Financial crisis and global imbalances: its labour market origins and the aftermath

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The objective of this paper is to articulate how the 2007–09 economic crisis is rooted in the uneven income distribution and inequality caused by the current finance-led model of growth. The process of financialisation that took place in the 1980s in the USA and then in the European Union was coupled with labour flexibility, wage moderation and soaring profits. The flexibility agenda of the labour market and the end of wage increases, along with the contraction of indirect wages (i.e. public social expenditure), diminished workers’ purchasing power. This was partly compensated with increased borrowing opportunities and the boom of credit consumption, all of which helped workers to maintain unstable consumption capacity. However, in the long term, unstable consumption patterns derived from precarious job creation, job instability and poor wages have weakened aggregate demand. Hence, labour market issues such as flexibility, uneven income distribution, poor wages and the financial crisis are two sides of the same coin. Both have a direct impact on the economic crisis and the current global imbalances.

Key words: Financial crisis, Saving glut, Global economy, Labour market, Wage, Productivity

JEL classifications: G01, E21, F32, J24

1. Introduction

The economic crisis that started in the financial sector in 2007 is still having an impact on the USA and European economies today, causing decreases in output and employment levels. This is the largest financial crisis since the Great Depression of 1929 and several arguments regarding the financial collapse have already been put forward (Obstfeld and...
Rogoff, 2009; Krugman, 2008; Skidelsky, 2009; Whelan, 2010; Semmler and Young, 2010; International Monetary Fund (IMF), 2009A; Bini Smaghi, 2008; Allen, 2009; Caballero et al., 2008; Fitoussi and Saraceno, 2010 etc.). These competing arguments offer differing analysis of both the origins of the crisis and the recovery policies implemented in its wake. Some economists argue that the origin of the crisis can be found mainly in the interaction between (i) the financial bubble and (ii) the cheap money and loose monetary policies, which allowed for the money glut in the economy (Taylor, 2009). The consequences of this interaction were the breakdown of the financial sector followed by the crisis in the real economy (Greenspan, 2007). The opposing view finds that the main explanation is the saving glut, on the global level, which drove increased saving in China and East Asia while spurring extra spending in the USA and other Western economies (Skidelsky, 2009). This caused huge imbalances in the current accounts of nations: specifically, surpluses in Asia (mainly China) and deficits in the West (mainly in the USA). Lastly, a third group finds the structural roots of the financial crisis in the unfavourable income distribution and in the decline of the wage share over the GDP, which has weakened consumption and effective demand (Barba and Pivetti, 2009; Fitoussi and Saraceno, 2010).

From these different explanations, different causations and policy consequences are derived. I will show that along with the process of financialisation, income inequality increased and labour flexibility improved, both in the USA and in the European Union (EU). Precarious job creation, job instability and poor wages have diminished workers’ purchasing power and have weakened aggregate demand. In turn, a weak and unstable aggregate demand, partly compensated with increased borrowing opportunities and the boom of credit consumption, increased the level of financial instability and favoured the crisis.

The remaining paper is organised as follows: Section 2 explains the various views of the crisis; Section 3 discusses the details of the financial meltdown, which originated in the US housing sector; Section 4 provides an interpretation of the finance-led model of growth that took place in the USA and in Europe after the 1980s; Section 5 explains the very foundation of the current economic crisis with reference to wages, evolution and labour productivity; and Section 5 concludes the paper.

2. Conflicting explanations of the crisis: a review

The starting point for an economic analysis of the current crisis should be with an understanding that the origin of the crisis is internal. The financial crisis originates in the heart of financial and global capitalism; it is an endogenous crisis that stemmed from a failure of the institutions tasked with regulating its mechanisms (Posner, 2009). It is the first crisis of the finance-led growth regime over the past two decades. No external influences, such as wars, oil shocks, natural disasters or global pandemics were at fault, as is sometimes found with past economic crises. Therefore, the remedies to the current crisis have to be founded on the reinvention of the system, in creating a new form of governance according to which the marketplace would operate (EuroMemorandum, 2010). Since this is a global crisis, it can also be considered a crisis of globalisation. In other words, it can be considered a consequence of globalisation that proliferated during the past two decades (Rochon and Rossi, 2010, Tropeano, 2010; Pitelis, 2010; Arestis and Pelagidis, 2010; Sawyer, 2010).

This is the first global crisis endured by capitalism since World War II. The blame, therefore, has been spread generously. In the USA neoliberals argue that everyone is to
financial crisis and global imbalances

blame, starting with the profit-driven bankers and continuing to all of the institutions that played a part and, of course, to China, whose low exchange rate caused a deficit in the USA (Mundell, 2009). However, the market has changed little and big financial institutions still exert the lion’s share of the power. The alternative view, rooted in both Keynesian (Skidelsky, 2009) and neo-Marxian thought (Wolff, 2010), blames the neoliberal global order and the internal and external imbalances that this financial regime of accumulation has created. In general the explanations of the crisis can be divided in three groups. The first group explains the slump of 2008–09 as resulting from an excess of money (‘money glut’) (Taylor, 2009). A second group claims the excess of global saving (‘saving glut’) as a main explanation for the crisis (Skidelsky, 2009). A third group identifies structural problems in the economic system as the main drivers of the current crisis (Fitoussi and Saraceno, 2010).

