Financial Crisis and Global Imbalance: its Labor Market Origins and the aftermath

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Abstract

The objective of this paper is twofold. First, I will show that the Keynesian theory explains the origins of the current economic crisis more accurately than does the monetarist theory. Second, and most importantly, I will expand the Keynesian explanation of financial crisis to that of the labor market in EU and US. The process of financialization was coupled with labor flexibility, wage moderation and profit soar. The flexibility agenda of the labor market and the end of wage increases are the complementary pillars of the current financial system. When attempting to correct the latter, one cannot ignore the lack of aggregate demand and unstable consumption derived from precarious job creation, job instability, and poor wages. Labor flexibility along with poor wages, and financial crisis are two sides of the same coin. Both have a direct impact on the real economic crisis and on the current global imbalances.

Key words: Financial crisis, saving glut, global economy, labor market, wage, productivity

JEL: G01; E21; F32; J24

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1. Introduction

The economic crisis which started in the financial sector in 2007 is still impacting USA and European economies today, causing decreases in output and employment levels. The crisis is the biggest 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 et. al, 2010; IMF, 2009a; Bini Smaghi, 2008; Allen, 2009; Caballero et al., 2008; etc). These competing arguments offer differing analyses of both the origins of the crisis and the recovery policies implemented in its wake; and the fundamental disagreements can be mainly conducted to the traditional differences between monetarist and Keynesian economic theory. The former argue that the origin of the crisis can be found mainly in the interaction between 1) the financial bubble and 2) the cheap money and loose monetary policies, which allowed for the money glut in the economy. The consequences of this interaction were the breakdown of the financial sector followed by the crisis in the real economy (Greenspan 2007). The opposing Keynesian 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 US and other western economies. This caused huge imbalances in the current accounts of nations, specifically surpluses in Asia (mainly China) and deficits in the West (mainly in the US).

From these different explanations, different causations and policy consequences are derived. The objective of this paper is twofold. First, I will show that the Keynesian theory explains the origins of the current economic crisis more accurately than does the monetarist theory. Second, and most importantly, I will expand the Keynesian explanation of financial crisis to that of the labor market in EU and US. The process of
financialization was coupled with labor flexibility, wage moderation and profit soar. The flexibility agenda of the labor market and the end of wage increases are the complementary pillars of the current financial system. When attempting to correct the latter, one cannot ignore the lack of aggregate demand and unstable consumption derived from precarious job creation, job instability, and poor wages. Labor flexibility along with poor wages, and financial crisis are two sides of the same coin. Both have a direct impact on the real economic crisis and the current global imbalances.

Keynesian theory suggests crisis interpretations and policies to keep the economy at full employment and on a stable path of development. The rest of the paper is organized as follows: section 2 explains the monetarist and Keynesian views of the crisis; section 3 goes in the details of the financial meltdown which originates in the US housing sector; section 4 provides and interpretation of the financial-led model of growth which took place in US and in Europe since the 1980s; section 5 explains the very foundation of the current economic crisis with reference to wages’ evolution and labor productivity. Section 5 concludes the paper.

2. Origins of the Crisis: Monetarist and Keynesian Views

The starting point for an economic analysis of the current crisis should be the understanding that the origin of the crisis is internal. It originates in the heart of financial and global capitalism. It is an endogenous crisis which 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 of 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 which the marketplace operates in accordance with (EuroMemorandum, 2010). Since this is a global crisis, it can also be considered a crisis of globalization. In other words, it can be considered a consequence of that kind of globalization which was proliferated during the past two decades (Rochon and Rossi 2010, Tropeano, 2010; Pitelis, 2010; Arestis et. al., 2010; Sawyer, 2010).

It is interesting that, while the story of and facts surrounding the crisis are reported similarly by both Keynesians and Monetarists, the roots of the narrative are extremely different. This is the first global crisis capitalism has endured since WWII. The blame, therefore, has been spread generously. In the US, neo-liberals argue that everyone is to blame (Mundell, 2009), starting with the profit-driven bankers, continuing to all of the institutions which played a part, and of course, to China, whose low exchange rate caused a deficit in the US. 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 and neo-Marxian thought (Wolff, 2010), blames the neo-liberal global order and the imbalances that this financial regime of accumulation created. Going into more detail, 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 co-determinants of the crisis. Finally Cooper (2007), Caballero et al., (2008), and Mendoza et al., (2007) argue that global imbalances are a benign and temporary phenomena caused by a propensity to save in the 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). Greenspan (2005) and Bernanke (2005) argued that the causes of the American foreign deficit, and therefore its cures, were primarily external to the US.\(^2\) This view assumes that perfect capitalist markets in countries like US are able to take on ever-increasing leverage without risk.

