be costly for capital flowing from one currency area to another within a short period of time and thus reduce speculation and give monetary authorities more room for domestic oriented policies. Tobin aimed at reducing short-term oriented speculation and at forcing agents to calculate for the long-term. A Tobin tax can have positive effects and also makes sense for fiscal purposes. It has been estimated that, at the global scale, a tax rate of 0.1 per cent would generate tax revenues of around 1.5 per cent of the world's GDP (Schulmeister, Schratzenstaller & Picek, 2008). However, capital flows which are driven by long-term expectations, big expected return differentials, and great speculative chances are not reduced by a Tobin tax. Close to a tax is the introduction of unremunerated reserve requirements for international credits, especially in the case of capital inflows. The reserve requirements can be extended to different types of international capital flows and the reserve rate can be varied as well. In addition to the above more market based control mechanisms and more direct controls in the form of outright prohibitions should be available. Control of international capital flows and financial market supervision sometimes overlap. Comprehensive banking and financial market supervision, which strictly controls currency mismatch, substitutes for capital import controls to a large extent. Other useful regulations to limit international capital flows are restrictions for pension funds or insurance companies to invest abroad. Off-shore centres are a special problem. The simplest way to dry out these centres is to prevent domestic financial institutions doing business with them.

Money laundering, tax evasion, circumvention of financial market supervision, and other rules are concentrated in offshore centres and tax havens. Transactions with such centres could be banned if they do not follow international rules.

Any substantial changes in the rules of the market globalisation project were neglected in the reform agenda after the Great Recession.

7. Towards a more regulated economic system

Since its existence in the 18th century capitalism has shown different faces and national characteristics. Or in other words, the embedded form it takes within institutions has repeatedly changed. There were phases of a more regulated type of capitalism and phases holding a bigger role for market mechanisms (Polanyi, 1944). The first decades after World War II belong to the best phases of capitalism, when indicators such as GDP growth, productivity development, income distribution, or level of uncertainty of the majority of the population are taken as indicators. During this phase of capitalism both national and international finance were strictly controlled, with an overall minimal role of non-bank financial

institutions, speculative activities, and international capital flows. The finance dominated type of capitalism finds its nucleus in the deregulation of the national and international financial system, triggering a specific finance driven globalisation project. Corporate governance was deeply affected by the finance driven regime and as early as the 1980s shareholder corporate governance systems had begun to develop. However, it would paint a false picture to only consider changes within the financial system. Labour market deregulations (including policies to weaken trade unions), completely free trade around the globe, increasing freedom and power of multinational companies, and privatisation of formerly state functions also belong to the new regime.

There developed an increasing mismatch between essentially national economic policy instruments and international economic processes. Sufficient global governance institutions are missing to govern global economic processes. These developments also imply an erosion of democracy as nation states are increasingly confronted with processes which they cannot control and dictate domestic policy (Rodrik 2011). In a liberal tradition the reduction of national sovereignty by international rules and market processes is not a problem. Capital markets which "bite" democratic elected governments which do not follow the interest of agents in the global financial system are seen as positive. The rule by (supranational) technocrats following the logic of markets is not new. Already Friedrich von Hayek (1939:269) stressed such a vision: "The abrogation of national sovereignties and the creation of an effective international order of law is a necessary complement and the logical consummation of the liberal program." The handling of the sovereign debt crisis in Europe is a good illustration for this (see Thomasberger, 2014).

The finance dominated economic regime which has been developing after the break of the economic regime in the 1970s seems to be exhausted. Firstly, it led to increasing economic instability based on boom-bust phases in asset markets and linked to phases of unsustainable credit expansion and financial crisis, including international capital flows. This instability reduced overall growth – financial crises not only interrupt growth processes, but can also lead to long-term stagnation based on balance sheet recessions (Koo, 2009). Secondly, the finance driven economic regime led to a substantial increase in income inequality and a more unequal distribution of wealth. Many factors contributed to the increasing inequality; from the increasing power of the financial system and the concentration of wealth to an explosion of very well- and very low-paid jobs and government redistribution policies. This dramatic shift in some countries towards more inequality dampens consumption demand based on income. The consequence is the danger of long-term stagnation in addition to the problems of the short- and medium-term volatility of the financial and economic system. Both sources of crisis can intensify each other.