Going into more detail for the first group, Cooper (2007), Caballero et al. (2008) and Mendoza et al. (2007) argue that global imbalances are benign and temporary phenomena caused by a propensity to save by citizens of nations with emerging economies (where financial markets are less developed) and a propensity to consume in advanced economies (with more developed financial markets and financial availability). They argue that if people save more in Asia this would be offset by more consumption in the West, and equilibrium will sooner or later be reached (Mendoza et al. 2007).

Greenspan (2005) and Bernanke (2005) argued that the causes of the American foreign deficit, and therefore its cures, were primarily external to the USA.¹ This view assumes that perfect capitalist markets in countries like the USA are able to take on ever-increasing leverage without risk. Alan Greenspan, as the chairman of the US Federal Reserve Board (Fed), was the main force behind American monetary policies between 1987 and 2006 and fundamentally created the monetary regime that the current financial system requires. According to the monetarist view, Greenspan is said to have kept money too cheap for too long, at least in the first part of the 2000s (Greenspan, 2007). Loose monetary policies accommodate the asset bubble, in particular the housing sector (Bernanke, 2005; D’Apice and Ferri, 2010). High prices required more liquidity and the Federal Reserve allowed for this. At the same time, a low interest rate stimulated more and more households to buy homes, and the housing sector enjoyed high prices and high profits. By means of securitisation and ‘financial innovation’, the financial market was able to insulate itself from risk. Private mortgages were available for everybody from middle-income to no-income borrowers. A new target group of borrowers was addressed, the so-called NINJA (no income, no job and no asset) class. This lending approach had been favoured since the Clinton administration, which encouraged the politically and economically marginalised to buy their own homes, instead of putting into place public housing programmes similar to those found in several European countries (see Footnote 15).

However, according to the saving glut argument, Greenspan’s loose monetary policies and the Bush administration’s budget deficit were facilitators of the crisis and of the

¹ Bernanke’s view in 2005 was quite different from that today, during the crisis (Obstfeld and Rogoff, 2009). He now argues that it is impossible to understand this crisis without references to the global imbalances in trade and capital flows that began in the latter half of the 1990s (Bernanke, 2009). However, he is to blame for the huge dollar soar in summer–autumn 2008 (Mundell, 2009). Against the euro, the US dollar soared to $1.60 in July 2008 and this had bad consequence for the US current account (see footnote 15).
imbalances, not the causes (Skidelsky, 2009; Lowenstein, 2010). In this second group, some commentators like Posner (2009), Dunaway (2009) and Skidelsky (2009) argue that global macroeconomic imbalances are the underlying cause of the crisis; the very root of it. Some others, like Obstfeld and Rogoff (2009) and Bini Smaghi (2008), find global imbalances to be codeterminants of the crisis. As they cannot be a source of economic recovery, loose monetary policies could not have been the main source of the crisis. On the contrary, public investments can be stabilisers of imbalances and provide the fiscal stimulus needed for recovery. Similarly, a lack of investment in the USA, a consequence of a very low rate of savings, was the main source of the imbalance. According to this argument (known also as the global imbalances argument) the external surplus run by China and other Asian economies underlies the excess of savings over investments. Following the famous paradox of thrift, these saving excesses reverse in the US economy as an imbalance of aggregate supply over aggregate demand, but not as an increase in induced investment, which would be able to offset the saving glut. Hence, the excess savings brought about an excess of production compared with demand. However, this excess was compensated by the consumption credit boom, which kept the aggregate demand artificially high for a very long period. Economic growth in the USA over the last 15 years was mainly driven by consumption and not by demand for new investments, particularly after the dot-com bubble burst in 2001 (Skidelsky, 2009). According to Obstfeld and Rogoff (2009), the dot-com crash, along with its negative effects on investment demand, caused a saving glut that policy makers in the USA reacted to with loose monetary policies, creating cheap money and low long-term interest rates. As a result, house and commodity prices increased. At the same time, home buyers and consumers were encouraged by financial instruments and the credit boom, both in the housing sector and in the commodity market. This allowed the USA to enjoy a decade of economic growth, carried by consumption, within a framework of financialisation and imbalances.

As Bini Smaghi (2008, p. 4) stated: ‘External imbalances are often a reflection, and even a prediction, of internal imbalances. Economic policies should not ignore external imbalances and just assume that they will sort themselves out.’ The essential truth of Keynes’s ideas is that even the most productive economy can fail if consumers and/or investors spend too little. At the global level it applies to the current crisis as follows: Asia, especially China, saves too much (and consumes too little), while the USA saves and invests too little. Furthermore, at the policy level Keynesian theory states that sound money and balanced budgets are not always wisdom (Krugman, 2008; Arestis and Pelagidis, 2010).

Along with the global imbalances argument, some of the more heterodox contributions, such as Barba and Pivetti (2009), Fitoussi and Saraceno (2010), Fitoussi and Stiglitz (2009) and Brancaccio and Fontana (2011), identify structural problems in the economic systems of advanced economies, in particular the USA and the UK, which were badly affected by the crisis. These structural problems are deep causes of the recession and of the global disorder. They refer to the income distribution bias and to the inequality that caused a lack of consumption and effective demand in the economies. I will develop this third

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2 Greenspan was also a great supporter of subprime lending and derivatives, stating: ‘Derivatives have been an extraordinarily useful vehicle to transfer risk from those who shouldn’t be taking it to those who are willing to and are capable of doing so’ (Mr. Greenspan told the Senate Banking Committee in 2003) (see Footnote 15).