*Monetarist View*

Monetarists propose the money glut theory in order to explain the origins of the crisis. There is weak evidence for the saving glut, they argue (Whelan, 2010). Moreover, the monetarist view disregards the saving glut theory by claiming that if people save more in Asia, this would be off-set by more consumption in the West, and equilibrium will soon or later be reached (Mendoza et al., 2007). 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. In order to defend 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, 2009). High prices required more liquidity and the Fed allowed for this. Conversely, 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 securitization and “financial innovation”, the financial market was able to insulate itself from risk. Private mortgages were available for everybody from

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\(^2\) Bernanke’s view in 2005 was quite different than 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-fall 2008 (Mundell, 2009. Against the Euro the Dollar soared to $1.60 in July 2008, and this had bad consequence for the US Current Account (see footnote 16).
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 borrowers) class. This lending approached had been favored since the Clinton administration, which encouraged the politically and economically marginalized buy their own homes, instead of putting into place public house programs like the ones in place in several European countries (see footnote 16).

**Keynesian View**

The alternative view put forward is the Keynesian theory of the “saving glut.” In this view, savings exceed investments on the international level. The external surplus run by China and other Asian economies underlies the excess of savings over investment. According to the famous *paradox of thrift*\(^3\), 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 of savings brought about an excess of production compared to demand, with a deflationary consequence on price. Economic growth in US over the last fifteen 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 Obstefedl and Rogoff, (2009), the dot-com crash, along with its negative effects on investment demand, caused a saving glut which policy makers in the US reacted to with loose monetary policies, creating cheap money and low long-term interest rates. As a result, prices increased (as the “twin” figures below show).

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\(^3\) The paradox of thrift: if everyone one wants to save more firms will sell less and output will fall until the induced investment increases.
At the same time, increased consumption was encouraged by financial instruments and the credit boom; both in the housing sector and in the commodity market. This allowed for a decade of economy growth, carried by consumption, within a framework of financialization and imbalances.

At this point the two explanations converge: cheap money in fact, in the Keynesian approach, a consequence, not a cause, 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 stabilizers of imbalances and provide the fiscal stimulus needed for recovery. Similarly, a lack of investments in the US was the main source of the imbalance. Greenspan’s loose monetary policies and the Bush administration’s budget deficit were facilitators of the crisis and of the unbalances, not the causes (Skidelsky, 2009; Lowenstein, 2009). Contrary to the assumptions of policy makers, lower interest rates did not result in higher investments. Prices in the US

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4 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.

5 Greenspan was also a great supporter of sub-prime 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” (US Senate Banking Committee, 2003) (see footnote 16).
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 about 225% in the UK and Spain. In Australia, Norway, Sweden, France, Denmark, Italy, Canada and the Netherlands, housing prices increased around 200%.6

Similar to the Keynesian argument, my view of the crisis is that it was a consequence of the combination of two main problems:

1. The macroeconomic imbalances (large current account surpluses of China, Asia, Germany, and the Middle Eastern vs. large current account deficits in the US, UK, and southern European).

2. The consequences of the imperfect capital market; particularly the connection between the increased systemic risk associated with the securitization of credit and financialization and the consumption credit boom.

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 US saves and invests too little. Furthermore, at the policy level, the Keynesian theory states that sound money and balanced budgets are not always wisdom (Krugman, 2008, Arestis, and Pelagidis, 2010).

The narrative and the facts of the crisis as told by the above scholars are described, as follows, together with information provided by other scholars (see Frangakis 2010, Semmler and Young, 2010):

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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.
• The background of the crisis is the increase of household debt in economically developed nations (like the US) and the bubble in the housing sector created by low interest rates coupled with global imbalances which occur when a saving glut in Asia is not compensated by increased investments in US and other developed economies.