To overcome the deeply rooted problems of the existing system the reforms which were implemented after the subprime crisis are not sufficient. Four points are important here:

a) The reforms in the financial system did not substantially affect the functioning of the shadow banking system. Relations between the commercial and shadow banking system are not sufficiently regulated. The basic structures in the financial system which led to the subprime crisis and the Great Recession were not changed.

b) Reforms concentrated on the financial system in a narrow sense. Financial institutions and especially banks were the central focus of reforms. International dimensions of the financial system like the questions of the usefulness of complete freedom for all types of international capital flows, problems of exchange rate

volatility, current account imbalances and over-indebtedness, or problems of volatility of oil and other internationally important prices were completely spared.

c) The shareholder corporate governance system was also left largely unchanged. Misled incentives for managers were discussed. But corporations were not discussed as institutions of key importance for many stakeholders. There was no debate on how to introduce democratic structures into corporations, or on how to organise compromises between the different stakeholders.

d) In other areas, reform possibility was not even discussed and neoliberal policies intensified. For example, further labour market deregulations are still on the agenda of governments and international institutions. Or policies to change income and wealth distribution are not on the political agenda. Also development problems of the countries of the global South were not seriously discussed.

What is needed is a comprehensive reform agenda which searches for a new relationship between institutions, government policies, and markets. In the above sections the basic direction of such a reform scenario is sketched. Of course, such a blueprint can only be an input to the debate. A broad debate about fundamental options is needed. Furthermore, the mobilisation of political forces is required to change economic policies and build institutions.

Two important points should be mentioned at the end. Firstly, the ecological crisis has already started and there can be no doubt that radical changes are needed to contain fundamental ecological problems, even in the near future. Any reform strategy must also take this dimension into account (Clark & Hermele, 2013; Papandreu, 2015). A Green New Deal, which combines ecological needs with policies for more equality and full employment, can become a focal point of the debate. It can be seen that a Green New Deal fits very well to the Keynesian idea of heavily influencing the volume and structure of investment by society. Secondly, for mature capitalist societies a radical cut of working time should be on the agenda. Part of productivity increases can and should be used to reduce working time in all its forms.

Notes

[1] See the extensive publication of the FESSUD project (Financialisation, Economy, Society and Sustainable Development), [Retrieved from].

[2] Adam Smith was not advocating ruthless individualism. In his second major work the need of ethics and charity was stressed.

[3] See for example Hein (2015) or Dullien, Herr, & Kellerman (2011).

[4] In Germany this policy is called neoliberal "Ordnungspolitik", the implementation of process policy to steer economic development.

[5] To plead for rational expectations in the tradition of Robert Lucas (1977) is not a solution. The rational expectations approach is a way to define away the role of expectations by assuming expectations as identical with the equilibrium solution of economic models. It fails to be any realistic abstraction of the real world with uncertainty and real human beings (Hahn 1981; Herr 2011a).

[6] "The practice of calmness and immobility, of certainty and security, suddenly breaks down. New years and hopes will, without warning, take charge of human conduct. The forces of disillusions may suddenly impose a new conventional basis of valuation." (Keynes 1937:215)

[7] A detailed overview about developments in different national financial systems after the subprime crisis is given in Kattel, Kregel, & Tonveronachi (2015). We draw especially on Kregel, Tonveronachi, & Kattel (2015), Tonveronachi (2015), and Detzer, & Herr (2015).

[8] It should be remembered that Basel recommendations have to be transformed into national laws. Most recommendations are taken over by national law, however, differences remain between countries.

[9] The Short-term Liquidity Coverage and the Increased Long-term Balance Sheet Funding.

[10] This means, for example, when credit default swaps cannot be fulfilled there is no provision against this case.This possibility is not a theoretical one. Before the outbreak of the subprime crisis AIG

sold huge amounts of credit default swaps. When defaults mounted and AIG was asked to step in it could not fulfil its obligation. AIG was bailed out by the US government with high costs.

[11] At the end of 2008 money market funds in the US managed assets worth a total value of 3.8 trillion US-dollars; in the EMU the value was 1.1 trillion euro (Bakk-Simon et al. 2012).

[12] For details see publications of the International Organisation of Security Commissions (IOSCO) [Retrieved from].

[13] For the US, Peter Boone and Simon Johnson (2009) argued in the New York Times: "So to us, 2 percent of G.D.P. seems about right. This would mean every bank in our country would have no more than about $300 billion of liabilities."