3 The paradox of thrift: if everyone one wants to save, more firms will sell less and output will fall until the induced investment increases.
argument, which, in my view, is the very foundation of the crisis, in strong correlation with the process of financialisation that took place some 30 years ago. In brief, my argument is that the aggregate demand, which was not sustained by appropriate wages and by productive investments, was artificially boosted through the channels of financialisation and credit to sustain consumption.

3. The meltdown

The background of the crisis is the increase of household debt in advanced economies (like the USA) and the bubble in the housing sector created by low interest rates. This is coupled with global imbalances that occur when a saving glut in Asia is not compensated by increased investments in the USA and other developed economies. Price bubbles, both in the housing and in the commodity sectors, emerged as the ‘twin’ figures, Figures 1 and 2. Prices in the US housing sector rose almost 200% since 1997. The situation in other countries is even worse; in Ireland, the increase in housing prices over the same period is about 300% and in the UK and Spain it is about 225%. In Australia, Norway, Sweden, France, Denmark, Italy, Canada and the Netherlands, housing prices increased around 200%.

The loosening of monetary policies and the resulting cheap money favoured the financial bubble, according to the following well-known causation chain: \( \uparrow \text{M}/\text{p}, \uparrow \text{D}_{\text{share}}, \uparrow \text{P}_{\text{share}}, \downarrow i \).

Nevertheless, the fall of interest rates \( i \) was not followed by an increase of investments, according to a classical ‘Keynesian effect’. On the contrary, high asset capitalisation allowed only for portfolio movements and financial investments. In contrast, the financial sector, supported by general enthusiasm and an excess of liquidity, manufactured a revolution, inventing financial instruments and financial packages for everybody, promising high returns to all. Financial innovation allowed for an impressive variety of instruments, securitisation, derivatives and speculative funds, such as collateralised debt obligations (CDO), mortgage-backed securities (MBS), mortgage-backed bonds (MMB), credit default swaps (CDS), asset-backed securities (ABS), hedge funds, futures etc. The result was an explosion in the availability of financing, in particular mortgage financing (Lowenstein, 2010), as shown in Figure 3.

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4 With the word ‘meltdown’ financial analysts and economists are referring to the financial crisis that arose in the mortgage market after a sharp increase in mortgage foreclosures, mainly subprime, collapsed numerous mortgage lenders and hedge funds. The meltdown spilled over into the global credit market as risk premiums increased rapidly and capital liquidity was reduced. The sharp increase in foreclosures and the problems in the subprime mortgage market were largely blamed on loose lending practices, low interest rates, a housing bubble and excessive risk-taking by lenders and investors.

5 The S&P/Case–Shiller Home Price Indices are the leading measures for the US residential housing market, tracking changes in the value of residential real estate both nationally as well as in 20 metropolitan regions.

6 Consistent with the story of surplus countries, which we will narrate later, house prices were stable or even fell in Germany, Switzerland and Japan.

7 \( \text{M}/\text{p} \) is the real quantity of money, \( \text{D}_{\text{share}} \) is the demand for shares, \( \text{P}_{\text{share}} \) is the price of shares and \( i \) is the interest rate.

8 Maurice Hank and Lewis Ranieri are the two financial gurus considered to be the main inventors and financial innovators among Wall Street people. Hank (AIG founder) conducted a vast business with CDS, generating huge profits and personal revenues before the failure of AIG. Ranieri (elected as one of the greatest innovators of the past 75 years by Business Week, together with Bill Gates and Steve Jobs) is considered the father of MBS and MBB in the 1980s. His idea of disconnecting borrowers and lenders through securitisation was one of the main factors leading to the financial meltdown (see Footnote 15).
Fig. 1. Global commodity prices.

Fig. 2. Home price indices.
Source: Standard & Poor.

Fig. 3. US mortgage debt and residential investment.
Source: US Federal Reserve System.
Financial institutions and banks, in order to protect themselves against NINJA and other weak borrowers, securitised mortgages with financial tools that were traded with customers and other banks and institutions in order to spread the high risk (Figure 4).  

Obviously, high-risk investments were associated with high returns and vice versa. Customers could choose from a menu, as if they were in a casino. The camouflaging of toxic assets and securities, along with collusion with the credit rating agencies (CRA), completed the picture.

Perverse incentive schemes within financial institutions and extra-bonuses for managers and brokers contributed to excessive risk-taking. Increasing risky trades made fortunes for financial intermediaries, who were rewarded according to the short-term expansion generated by these risky activities, rather than the long-term profitability of investments. Benchmarks became the delivery of exceedingly high expected quarterly earnings in terms of dividends and share prices for investors. This hugely increased financial pressure generated manias and reinvigorated the bubble. But banks are not casinos and a crisis could potentially, and actually did, emerge when only a small fraction of mortgage holders declared default, causing a so-called default correlation. As a matter of fact, these defaults actually caused the value of the most risky instruments to fall to zero. In turn, investors in the securities tools (MBS, CDO, ABS etc.) demanded now, with higher levels of risk, higher compensatory interests, paid again by mortgage owners, causing further defaults. The fact that these instruments were spread out across the world only increased the level of panic, because nobody actually could know precisely where the toxic assets were. Paraphrasing Kindleberger (2005), panic follows mania. As a result, the American housing bubble burst. Banks started to worry seriously and drastically limited the levels at which they were willing to lend to each other, causing a huge increase in the intrabank rate of lending, therefore worsening the position of many creditors. This caused even more default correlation as an increasing number of borrowers could not repay their debts. Simultaneously, a crisis of solvency (for borrowers) and a crisis of liquidity (for banks) emerged at the end 2007 and beginning of 2008 (Chorafas, 2009).