• The crisis started in the housing sector of the US, with the collapse of the sub-prime mortgage market in 2007.

• Default correlations on mortgages spread to investment banks and commercial banks in the US and then across the world through the complex system of securitization.

• Mortgage-backed securities were downgraded by the same Credit Rating Agencies (CRA) that some months before were giving artificially high ratings; nobody wanted them and owners wanted to sell them. They lost value, decreased in price, providing poor returns to owners. Owners of such toxic assets (among them governmental and nongovernmental organizations, banks, enterprises, individuals, hospitals, charities, universities, etc.) were now financially compromised.

• Credit markets seized up as risk increased and expectations worsened. Consequentially, the interbank lending slowed considerably. Banks and financial institutions failed. Interest rates went up and mortgage owners were even in even more trouble, with the increased default correlations.

• The bursting of the bubble in the housing market was then followed by the bursting of the bubble in the linked financial sector, with the collapse of Bear Stearns’ (bailed-out by US Treasury), and Lehman Brothers (which failed), among others.

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7 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.
• Both solvency problems (from people) and liquidity problems (from banks) emerged.
• The central banks of advanced economies tried to limit the failure by creating huge amounts of liquidity in the financial system.

3. The Meltdown

The loosening of monetary policies and the resulting cheap money favored the financial bubble, according to the following well-known causation chain: $\uparrow M/p$, $\uparrow Dshare$, $\uparrow Pshare$, $\downarrow i$.

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 capitalization 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, securitization, derivatives, and speculative funds such collateralized debt obligations (CDO), mortgage-backed securities (MBS), mortgage-backed bonds (MBB), 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 the figure below shows.

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8 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.

9 $M/p$ is the real quantity of money; $Dshare$ is the demand for shares; $Pshare$ is the price of shares, $i$ is the interest rate.

10 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
Financial institutions and banks, in order to protect themselves against NINJA and other weak borrowers, securitized mortgages with financial tools which were traded with customers and other banks and institutions in order to spread the high risk (This kind of financialization and securitization was welcomed by Alan Greenspan as a way to spreading the risk and eliminate the systemic risk, see footnote 16).

**Figure 4 – Percentage Mortgage Delinquencies**


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That is a mortgage for which the borrower has failed to make payments as required in the loan documents.

[Footnote 16] 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 securitization was one of the main factors leading to the financial meltdown (see footnote 16).
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 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 increased hugely financial pressure, generated empty expectations 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), mania follows panic. 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 inter-bank rate of lending, therefore worsening of 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).

**Figure 5 - Bank Failures in the US, 2007-2010**

![Graphic: Bank Failures in the US, 2007-2010](assets/bank_failures_graph.png)

Source: Federal Deposit Insurance Corporation  
Contrary to the well-spread mantra that some banks were *to big to fail* (Goldstein and Veron, 2010), the graph above shows that at the beginning of the crisis, the first banks to fail were just the big ones, while later, in 2009 and 2010, the small ones failed as a consequence of correlation defaults.

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 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 faced seriously solvency and liquidity problems.

Now, not only individuals (borrowers, 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 US, the unexpected default of the Lehman and 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 first $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: securitization, i.e. the process of spreading the individual risk of sup-prime mortgage in many tranches, posed a danger to the market. Faulty guarantees by credit rating agencies such as Moody’s\textsuperscript{12} showed that the financial system was entirely built upon a conflict of interests\textsuperscript{13} 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 which went bankrupt in the fall of 2008, such as

\textsuperscript{12} 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 and Brothers crashed, many others in the US and in Europe experienced similar ends, Commerzbank, Parmalat, and Enron among them.

\textsuperscript{13} Lowenstein (2010) claims that this conflict of interests 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.
Lehman Bros\textsuperscript{14}, or were bailed out or saved by the government, such as Fannie Mae, Freddie Mac\textsuperscript{15}, Bear-Stearns, Merrill Lynch, AIG, Goldman Sachs, Morgan Stanley, and Washington Mutual\textsuperscript{16}. Trust collapsed immediately, equaling 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. The remaining market share, approximately 7%, is split amongst the rest (147 enterprises).