[14] The first loss piece is the slice of a credit basket which suffers first if debtors cannot pay back their credits.

[15] Martin Helwig does not belong to the camp of heterodox economists. He was director of the Max Planck Institute for Research on Collective Goods, Bonn, and chair and vice-chair of the Advisory Scientific Committee of the European Systemic Risk Board. Admati Anat is professor at Stanford University.

[16] Accounting standards are as important for the stability of the financial system and should be recommended by a body similar to the BCBS. They should be based on historical costs, and for reasons of safety, accounting values below that level if market prices fall below historical costs. Such accounting standards lead to undisclosed reserves. Undisclosed reserves make financial institutions (and enterprises) more stable and there is nothing wrong with this. It is by far better than booking higher real estate prices at market prices during a real estate bubble, pretending to have high equity which then evaporates during the collapse of real estate prices.

[17] "The mistake of regarding the marginal efficiency of capital primarily in terms of the current yield of capital equipment, which would be correct only in the static state where there is no changing future to influence the present, has had the result of breaking the theoretical link between to-day and to-morrow." (Keynes 1936:145)

[18] With Y as income, W as wage sum, Q as profit sum, K as the value of capital and q as profit rate we get Y = W + Q or (W/Y) = 1-(Q/Y). With profit Q = q·K and k= (K/Y) as capital coefficient it follows (W/Y) = 1-q·k. The wage share depends on the profit rate and the capital coefficient. In contrast to neoclassical thinking in Keynesian thinking an increase in k does not reduce q. Thomas Piketty (2014) argues that in Western countries k slowly increases whereas q does not fall.

[19] A marginal productivity of capital cannot be measured as there is no suitable measure of capital which is needed to calculate marginal productivities (see for example Sraffa 1960). The capital coefficient not only depends on technical factors but also on the distribution of income.

[20] Piero Sraffa (1960) argues that functional income distribution can be explained by fixing a basket of real wages which is negotiated between workers and capitalists or to fix the profit rate which is determined in the asset market. "The rate of profits (…) is (...) susceptible of being determined from outside the system of production, in particular by the level of the money rate of interest." (Sraffa 1960:33)

[21] Privatisation increases the capital coefficient.

[22] This point is sometimes controversial in the Post-Keynesian camp. For this reason two quotes will be provided here to show that Keynes and Kalecki had a clear position. Keynes (1930:150): "Let the reader observe that changes in the average rate of earnings have no direct tendency in themselves to bring about profits or losses, because … entrepreneurs will always be recouped for their changed outlay by the corresponding change in their receipts, which will result from the proportionate change in the price level." And Kalecki (1954:19): If the degree of monopoly does not change "the long-run changes in prices will reflect only the long-run changes in unit prime costs." And prime costs are "costs of materials and wages" (Kalecki 1954:12).

[23] Unit labour costs depend on nominal wages and labour productivity. The percentage of change in unit labour costs ($\dot{u}$) depends on the percentage of change in nominal wages ($\dot{w}$) minus the percentage of change in labour productivity ($\dot{\pi}$). Thus we get $\dot{u} = \dot{w} - \dot{\pi}$. As price level changes in the medium-term match changes in unit labour costs ($\dot{u} = \dot{P}$) the above equation can be written as $\dot{P} = \dot{w} - \dot{\pi}$.

[24] From $\dot{P} = \dot{w} - \dot{\pi}$ it follows $\dot{w}_N = \dot{P}_T + \dot{\pi}_T$ with $\dot{w}_N$ as desired wage increases, $\dot{P}_T$ as target inflation rate and $\dot{\pi}_T$ trend productivity development.

References

Anat, A. & Hellwig, M. (2013). *The Bankers' New Clothes*, Princeton: Princeton University Press.

Bakk-Simon, K., Borgioli, S., Giron, C., Hempel, H., Maddaloni, A., Recine, F., & Rosati, S. (2012). Shadow Banking in the Euro Area: An overview, *ECB Occasional Paper Series*, No. 133, April. [Retrieved from].

Bankenverband, (2014). *Regulation of Shadow Banking*, (Association of German Banks), Berlin. [Retrieved from].

BIS, (2015). Statistical release OTC derivatives statistics at End-June 2015, (Bank for International Settlement), Basel.

Bonizzi, B., Laskaridis, C., & Toporowski, J. (2015). Developing countries' external debt and international financial integration. *Working Paper*, No. 121. [Retrieved from].