Fig. 4. Percentage mortgage delinquencies.
Note: Prime segment left axis; subprime segment right axe. Source: US Mortgage Banking Association.

9 That is a mortgage for which the borrower has failed to make payments as required in the loan documents.
10 Sub-prime includes a classification of lending to borrowers with a tarnished or limited credit history. Sub-prime loans carry more credit risk, and, as such, carry higher interest rates as well. Occasionally some borrowers might be classified as sub-prime despite having a good credit history. The reason for this is because the borrowers decided to not provide verification of income or assets in the loan application process.
Despite the initial political consensus over the protection of big bank defaults (too big to fail), Figure 5 shows that at the beginning of the crisis the first banks to fail were limited to the big ones, while later, in 2009 and 2010, the small ones failed as a consequence of correlation defaults (Goldstein and Veron, 2010).

The CRA started to revise their ratings of CDO, MBS, ABS and the like downwards. Consequentially, banks adjusted their risk upwards. The already highly leveraged financial institutions and the banking system were in worse trouble than before. They tried to raise fresh capitals by looking for funding from sovereign funds and state intervention as they now faced serious solvency and liquidity problems.

Now, not only individuals (borrowers and mortgage owners) but also banks started to declare default. In the UK, the Northern Rock bank default was clearly the symptom of a liquidity problem. In the USA, the unexpected default of the Lehman Brothers in September 2008 indicated that the crisis would be very big and could extend to the real market, since Lehman’s shares were spread widely throughout the financial world and investor confidence would now be close to zero.

Western central banks, the Fed, the Bank of England and the European Central Bank (ECB) in particular acted immediately, providing liquidity and lowering the interest rate in stages. The Fed provided $200 billion in the first quarter of 2008 and another $700 billion in the second quarter of 2009. During the same period the interest rate was lowered from 5% to 0.25%. The ECB, although traditionally more prudent with money supply and more focused on targeting low inflation and price stability than the Fed, followed the same line, although with some delay and at lower paces, by providing massive liquidity and lowering interest rates.

The crisis showed what was already known: securitisation, i.e. the process of spreading the individual risk of subprime mortgages in many tranches, posed a danger to the market. Faulty guarantees by credit-rating agencies such as Moody’s showed that the financial

![Failed banks in US](http://cje.oxfordjournals.org/)

**Fig. 5.** Bank failures in the USA, 2007–10. *Source: Federal Deposit Insurance Corporation.*

After 2001 it became clear that rating agencies had a vested interest in providing positive assessments, being paid by the very enterprises they were rating (Petit, 2009). This had bad consequences: before Lehman Brothers crashed, many others in the USA and in Europe experienced similar ends, Commerzbank, Parmalat and Enron among them.
system was entirely built upon a conflict of interest\textsuperscript{12} between controller and controlled societies. CRAs make profits advising firms whose products they are going to assess. Moody's has been awarding improper triple-A ratings to many of the investment banks and insurance societies that went bankrupt in the autumn of 2008, such as Lehman Brothers\textsuperscript{13}, or were bailed out or saved by the government, such as Fannie Mae, Freddie Mac,\textsuperscript{14} Bear-Stearns, Merrill Lynch, AIG, Goldman Sachs, Morgan Stanley and Washington Mutual.\textsuperscript{15} Trust collapsed immediately, matching the rate at which big financial colossuses were going into bankruptcy. The lack of transparency in the financial market and mystery surrounding complex financial tools, combined with corruption and manager greed, completed this recipe for disaster. Similar stories, although on a smaller scale, can be told regarding European banks and financial institutions, saved by their governments as the market fell (Frangakis, 2010).

The failure and corruption of the very guarantors of the market economy, the CRAs, is just an example of how little real competition and transparency there is in the capital markets. There is a troupe of 150 rating and vigilante enterprises in the world. However, the majority of securities analyses are made by just two CRAs: Moody’s and Standard and Poor’s, which account for 80\% of the market; 13\% is controlled by Fitch and the remaining market share (approximately 7\%) is split amongst the rest (147 enterprises).

4. The labour market and the crisis under the finance-led growth model

The saving glut in the USA and in European and other advanced economies is the background in which the current crisis emerged. The labour market is in fact a complementary pillar of this systemic crisis. The impact of the financial crisis on the labour market, including the persistent and deep impact of the crisis on the real economy, has been explored by many authors (Choudhry \textit{et al.}, 2010; European Commission, 2009; IMF, 2009B; ILO, 2010). As a result I will focus my attention on the following.

The argument that I want to put forward is that the institutional and structural changes that occurred in the labour market and in the economy over the last 15 years in Europe and over the past 30 years in the USA were functional to the financialisation process and have culminated in the current economic crisis. These changes allowed for labour flexibility,

\textsuperscript{12} Lowenstein (2010) claims that this conflict of interest arises also in the US federal government, where several top jobs at the Treasury and in the Cabinet of the US President are held by alumni of Goldman Sachs and other Wall Street firms, in particular during the Clinton and Bush administrations.