\textsuperscript{14} Hank Paulsen (Secretary of US Treasury) decided to bail-out Bear-Stearns and allowed Lehman Bros to fail (see footnote 16).

\textsuperscript{15} 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 privatized between 1968 and 1970, but was taken over by the Federal Housing Finance Agency (FHFA) on September 6, 2008 due to its huge losses. \url{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 privatized in 1989 and also taken over by the FHFA on September 6, 2008. \url{www.freddiemac.com}.

\textsuperscript{16} 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 of 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. Of course the crisis is not, in our view, a consequence of individual behavior. They just symbolize the main institutions which, within such a financial-led growth system, are bearer of responsibilities 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.
4. The Labor Market and the Crisis under the Financial-led Growth Model

The saving glut in US and in other European and advanced economies is the background in which the current crisis emerged. The problem of the labor market is the complementary pillar of this systemic crisis. This session will not explore the impact of the financial crisis on the labor market or show how persistent and deep the impact of the crisis can be on the real economy. This issue has been already explored by many authors (Choudhry et al., 2009; European Commission, 2009; IMF, 2009b; ILO, 2010). The argument that I want to put forward here is that the institutional and structural changes which occurred in the labor market and in the economy over the last fifteen years in Europe, and over the past 30 years in US, was functional to the financialization process and have culminated in the current economic crisis. These changes allowed for labor flexibility, wage moderation and ultimately inequality and profit soar. All this occurred with the demise of the Keynesian policies.

Table 1 – Financial-led Model of Accumulation

<table>
<thead>
<tr>
<th>Financial led model</th>
<th>Wage-labor 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>
</thead>
</table>

First, the neoliberal approach requires higher degrees of labor flexibility because, in the current post-Fordist era, technology and innovation bring about rapid structural changes which demand quick responses from firms. Therefore, labor 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 has been an early and eager promoter of deregulation in the early 1980s in UK and in USA, under the Thatcher and Reagan administrations. It has brought about more labor 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 globalization of the financial sector (Greenspan, 2007; Semmler and Young, 2010). The rest of the economy then followed the financial-led regime of accumulation, with flexible labor and compressed wages. Shareholders want 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. Labor flexibility is a means to obtain this result.

Figure 6 – Financialization: Listed Companies in the Stock Exchange
Market Financialization: 1988-2006 (% of GDP)

The figure above shows the financialization of the OECD economies since 1988. The variable of comparison here is the value of market capitalization in the stock exchange as a percentage of GDP. One can observe a huge improvement among all the countries, in particular the US, UK, Switzerland, Australia, and Canada. The highest percentage of financialization, in terms of GDP, belongs to Switzerland. However, in terms of absolute value, the US is the most financialized market, followed by the UK. The US promoted neo-liberalism through global, multi, and bilateral measures, under pressure from all of the major international financial institutions, multinational corporations, and Wall Street institutions. The trend of hyper-financialization spread around the world, first to Europe and then to emerging markets. Financialization is beneficial, Wall Street people argued, to facilitate innovation and economic growth,

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17 Market capitalization (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.
despite a paucity of evidences supporting the claim. Quite the opposite is true, as clear evidence of a correlation between financialization and inequality exists, 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 financialization and wealth inequality. In the top right corner of the figure below, one can see the US and other Anglo-Saxon countries, which have traditionally higher levels of financialization and wealth inequality. In contrast, the bottom left of the chart displays the Scandinavian and Germanic nations, typically more equitable regarding wealth distribution.

**Figure 7 – Scatter Plot Inequality and Financialization in 2000s**

![Scatter Plot Inequality and Financialization in 2000s](image)

Source: World Bank, 2010 online database

As one can see, high financialization is typically associated with high Gini coefficients and higher labor flexibility. More interesting, however, is the parallel trends
of these variables: when financialization increases, one notices both increased flexibility and inequality (see table 2 below and table A1 in the Appendix).

A flexible labor market with compressed wages needs to be supplemented by available financing. Hence, developed financial tools to sustain consumption, which otherwise was compressed by low and unstable wages. It is difficult to establish a causal relation, though: we cannot be certain whether financialization required labor flexibility or if increased labor flexibility brought about hyper-financialization. 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 (see data in the appendix). This extra-consumption was needed by the economy because the saving glut in Asia and the low income capacity of domestic workers had left firms with un-bought goods and services. Workers could now afford to buy cheap goods from China and, thanks to financial innovation and cheap money, expensive houses, luxury cars, and other durable goods at home.