Boone, P., & Johnson, S. (2009). How big is too big?. *New York Times*, November 26.

Cardarelli, R., Igan, D., & Rebucci, A. (2008). Managing Housing Sector Boom-Bust Cycles. *World Economic Outlook*, April Washington DC.

Clark, E., & Hermele, K. (2013). Financialisation of the environment: A literature review. *Working Paper*, No. 32. [Retrieved from].

Detzer, D., & Herr, H. (2015). Financial market regulation in Germany, *in*, Kattel R., Kregel, J., Tonveronachi, M. (eds.), *Financial Regulation in the European Union*, London: Routledge.

Detzer, D., & Herr, H. (2015a). Theories of financial crises as cumulative processes – An overview, *in*, E. Hein, D. Detzer, & N. Dodig (eds.), *The Demise of Finance-dominated Capitalism*, Cheltenham, Edward Elgar.

Detzer, D., & Herr, H. (2014). Financial market regulation in Germany. *FESSUD Working Paper*, No. 55. [Retrieved from].

Detzer, D., Dodig, N., Evans, T., Hein, E., & Herr, H. (2013). The German financial system, *FESSUD Studies in Financial Systems*, No. 3. [Retrieved from].

Dullien, S., Herr, H., & Kellermann C. (2012). The danger of a great recession in the 2000s - Long-tem option for a decent capitalism, *in*, Herr, H., Niechoj, T. Thomasberger, C., Truger, A., van Treeck, T. (eds.), *Form Crisis to Growth? The Challenge of Debt and Imbalances*, Marburg: Metropolis.

Dullien, S., Herr, H., & Kellermann C. (2011). *Decent Capitalism. A Blueprint for Reforming our Economies*, London: Pluto Press.

ECB, (2014). Financial Stability Review, (European Central Bank), May. [Retrieved from].

Evans, T., & Herr, H. (2015). Synthesis of sectoral studies of the currency, energy and residential property markets. *Working Papers*, No. 113, September 2015. [Retrieved from].

FSB, (2015). Global Shadow Banking Monitoring Report 2015, (Financial Stability Board), November 12. [Retrieved from].

FSB (2014). To G20 leaders: Financial reforms, completing the job and looking ahead, November 7. [Retrieved from].

FSB, (2014a). Adequacy of loss-absorbing capacity of global systematically important banks in resolution, consultative document, November 10. [Retrieved from].

FSB, (2011). Policy measures to address systemically important financial institutions, November 4. [Retrieved from].

FSB, (2011a). Key attributes for effective resolution regimes for financial institutions, October. [Retrieved from].

FSB, (2011b). Shadow banking: Strengthening oversight and regulation recommendations of the financial stability board, October.[Retrieved from].

FSF, (2009). FSF principles for sound compensation practices, (Financial Stability Forum), April 2. [Retrieved from].

Gallas, A., Herr, H., Hoffer, F., Scherrer, C. (2016). *Combating Inequality. The Global North and South*, Routledge, London.

G20, (2009). *Enhancing sound regulation and strengthening transparency*. Working Group 1, Final Report, March 25. [Retrieved from].

G20, (2008). *Declaration following the Washington meeting*, November 15. [Retrieved from].

Hahn, F. (1981). General Equilibrium Theory, *in*, D. Bell, I. Kristol (eds.), *The Crisis in Economic Theory*, Basic Books, New York.

Harvey, D. (2005). *A Brief History of Neoliberalism*, Oxford, Oxford University.

Hayek, F.A. (1939). The economic conditions for interstate federalism, *in*, F.A. Hayek (1948), *Individualism and Economic Order*, Chicago, University of Chicago Press.

Hein, E. (2015). Causes and consequences of the financial crisis and the implications for a more resilient financial and economic system: Synthesis of FESSUD Work Package 3, *FESSUD Working Paper*, Series No. 128. [Retrieved from].

Hein, E. (2014). *Distribution and Growth After Keynes. A Post-Keynesian Guide*, Edward Elgar: Cheltenham.