\textsuperscript{13} Hank Paulsen (Secretary, US Treasury) decided to bail out Bear-Stearns and allowed Lehman Brothers to fail (see Footnote 15).

\textsuperscript{14} Fannie Mae was created in 1938 as a Federal National Mortgage Association in response to the massive foreclosures as a result of the Depression. Fannie Mae was then privatised between 1968 and 1970, but was taken over by the Federal Housing Finance Agency (FHFA) on 6 September 2008 due to its huge losses (www.fanniemae.com). Freddie Mac is a Federal Home Loan Mortgage Corporation and was created as part of the Emergency Finance Act in 1970. Similarly to Fannie Mae, Freddie Mac was privatised in 1989 and also taken over by the FHFA on 6 September 2008 (www.freddiemac.com).

\textsuperscript{15} People like Maurice Hank, founder of AIG, the biggest insurance firm in the world, are among the ones to blame for the 2007–08 crisis, along with Alan Greenspan and Ben Bernanke at the Fed, Bill Clinton and George Bush (as political leaders and US Presidents), Hank Paulsen (Secretary, US Treasury) and Lewis Ranieri (the bond trader who turned home loans into tradable securities). No rational or socially grounded explanation can be found for the decision of Paulsen, who decided to save AIG and not to save Lehman Brothers. Of course the crisis is not, in my view, a consequence of individual behaviour. They just symbolise the main institutions that, within such a finance-led growth system, are bearers of responsibility for the collapse. It follows then that, in my view, the solution to the crisis is not only the substitution of those people, but the change of the institutions.
wage moderation and, ultimately, inequality and profit soar. All this occurred with the demise of Keynesian policies (Table 1).

First, the neoliberal approach requires a higher degree of labour flexibility because, in the current post-Fordist era, with the massive shift from the industrial sector to the service sector, technology and innovation bring about rapid structural changes, which demand quick responses from firms. Therefore, labour should adjust to the firms’ need. The financial sector in particular, because of its peculiarities, requires a very flexible workforce and fast adjustments. The financial sector was an early and eager promoter of deregulation in the early 1980s, both in the UK and in the USA under the Thatcher and Reagan administrations, respectively. This has brought about increased labour flexibility (Petit, 2009; Boyer, 2000). Moreover, after the fall of the Soviet Union, Alan Greenspan, who rose to oversee the Fed during the Reagan administration, believed that the world economy could expand greatly through the globalisation of the financial sector (Greenspan, 2007; Semmler and Young, 2010). The rest of the economy then followed the finance-led regime of accumulation, with flexible labour and compressed wages. Shareholders wanted higher dividends because they invested their own capital in firms, taking on a higher level of risk. Since the economic growth and productivity of advanced economies in the post-Fordist market has not been much higher than in the Fordist market, it follows that wages should be compressed in order for shareholders to obtain higher dividends. Labour flexibility and wage contraction is a means to obtain this result.

Figure 6 shows the financialisation of the OECD economies from 1988 to 2006. The variable of comparison here is the value of market capitalisation in the stock exchange as a percentage of GDP. One can observe a large-scale increase among all the countries, in particular the USA, the UK, Switzerland, Australia and Canada. The highest percentage of financialisation, in terms of GDP, belongs to Switzerland. However, in terms of absolute value, the USA is the most financialised market, followed by the UK. The USA promoted neoliberalism through global, multilateral and bilateral measures, under pressure from all of the major international financial institutions, multinational corporations and Wall Street institutions. The trend of hyperfinancialisation spread around the world, first to Europe and then to emerging markets. Wall Street argued that financialisation is beneficial to facilitate innovation and economic growth, despite a paucity of evidence supporting the claim. In fact quite the opposite is true, as clear evidence exists of a correlation between financialisation and inequality, manifesting in the compressed wage share (Petit, 2009; Basili et al., 2006).

A clear and concise story is emerging from these figures. Stopping short of suggesting causality, there is a positive correlation between the level of market financialisation and wealth inequality. In the top right corner of Figure 7, one can see the USA and other Anglo-Saxon countries, which have traditionally higher levels of financialisation and wealth inequality. In contrast, the bottom left of the chart displays the Scandinavian and Germanic nations, which are typically more equitable regarding wealth distribution. The most interesting case is the USA when compared with Denmark, which seem poles apart. However, in general, all Anglo-Saxon countries have higher inequality and financialisation than the Continental European and Scandinavian countries representing typically a European social model.

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16 Market capitalisation (also known as market value) is the share price multiplied by the number of shares outstanding. Listed domestic companies are the domestically incorporated companies listed on the country's stock exchanges at the end of the year. Listed companies do not include investment companies, mutual funds or other collective investment vehicles.
Table 1. Finance-led model of accumulation

<table>
<thead>
<tr>
<th>Wage–labour nexus</th>
<th>Form of competition</th>
<th>Monetary regime</th>
<th>State/society relation</th>
<th>Internatio nal regime</th>
<th>Coherence of the growth regime</th>
<th>Typical case</th>
</tr>
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<tbody>
<tr>
<td>Finance-led model</td>
<td>Employment flexibility, profit soar, poor wages and unstable pension funds</td>
<td>Mainly on financial markets, but trends towards oligopoly</td>
<td>Accommodate emergence of financial bubbles</td>
<td>Unders crutiny of financial markets</td>
<td>Trend towards global finance</td>
<td>Risk of systemic instability</td>
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As one can see, high financialisation is typically associated with high Gini coefficients and higher labour flexibility. More interesting, however, is the parallel trend of these variables: when financialisation increases, one notices both increased flexibility and inequality.