An idea about the increasing of flexibility in the labor market is offered by the Employment Protection Legislation (EPL) from OECD (see table below). This indicator shows the level of protection offered by national legislation with respect to regular employment, temporary employment and collective dismissal. In other words, how regulated the employer’s freedom to fire and hire workers is. The indicator decreased consistently in the last two decades (which indicates more labor flexibility). Traditionally, European economies maintain higher levels of EPL in comparison with Anglo-Saxon economies (Nickell, 1997).

Table 2 - Employment Protection Legislation
<table>
<thead>
<tr>
<th>OECD Countries</th>
<th>Overall EPL, including regular employment, temporary employment and collective dismissal restrictiveness</th>
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<tbody>
<tr>
<td></td>
<td>Late 1980s</td>
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<tr>
<td>Australia</td>
<td>0.9</td>
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<tr>
<td>Austria</td>
<td>2.2</td>
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<tr>
<td>Belgium</td>
<td>3.2</td>
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<td>Canada</td>
<td>0.8</td>
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<td>Czech Rep</td>
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<td>Denmark</td>
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<td>Finland</td>
<td>2.3</td>
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<td>France</td>
<td>2.7</td>
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<tr>
<td>Germany</td>
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<td>Greece</td>
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<td>Japan</td>
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<tr>
<td>Poland</td>
<td>..</td>
</tr>
<tr>
<td>Portugal</td>
<td>4.1</td>
</tr>
<tr>
<td>Slovak</td>
<td>..</td>
</tr>
<tr>
<td>Spain</td>
<td>3.8</td>
</tr>
<tr>
<td>Sweden</td>
<td>3.5</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1.1</td>
</tr>
<tr>
<td>Turkey</td>
<td>..</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.6</td>
</tr>
<tr>
<td>United States</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>2.335</strong></td>
</tr>
</tbody>
</table>

Source: OECD

However, labor flexibility is increasing everywhere, although in Europe the policy agenda is moving toward a so called “flexicurity” which would promote some type of job security while accounting for the need for flexibility on the part of firms (Kok 2004; Boyer 2009; Tridico 2009).

The EPL is trending downwards in most of the countries. Areas with traditionally rigid labor markets, such as Europe, consistently improved labor market flexibility, and therefore the EPL decreased. The US continued to have a steady, but very low EPL (actually the lowest at 0.2). This decreasing trend is coupled with increasing
financialization (as indicated by the market capitalization values) during the past two decades. A strong correlation between these two indicators seems to exist.

**Figure 8 – Correlation between Labur Flexibility and Capital Financialization**

![Correlation between Labur Flexibility and Capital Financialization](image)

Source: World Bank 2010, online database

It is interesting to note the trend of the market capitalization of listed companies before and after the crisis. The data shows how companies protect themselves, withdrawing from stock exchanges as the crisis started. Before that, the financial euphoria and the manias, in the Kindleberger way (2005), convinced many firms to be listed in the stock exchanges and to engage in speculative trading.

Now that the crisis of confidence dampened the euphoria, the percentage of firm capitalization 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 the figure below, with the average capitalization 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 financial-led model had already been fully explained, along with its weaknesses and instabilities. Interestingly enough, Boyer (2000) argued in 2000 that under the new financial-led regime of accumulation, the fundamental role, which had belonged to the wage-labor 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 financial-led system (Boyer 2000: 117), that one does not need to claim greed and opacity to explain the current crisis. These are just complementary problems which emerged in the financial sector. The figure shows that instability emerges from the model by itself.

Figure 10 – The Mechanism of Finance-led Growth and Its Institutions
There are three major weaknesses seen in this model:

1. 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.

2. The highly reactive wage labor nexus, which in substance means labor flexibility, allows for wage compression, precarious job security and further reduction of aggregate demand.

3. The easy access to credit, which is necessary to finance consumption in order to artificially increase low natural aggregate demand. It is a paradox for the neoliberal approach, which advocates the financial-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: 142).