Hein, E. (2012). *The Macroeconomics of Finance-dominated Capitalism - and its Crisis*, Cheltenham, Edward Elgar.
Hein, E., Detzer, D., & Dodig, N. (2015). *The Demise of Finance-dominated Capitalism: Explaining the Financial and Economic Crises*, Cheltenham: Edward Elgar.
Hein, E., & Dodig, N. (2015). Finance-dominated capitalism, distribution, growth and crisis - Long-run tendencies, *in*, Hein, E., Detzer, D., & Dodig, N. (2015) (eds): *The Demise of Finance-dominated Capitalism: Explaining the Financial and Economic Crises*, Cheltenham: Edward Elgar.
Hein, E., Dodig, N., & Budyldina, N. (2014). Financial, economic and social systems: French regulation school, social structures of accumulation and Post-Keynesian approaches compared, *FESSUD Working Paper*, No. 22. [Retrieved from].
Helwig, M. (2008). Systemic risk in the financial sector: An analysis of the subprime-mortgage financial crisis. Max Planck Institute for Research on Collective Goods, No. 2008/43. [Retrieved from].
Herr, H. (2015). Japan, *in*, M.V. Klaveren, D. Gregory, T. Schulten (eds.), *Minimum Wages, Collective Bargaining and Economic Development in Asia and Europe*, London, Palgrave Macmillan.
Herr, H. (2011). International monetary and financial architecture, *in*, E. Hein, E. Stockhammer (eds.), *A Modern Guide to Keynesian Macroeconomics and Economic Policies*, Cheltenham, Edward Elgar.
Herr, H. (2011a). Money, expectations, physics and financial markets. Paradigmatic alternatives in economic thinking, *in*, H. Ganssmann (ed.), *New Approaches to Monetary Theory. Interdisciplinary Perspectives*, Routledge, London.
Herr, H. (2010). Shareholder-value als Leitbild unternehmerischer Verantwortung?, *in*, S. Meyer, S., Pfeifer, B. (eds.), *Die Gute Hochschule. Ideen, Konzepte und Perspektiven. Festschrift für Franz Herbert Rieger*, Berlin: Sigma.
Herr, H. (2009). The labour market in a Keynesian economic regime: Theoretical debate and empirical findings, *Cambridge Journal of Economics*, 33, 949-965. doi. 10.1093/cje/ben044
Herr, H., & Horn, G. (2012). Wage policy today, *Global University Working Paper*, No. 16. [Retrieved from].
Herr, H., & Kazandziska, M. (2011). *Macroeconomic Policy Regimes in Western Industrial Countries*, London, Routledge.
Herr, H., & Ruoff, B. (2015). Labour and financial markets as drivers of inequality, *in*, Gallas, A., Herr, H., Hoffer, F., & Scherrer, C. (2016). *Combating Inequality. The Global North and South*, Routledge, London.
Hirshleifer, D., & Teoh, S.H. (2003). Herd behaviour and cascading in capital markets: A review and synthesis, *European Financial Management*, 9(1), 25-66. doi. 10.1111/1468-036X.00207
IMF, (2014), *Global Stability Report*, Washington DC. [Retrieved from].
Kalecki, M. (1954). *Theory of Economic Dynamics.An Essay on Cyclical and Long-Run Changes in Capitalist Economy*, London.
Kattel, R., Kregel, J., & Tonveronachi, M. (2015). *Financial Regulation in the European Union*, London: Routledge.
Keynes, J.M. (1969). Proposals for an international clearing union, *in*, J.K. Horsfield (ed.), *The International Monetary Fund 1946-1965*, Vol. III, Documents, Washington DC.
Keynes, J. M. (1937). The general theory of employment, *Quarterly Journal of Economics*, 51(2), 209-223. doi. 10.2307/1882087
Keynes, J. M. (1936). *The General Theory of Employment, Interest and Money*, Cambridge University Press, Cambridge.
Keynes, J. M. (1930). *Treatise on Money, Vol. I: The Pure Theory of Money*, Cambridge University Press, Cambridge.
Keynes, J.M. (1926[1972]). The end of laissez-faire, London: Hogarth-Press, also *in*, *The Collected Writings of John Maynard Keynes, IX*, London and Basingstoke: Macmillan, 272 – 294.
Kindleberger, C.P., & Aliber. R.Z. (2011). *Manias, Panics, and Crises. A History of Financial Crises*, Sixth ed., Palgrave Macmillan.
Kinsky, H.P. (1975). *John Maynard Keynes*, Columbia University Press, New York.
Koo, R. (2009). *The Holy Grail of Macroeconomics-Lessons from Japan's Great Recession*, John Wiley & Sons, Asia
Kregel, J., Tonveronachi, M., & Kattel, R. (2015). Introduction, *in*, Kattel R., Kregel, J., Tonveronachi, M. (eds.), *Financial Regulation in the European Union*, London: Routledge.
Lerner, A.P. (1943). Functional finance and the federal debt, *Social Research*, 10(1), 38-51.
Lucas, R. E., Jr. (1977). Understanding business cycles. *Carnegie-Rochester Conference Series on Public Policy*, 5, 7-29. doi. 10.1016/0167-2231(77)90002-1