An exception is represented by the Mediterranean countries, which traditionally have less-effective States, with bad distribution policies and an informal economic sector that...
contributes to an increase in inequality (higher, for instance, than Australia and Canada and, to some extent, the UK). Moreover, lower employment rates in Mediterranean countries contribute to make the economy more uneven and the aggregate demand more unstable.

A flexible labour market with compressed wages needs to be supplemented by available financing. Hence, to have developed financial tools to sustain consumption, which otherwise were compressed by low and unstable wages. It is difficult to establish a causal relation, though as we cannot be certain whether financialisation required labour flexibility or if increased labour flexibility brought about hyperfinancialisation. A simple correlation between these two complementary institutional forms of neoliberalism seems more likely. A large number of financial tools were invented to finance consumption, to postpone payments, to extend credit and to create extra-consumption. Interestingly enough, while income inequality increased in the USA dramatically in the last 30 years, consumption inequality did not increase because borrowing opportunities allowed for workers to consume using credit channels (see Figure A7 in the Appendix). On the other hand, this consumption was needed by the economy, because otherwise the saving glut in Asia and the low income capacity of domestic workers would leave firms with unbought goods and services, and this would create aggregate demand unbalances. Thanks to financial innovation and cheap money, workers could now afford to buy cheap goods from China, as well as expensive houses, luxury cars and other durable goods at home. Such a model of consumption is, however, unstable, as the financial crash of 2007 showed.

An idea about the increasing flexibility in the labour market is offered by the employment protection legislation (EPL) from OECD (Table 2). This indicator shows the level of protection offered by national legislation with respect to regular employment, temporary employment and collective dismissal. In other words, regulation that allows employers the freedom to fire and hire workers at will. The indicator decreased consistently in the last two decades (which indicates more labour flexibility). Traditionally, European economies maintain higher levels of EPL in comparison with Anglo-Saxon economies (Nickell, 1997).

Labour flexibility is increasing everywhere, although in Europe the policy agenda is moving toward a so-called ‘flexicurity’ that would promote some type of job and income securities (i.e. employability) while accounting for the need for flexibility on the part of firms (Kok, 2004; Boyer, 2009; Tridico, 2009). Typically, the case of Denmark represents a situation where a lower EPL is associated with income and job securities. Thus, income inequality did not increase.

The EPL is declining in most of the countries. Areas with traditionally rigid labour markets, such as Europe, consistently improved labour market flexibility and therefore the EPL decreased. The USA continued to have a steady but very low EPL (actually the lowest at 0.2). This decreasing trend is coupled with increasing financialisation (as indicated by the market capitalisation values) during the past two decades. A strong correlation between these two indicators seems to exist; in particular one can see that countries which have the most aggressive finance-led model (typically the Anglo-Saxon ones, have the lowest EPL, i.e. highest labour flexibility, which exerts a strong pressure on wage) (Figure 8).

It is interesting to note the trend of the market capitalisation of listed companies before and after the crisis. The data show how companies protected themselves, withdrawing from stock exchanges as the crisis began. Before that, the financial euphoria and the manias, in the Kindleberger (2005) way, convinced many firms to be listed in the stock exchanges and to engage in speculative trading.
Now that the crisis of confidence has dampened the euphoria, the percentage of firm capitalisation in the stock exchange has decreased dramatically, and as Kindleberger (2005) predicts, panics have substituted themselves for manias. Clearly, a ‘reversed V’ is visible in Figure 9, with the average capitalisation in 2006, on the eve of the crisis, peaking around 120% of GDP, while the average in 2002 and in 2009 was 70% and 73%, respectively.

Before the current crisis, the new finance-led model had already been fully explained, along with its weaknesses and instabilities. Interestingly enough, Boyer (2000) argued that under the new finance-led regime of accumulation, the fundamental role, which had belonged to the wage–labour nexus under Fordism, belonged now, instead, to finance. The wage nexus, on the contrary, has been relegated to a secondary role and simply adjusts to the needs of the financial system. It is easy to show, using the Boyer model of the mechanisms of the finance-led system (Boyer, 2000, p. 117), that one does not need to claim greed and opacity to explain the current crisis. These are just complementary

### Table 2. Employment protection legislation

<table>
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<tr>
<th>OECD countries</th>
<th>Late 1980s</th>
<th>Late 1990s</th>
<th>2000s</th>
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<tbody>
<tr>
<td>Australia</td>
<td>0.9</td>
<td>1.2</td>
<td>1.2</td>
</tr>
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<td>Austria</td>
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problems that emerged in the financial sector. Figure 10 shows that instability emerges from the model by itself.

There are three major weaknesses seen in the model in Figure 10:

(i) The careful management of investments (affected by shareholders), which means a low (real) investment rate and a high tendency towards speculative financial
investments, which do not guarantee stable accumulation and sustained aggregate demand.