5. The Foundation of the Crisis: Wage Inequality, Low Productivity and Flexibility

In this section I will explore the very foundations of the current economic crisis. In particular, I assert that the crucial problem in the US is the issue of stagnating wages, with productivity growth, which allowed for a profit soar, an issue which has been present since the 1970s (see data in the appendix, Figure A2 and A3). In Europe the increase of labor flexibility which was introduced since the 1990s allowed also for a profit soar. Flexibility and stagnant wages simultaneously contributed to the new finance-led model of accumulation (whose main characteristics are described in table below), as well as to the financial crisis of today. Both these phenomena are interconnected with the issue of extreme financialization which is necessary in order to sustain consumption (see data in the appendix). Flexibility, precarious and instable job and poor wages encourage the increase of demand for financing for consumption purchases (see figure A3 in the appendix). The US case is very well described by Wolff (2010), who claims that the US wages today are stuck at the 1973 levels. After 150 years of growth, during the US boom and the realization of the American dream from 1830 to 1970, productivity increased.
spectacularly with industrialization, consequentially wages increased, immigration from abroad filled the continuous labor 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 US 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 labor supply shortage, the international competition, and the massive outsourcing of investments complete the picture. Consumerism, a natural and institutionalized 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 below, from US Department of Labor (Bureau of Labor statistics), confirm such an analysis.

As the data below shows, productivity between 1973 and 2007 increased 83%, while hourly wages only increased 3%. It is obvious that inequality increases in this scenario. Since during the same period consumption increased too (25% between 1996 and 2006)\(^\text{18}\), one must assume that the increase was supported by financing and credit (see data in the appendix – Figure A3). The winners in this scenario in the US are

\(^{18}\) US Census Bureau.
corporate managers, shareholders, and capital gains recipients who benefited most from
the productivity improvements in the economy (Wolff, 2010) (see data in the appendix –
Figure A4 and A5).

**Figure 11 – Real Wage, Non-supervisor Workers (In 2007 $)**

![US weekly real wage 1947-2007](chart11)

Source: US Department of Labor, Bureau of Labor statistics

**Figure 12 – US Economy, Non-agricultural Sector (In 2007 $)**

![US productivity (1992=100) and hourly wage 1973-2007](chart12)

Source: US Department of Labor, Bureau of Labor statistics
In Europe a similar story can be told. However, two details are different, with respect to US economy:

1) Productivity in Europe did not grow as much as in the US, particularly since the 1980s\footnote{Given the fact that EU economies were poorer than the US, the level of productivity in the US has always been higher. However, productivity changes were higher in EU for long time. This was the case until the 1980s. After that and in particular after 1996 also the changes along with the levels of labor productivity were higher in US.}.

2) Wages, on the contrary, kept growing after 1973, although at a lower rate than between 1947 and 1973. Since the 1990s however, in Europe too real wages stopped to increase.

Hence, in the EU, we find an economy with lower productivity than US 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; and, 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, a general trend of stagnant productivity in the EU, when compared to the US economy, as the figure below shows:

**Figure 13 – Labor Productivity in the EU and US**

![Labour Productivity change per person employed: EU and US 1995-2007](image)
While in the US economy, which has had always a flexible labor market, the pressure of the financial-growth model stifled the growth of wages, in the EU the pressure was on the governments to allow for, politically and financially, more labor 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: the State. Cost savings for firms were possible at the expenses 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, labor flexibility had to increase; the EU agenda of “flexicurity” in the labor 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 states 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 expenditures (Leon and Realfonzo, 2008; European Commission 2009).

Labor flexibility, however, gives European workers the same anxieties and precarious situation of US workers (EFILWC, 2006; Dymarsky 2008). Unstable income earners need help from credit and financing, as in US. Hence, in the EU as in the US, demand for financing for consumption developed too, albeit a bit later and in smaller proportions than in US. The numbers may be different, but the trends are similar (see data in the appendix). As the figure below shows, there are bad interactions in the current
economic systems of the EU and of the US, which are characterized by a finance-led accumulation regime. Such interactions affect labor, finance, consumption, and investments, allowing for the creation of bubbles and their subsequent bursting, hence financial instability and economic crisis. Such an extreme financial-led growth model, which does not distribute productivity gains, compresses wage, increases inequality and labor 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, too, 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.