Minsky, H.P. (1982). Can "it" happen again? Essays on instability and finance, Armonk, M.E. Sharpe, New York.
Minsky, H. P. (1975). *John Maynard Keynes*, Columbia University Press.
OECD, (2011). *Divided We Stand: Why Inequality Keeps Rising*. OECD Publishing, doi. 10.1787/9789264119536-en.
Papandreu, A. (2015). The great recession and the transition to a low-carbon economy, *Working Paper*, No. 88, January. [Retrieved from].
Pareto, V. (1909). *Manuel d' Èconomique Politique*, Paris: Giard and Brière.
Philippon, T., & Resheff, A. (2009). Wages and human capital in the U.S. finance Industry: 1909-2006, *NBER Working Paper*, No. 14644. doi. 10.3386/w14644
Piketty, T. (2014). *Capital in the Twenty-First Century*, Harvard University Press: Cambridge, USA.
Polanyi, K. (1944). *The Great Transformation*, New York: Farrar & Rinehart.
Rappaport, A. (2005). The economics of short-term performance obsession, *Financial Analysts Journal*, 61(3), 65-79. doi. 10.2469/faj.v61.n3.2729
Rappaport, A. (1999). How to link executive pay with performance, *Harvard Business Review* March-April: 91-101.
Rodrik, D. (2011). *The Globalisation Paradox: Democracy and the Future of the World Economy*, W.W. Norton, New York.
Rodrik, D. (1998). Who needs capital-account convertibility? *in*, S. Fischer et al. (eds.), *Should the IMF Pursue Capital-Account Convertibility? Essays in International Finance* No. 207, International Finance Section, Department of Economics, Princeton University, May 1998.
Ruzzenenti, F. (2015): Changes in the relationship between the financial and real sector and the present economic financial crisis: study of energy sector and market, Working Paper Series No. 105, April 2015. [Retrieved from].
Saez, E., & Zucman, G. (2014). Wealth inequality in the United States since 1913: Evidence from capitalized income tax data, *NBER Working Paper*, No. 20625. doi. 10.3386/w20625
Schumpeter, J. (1983[1926]). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, Transaction, New Jersey: Piscataway.
Shiller, R. (2005). *Irrational Exuberance*, Princeton University Press, Princeton, Oxford.
Singh, M., & Aitken, J. (2010). The (sizable) role of rehypothecation in the shadow banking system, *IMF Working Paper*, No. 10/172.
Smith, A. (1904[1776]). *The Wealth of Nations*, 5th ed., London: Methuen.
Stiglitz, J. (2012). *The Price of Inequality*, New York, London: W. W. Norton & Company.
Stiglitz, J. (2004). Capital market liberalisation, globalisation and the IMF, *Oxford Review of Economic Policy*, 20(1), 57-71. doi. 10.1093/oxrep/grh004
Sraffa, P. (1960). *Production of Commodities by Means of Commodities*, Cambridge University Press: Cambridge.
Teles, N. (2015). Financialisation and neoliberalism: The case of water provision in Portugal, *Working Paper*, No 102, January. [Retrieved from].
Thomasberger, C. (2014). Die intellektuellen Wurzeln der Euro-Krise, *in*, Dullien, S., Hein, E., Truger, A. (eds.): *Macroeconomics, Development and Economic Policies*, Festschrift für Jan Priewe, Marburg, Metropolis.
Tobin, J. (1978). A proposal for international monetary reform, *Eastern Economic Journal*, 4(3-4), 153-159.
Tonveronachi, M. (2015). Post-crisis international regulatory standards and their inclusion in the European Framework, *in*, Kattel R., Kregel, J., Tonveronachi, M. (eds.), *Financial Regulation in the European Union*, London: Routledge.
Wray, L.R. (1998). *Understanding Modern Money: The Key to Full Employment and Price Stability*, Cheltenham: Edward Elgar.