

THE CURRENT FINANCIAL MELTDOWN: A CRISIS OF FINANCE CAPITAL-DRIVEN GLOBALIZATION

Preliminary draft prepared for the International Conference “Whither Financialised Capitalism?” , , November 7, 2009, SOAS, University of London

Claude Serfati, Université de Saint-Quentin-en-Yvelines

Claude.Serfati@c3ed.uvsq.fr

Comments welcome

INTRODUCTION

The basic thrust of this paper is that what happened after September 2007 is not a financial crisis which ‘contaminated’ an healthy ‘real’ economy. The current state of the world economy cannot be understood either as propagation, or a contagion from the financial side to the ‘real’ economy. It is this way the current crisis is mainly analysed: an exuberant financial sector contaminated the otherwise healthy and buoyant production sector. It is not a crisis of ‘financialisation’ either. The underlying social and economic power built up for three decades by financial institutions and interests should not be underestimated. Finance capital is not a stock of financial titles; it embodies social relations which allows his holder to claim a share of the value created by labour or the existing wealth. The political economy of governmental rescue package surveyed in the last part of the paper evidences that so far in industrialised countries, finance capital’s grip on economic and social relations has not been fundamentally undermined. The pervasive influence it gained throughout the three last decades at the four following levels remains steady :

- Global level : even though Anglo-american capitalism was a driving force in the return to power of finance capital at the turn of the end 1970s, the benefits were also shared by other industrialised countries, to begin with the European Union. For all claims on the coming taking up of industrialized countries by emerging countries, the Euro-american ‘bloc’ accounts for the bulk of the world economy [Serfati, 2004]. This is all the more significant as one move to financial indicators. As the transatlantic bloc accounts for 45% of the World GDP, it accounts for 53% of Assets of high net worth individuals, 74% of transborder Merger&Acquisitions, 77% of bank investment revenues, 75% of forex markets, 82% of equity markets, and 90% of derivatives business [various sources]. Here, the ‘variety’ of capitalism framework has to be included in a broader context brought about by finance-driven globalisation. As they have not transformed into an international class of *rentiers*, because of protracting national rivalries, ruling classes and national elites have been united at an international level to accumulate financial wealth and extract large financial revenues from production, knowledge (Intellectual property rights) and nature.

- Macro level: governemental policies, buttressed by the Consensus of Washington (I and II) have set in liberalization, privatization, and monetary policy finance capital- and rentiers-friendly (called anti-inflation policies) that had drastic effects on the distributional of the added value between capital and labour, and of the profits between retained profits and dividends

- Meso level : at the industrial level, the weight of large Transnational corporations was considerably reinforced through Mergers&Acquisitions (redistribution of property rights vs *greenfield* investments) and financialisation of Global Value Chain [Serfati, 2008].

- Microlevel : shareholder-value oriented has become the motto of corporate governance, following mainstream economics recommendations (e.g. agency theory) and pressures on

wage earners to transform a growing share of their revenues into financial claims (e.g. pension schemes stock-market based) have risen.

In our view, the financial crisis is a moment which come first and paved the way for a major structural crisis. The structural crisis is unique in that it combines a triple crisis: economic (financial and production), social (the end of the belief that globalization, as the tide 'would raise all the boats'), and environmental (climate change, growing subjugation of natural resources by financial markets) ones [Serfati, 2009] .

A prominent historian economist, referring to the "crash of the first globalization (at the end of the 19th century) asked whether "*Will global capitalism fall again*" and warned that "*Today capitalism is at least as global as it was in the decades before 1914, which raises the spectre of a return to the failures that ended that earlier episode of global capitalism*" [Frieden, 2007,p.22] . From a quite different perspective, *The Economist* made a worrying statement "*Capitalism at bay*" [2008]. This represents probably a broader and deeper view than the one still developed in mainstream economics which recommends 'more regulation', the 'return of state', and other measures some of them being already implemented by governments.