(ii) The highly reactive wage–labour nexus, which in substance means labour flexibility, and allows for wage compression, precarious job security and further reduction of aggregate demand.

(iii) The easy access to credit, which is necessary to finance consumption in order to artificially increase an otherwise low aggregate demand. It is a paradox for the neoliberal approach, which advocates the finance-led model of accumulation, to notice that from one side consumption is considered crucial (even when financed by cheap credit) and from another side neoliberal policies do not allow for proper wages to sustain consumption.

It is astonishing to notice how well the forecasts of Boyer in 2000 anticipated the current crisis, as the following text from the conclusion of his paper shows:

Contrary to a widely diffused belief, the main source of major financial crises may not be NICs that suffer from bad financial and banking supervision and weak surveillance from international organizations. From 1997 to 1999, all actors on financial markets have clearly perceived this NICs risk and, accordingly, raised their risk premium, while public authorities have undertaken ambitious reforms in order to assess more correctly the financial risks and tried to develop instruments in order to reduce such risk. Thus, a major lesson of the model is that the major current risks seem to be observed in the US. The more extended the impact of finance over corporate governance, household behaviour, labor-market management and economic policy, the more likely is an equity-based regime to cross the zone of structural stability. The next act of the financial drama may well start on Wall Street! (Boyer, 2000, p. 142)

5. The foundation of the crisis: wage inequality, low productivity and flexibility

In this section I will explore the very foundation of the current economic crisis. In particular, I assert that the crucial problem in the USA is the issue of stagnating wages
with productivity growth, which allowed for a profit soar, an issue that has been present since the 1970s (see data in the Appendix, Figures A2 and A3). In Europe the increase in labour flexibility, which was introduced in the 1990s, allowed also for a profit soar. Certainly, in Europe the situation is more variegated and differentiated than in the USA, and the difference between a neoliberal and Anglo-Saxon model and a European social model is not always easy to trace. However, on average, wage share over GDP in the USA is lower than in the EU15 and it fell more rapidly in the USA than in Europe. Furthermore, countries like the UK still have a higher wage share than the USA and some EU countries, since its initial levels were much higher because in the past the UK’s trade unions played an important role in defending labour. Nevertheless, flexibility and stagnant wages simultaneously contributed to the new finance-led model of accumulation (whose main characteristics are described in the table 1 above), as well as to the financial crisis of today. Both these phenomena are interconnected with the issue of extreme financialisation, which is necessary in order to sustain consumption (see the data in the Appendix). Flexibility, precarious and unstable jobs and poor wages encourage the increased demand for credit to finance consumption (see Figure A4 in the Appendix). The US case is very well described by Wolff (2010), who claims that US wages today are stuck at 1973 levels. After 150 years of growth, during the US boom and the realisation of the American dream from 1830 to 1970, productivity increased spectacularly with industrialisation; consequentially, wages increased, immigration filled the continuous labour supply shortage and GDP reached high levels. Consumerism was just a natural development of that process. The Great Depression, which lasted about a decade, was the only bad experience during that century and a half, albeit one of dramatic proportions. After 1973 wages stagnated. Although productivity in the USA continued to grow after that, productivity gains, a crucial pillar of Fordism, were no longer shared (Aglietta, 1979). Wage inequality increased dramatically as the Gini coefficient shows, passing from around 28% in the mid-1970s to 40% in the mid-2000s (OECD, 2010). The end of the labour supply shortage, the international competition and the massive outsourcing of investments completed the picture. Consumerism, a natural and institutionalised mindset in American culture, did not stop either (Ivanova, 2010). However, in order to continue it had to use financing and credit to replace lost wages: consumption credit for cars and durable goods, multiple mortgages for houses, loans for colleges etc. (see data in the Appendix). Moreover, even with stagnant wages, American consumers could still enjoy higher purchasing power with respect to international prices, since productivity kept increasing and therefore real prices of imports decreased. Data from the US Department of Labor (Bureau of Labor Statistics) confirm such an analysis (Figures 11 and 12).

Productivity between 1973 and 2007 increased 83%, while hourly wages only increased 3%. It is obvious that inequality increased in this scenario. Since during the same period consumption increased too (25% between 1996 and 2006), one must assume that the increase was supported by financing and credit (see data in the Appendix, Figure A4). The winners in this scenario in the USA are corporate managers, shareholders and capital gains recipients who benefited most from the productivity improvements in the economy (Wolff, 2010) (see data in the Appendix, Figures A5 and A6).

17 US Census Bureau.
In Europe a similar story can be told. However, two details are different, with respect to the US economy:

(i) Productivity in Europe did not grow as much as in the USA, particularly after the 1980s.\(^{18}\)

(ii) Wages, on the contrary, kept growing after 1973, although at a lower rate than between 1947 and 1973. Since the 1990s, however, in Europe as well, real wages have ceased to increase.

\(^{18}\) Given the fact that EU economies were poorer than that of the USA, the level of productivity in the USA has always been higher. However, productivity changes were higher in the EU for a long time. This was the case until the 1980s. After that and in particular after 1996 the changes along with the levels of labour productivity were higher in the USA.
Hence, in the EU, we find an economy with lower productivity than the USA and modestly growing wages until the 1990s (see Figure A1 in the Appendix). However, one should keep in mind that the EU is an economic entity with strong variation within its borders; one can observe an entity experiencing growth in the productivity of some countries (like France and Germany) and decreasing productivity in others (like Spain and Italy). Nevertheless, there is a general trend of stagnant productivity in the EU, when compared with the US economy, as Figure 13 shows.