**Figure 14 - Interactions and bubbles within the Finance-led Growth Model**

![Diagram showing interactions between labor, finance, consumption, and investments, highlighting financialization, demand for finance, price shares, and investment bubbles.]

**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) surpluses in the current account. This was the state of the world economy on the eve of the crisis in 2007. However, the crisis is as complex as the financialization process, and finds its very roots in that phenomenon which was coupled with wage stagnation, profit soar and labor flexibility. The process of financialization, measured as market capitalization, started in the US and EU in the 1980s and appears to be strongly correlated with inequality and labor flexibility. In fact, financialization brought about a financial-led regime of accumulation which begged for deregulation, liberalization, and labor flexibility, causing a stagnation of real wage in the US (with productivity growth) and, to some extent, also in the EU. This 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 bad interaction between labor, finance, consumption, and investments took place, creating a model where finance is the main institutional form characterized by multi-bubbles 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. Monetary quantitative ease, cheap money, mortgage housing boom and burst 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 Keynesism is not a theory which has to be used during a specific phase of the economic cycle. It is a general theory which, if implemented correctly, helps to prevent crisis and to maintain a steady path of development.
Appendix

Table A1 – Inequality and Financialization

<table>
<thead>
<tr>
<th>Country</th>
<th>Gini mid-1980s</th>
<th>Gini mid-2000s</th>
<th>% Point change inequality mid-80s-mid-2000</th>
<th>Financialization as % of GDP, listed companies 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>30</td>
<td>33</td>
<td>3</td>
<td>146</td>
</tr>
<tr>
<td>Austria</td>
<td>24</td>
<td>26</td>
<td>2</td>
<td>59</td>
</tr>
<tr>
<td>Belgium</td>
<td>26</td>
<td>28</td>
<td>2</td>
<td>99</td>
</tr>
<tr>
<td>Canada</td>
<td>28</td>
<td>32</td>
<td>4</td>
<td>133</td>
</tr>
<tr>
<td>Denmark</td>
<td>22</td>
<td>24</td>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td>Finland</td>
<td>22</td>
<td>27</td>
<td>5</td>
<td>99</td>
</tr>
<tr>
<td>France</td>
<td>29</td>
<td>29</td>
<td>0</td>
<td>107</td>
</tr>
<tr>
<td>Germania</td>
<td>26</td>
<td>28</td>
<td>2</td>
<td>66</td>
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<td>Greece</td>
<td>32</td>
<td>34</td>
<td>2</td>
<td>86</td>
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<tr>
<td>Ireland</td>
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<td>36</td>
<td>3</td>
<td>89</td>
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<td>Italy</td>
<td>31</td>
<td>35</td>
<td>4</td>
<td>76</td>
</tr>
<tr>
<td>Japan</td>
<td>30</td>
<td>32</td>
<td>2</td>
<td>108</td>
</tr>
<tr>
<td>Netherlands</td>
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<td>Norway</td>
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<td>Spain</td>
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<td>0</td>
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<td>Sweden</td>
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<td>United Kingdom</td>
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<td>35</td>
<td>3</td>
<td>145</td>
</tr>
<tr>
<td>United States</td>
<td>34</td>
<td>40</td>
<td>6</td>
<td>155</td>
</tr>
</tbody>
</table>

Source: OECD

Figure A1 – Labor Productivity 1995-2009

Labour productivity, US and Euro area

Source: Eurostat
Figure A1 - Wage dispersion, selected countries

Source: Euromemorandum 2010

Figure A2 – Wage shares on GDP, selected countries

Source: Euromemorandum 2010
Figure A3 - Family debts and income inequality (US 1984-2008)

[Graph showing family level of indebtedness (% sx) and income share of the top 5% of the distribution (% dx). Source: IMF, 2010]

Figure A4 - Compensation financial sector and other sectors

[Graph showing average compensation for financial sector and other sectors. Source: Financial Crisis Inquiry Commission (2011)]
Figure A5 – Ratio between manager compensation and workers (avg wage) - US

![Graph showing the ratio between manager compensation and workers (avg wage) for the years 2003, 2005, and 2007.]

Source: ILO, 2010

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