While in the US economy, which has always had a flexible labour market, the pressure of the finance-growth model stifled the growth of wages, in the EU the pressure was on the governments to allow for, politically and financially, more labour flexibility (Wolfson, 1994). Both phenomena allowed for a profit soar. A third actor, operating between firms and trade unions, has always had a strong role in Europe (including the UK): the State. Cost savings for firms were possible at the expense of the State, which guarantees social support and financial subsidies to workers (Sapir, 2005; Nickell, 1997).

In the EU, since productivity was stagnant and because trade unions, traditionally, defended better wages, inequality did not increase as much and, to some extent, wages continued to increase until the 1990s. However, labour flexibility had to increase; the EU agenda of ‘flexicurity’ in the labour market and the Lisbon Strategy confirm this (European Commission, 2003). More flexibility has been introduced and the EU promises more security will be given to workers by the State in exchange. This relieves firms and gives them more power to determine wages, achieve profits and evaluate working conditions in the face of trade unions. The pressure then is on the State, which, in order to guarantee social cohesion, increases social expenditure (Leon and Realfonzo, 2008; European Commission, 2009).

Labour flexibility, however, gives European workers the same anxieties and precarious situations as workers in the USA (European Foundation for the Improvement of Living and Working Condition, 2006; Dymarsky, 2008). Unstable income earners need help from credit and financing, as in the USA. Hence, in the EU as in the USA, demand for financing for consumption developed too, albeit a bit later and in smaller proportions than in the USA. The numbers may be different, but the trends are similar (see data in the Appendix). As Figure 14 below shows, there are bad interactions in the current economic systems of

![Labour Productivity change per person employed: EU and US 1995-2007](http://cje.oxfordjournals.org/)

**Fig. 13.** Labor productivity in the EU and USA.

*Source: Eurostat.*
the EU and of the USA, which are characterised by a finance-led accumulation regime. Such interactions affect labour, finance, consumption and investments, allowing for the creation of bubbles and their subsequent bursting, and hence financial instability and economic crisis. Such an extreme finance-led growth model—which does not distribute productivity gains, compresses wages, increases inequality and labour flexibility, and which requires financing and credit to sustain consumption—lacks substantially productive investments and is subject to recurrent bubbles and dangerous price increases in the commodity market, with negative effects on the purchasing power of consumers. Therefore, it is not a sustainable model in the long term, and the current crisis testifies to the instability of such a system and the need for a radical change to it.

6. Conclusion

In this paper, I have argued that the background in which the current financial crisis emerged is the global saving glut and, particularly, the imbalances between the US deficit and Asian (China in particular) current account surpluses. This was the state of the world economy on the eve of the crisis in 2006. However, the crisis is as complex as the financialisation process and finds its very roots in the uneven income distribution caused by wage stagnation, profit soar and labour flexibility. My argument is primarily in regard to the US economy. However, the trends of some important macroeconomic variables in Europe underline similar tendencies, although one can find across Europe different experiences and institutions in the labour markets. The process of financialisation, measured as market capitalisation, started in the USA and the EU in the 1980s and appears to be strongly correlated with inequality and labour flexibility. In fact, financialisation brought about a finance-led regime of accumulation, which begged for an agenda of deregulation, liberalisation and labour flexibility, causing a stagnation of real wages in the USA (with productivity growth) and, to some extent, also in the EU. This agenda was also the demise of Keynesian policies. However, consumption kept increasing, even with stagnant wages, thanks to financing, the credit boom and readily available loans. A negative interaction between labour, finance, consumption and investments took place, creating a model where finance is the main institutional form characterised by multibubbles and consequent bursts; wages are flexible, deregulated and compressed; consumption is sustained by finance; and real investments are lacking while portfolio movements and speculation prevail. Hence, unstable
consumption, poor wages and uneven income distribution, with a fall in the wage share over GDP in the last 30 years in the USA and the EU, weakened aggregate demand and threatened the advanced economic systems of capitalism. Monetary quantitative easing and cheap money, mortgage housing and credit boom, Ponzi financial schemes and Minskyan instabilities are the natural consequences of this economic model. This model is unstable and the crisis of 2007–09 revealed that instability. Therefore, a radical change is needed. My paper suggests that Keynesian macroeconomics is not a theory that has to be used during a specific phase of the economic cycle. It is a general theory that, if implemented correctly, helps to prevent crisis and to maintain a steady path of development.

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Appendix

**Labour productivity, US and Euro area**


**Wage dispersion, selected countries. Source: EuroMemorandum, 2010.**

![Wage dispersion, selected countries. Source: EuroMemorandum, 2010.](image2)
Fig. A3. Wage shares on GDP, selected countries.

Fig. A4. Family debts and income inequality (USA 1984–2008).
Fig. A5. Compensation for the financial sector (black line) and other sectors (grey line). Source: Financial Crisis Inquiry Commission, 2011.

Fig. A6. Ratio between manager compensation and workers (average wage)—USA. Source: ILO, 2010.
Fig. A7. Income and consumption inequalities (USA 1980–2006). The dashed line represents income inequality and the solid line represents consumption inequality (non-durable goods).