1) SETTING THE SCENE

Three main drivers to a self-expansion process

We identify three drivers which 'greased' the wheels of what is usually called speculation, but which reflected actually the extraordinary growth of credit acting as money capital – i.e. money bringing about more money for their holders (see under) - through circulation (buy/sell, loan/borrows) and overstretching of the financial network.

a) Thanks to deregulation and financial innovations, the creation of credit has reached a level unmatched in the past. The 'pyramid' of credits – as graphically described (figure 1) – has climbed so high over the two three decades that figures have lost any sensible meaning (e.g. how anybody could imagine what does means a 683,735 \$ trillion as notional amounts of over-the-counter outstanding derivatives contracts recorded by BIS in June 2008, an over 2/3rd increase from June 2006) .

Figure 1 : The credit pyramid

Source : Author, from various statistical data

There is no need to extend here on the unfettered imagination of financiers, as the quest for higher yielding assets was a mighty propeller for innovations. They include 'carry trade', which is borrowing money in one currency with low or zero interest rate then investing the funds in another currency or instrument with higher yields, and earning a spread (i.e. the difference in the yields). More used are structured financial products¹, the more popular in last years being collateralised debt obligations (CDOs) and residential mortgage-backed securities (MBS) especially the higher risk subprime ones. A major effect -and objective as well - of structured products was to pass on to non-bank institutions ('hot potatoes') and to hide counterparty risks, as they normally entail aggregating underlying risks (market, credit,

¹ As there is no universal definition, here is the SEC definition : "*Structured securities shall mean securities whose cash flow characteristics depend upon one or more indices or that have imbedded forwards or options or securities where an investor's investment return and the issuer's payment obligations are contingent on, or highly sensitive to, changes in the value of underlying assets, indices, interest rates or cash flows*", <http://www.sec.gov/divisions/corpfin/forms/regc.htm#delivery>

...) by pooling instruments subjects to those risks and then dividing the resulting cash flows into tranches with different payouts paid to different holders (senior, equity, subprime). The explosive growth of credit default swaps (CDSs)² should also be mentioned as evidence of unfettered financial innovations. CDS is a highly liquid credit derivative which forms the base for more complex structured credit products. Their growth is stunning. In terms of gross market value, which is a measure of the magnitude of risks embedded in the Over-The-Counter market, the CDS market increased from 133 \$ billion in December 2004 to 5.7 \$ trillion in December 2008, a much faster growth than any other derivative markets and it constitutes the second largest market in terms of gross market value after interest rate contracts [European Central Bank, 2009]. Those instruments have been a mighty engine for the development of credit risk for corporate debt, as the traditional bonds bought by investors are generally held to maturity³. Liquidity of those assets has been greatly improved through the development of secondary markets. So confident monetary policy-makers were in the 'progress' made by CDS-like innovations, that a governor of the Federal Reserve praised that *"in addition to enhanced liquidity and transparency, the recent developments in credit markets have equipped market participants with new tools for taking on, hedging, and managing credit risk"* [Krosner, 2007].

A major effect of financial innovations was to allow major banks to significantly increase their access to markets to collect funds. This was a major source of imbalance for banks, as their leverage (assets as a multiple of capital) considerably increased since the turn of the decade, with the Eurozone banks setting the trail (figure 2).

Figure 2 : Banking Sector Leverage : Assets as a multiple of capital

Note : Based on data for seven major banks from the euro zone, six major U.K. banks, five large U.S. investment banks, plus ten large national and regional
Sources: Bloomberg and bank financial statements

The increased banking leverage was immediately transformed into loans credited to agents of economy, in particular to households, whose debt-to- Personal Disposable Income increased in teaming with bank's leverage during the decade in all industrialised countries, including Canada, United States, United Kingdom and the Eurozone (figure 3).

Figure 3: Household Debt as a Share of Personal Disposable Income

Note : 1 means 100%

Source : Bank Of Canada, *Financial System Review*, December 2008

b) Monetary policy was extraordinary complacent with financial markets, and was another source of liquidity/credit/money creation. During his 23 October 2008 hearings, A. Greenspan, 'once' named Maestro, pressed by aggressive Congressmen, made an humiliating self-criticism, when he said that *"Those of us who have looked to the self-interest of lending institutions to protect shareholders' equity, myself included, are in a state of shocked disbelief,"*[Andrews, 2008].

It indeed appears that was had been dubbed as the ``Greenspan put''- the helpful way the former Federal Reserve chairman responded throughout the 1990s and until 2005 to big

² The CDS is an instrument that provides its buyer with a lump sum payment made by the seller in the case of default (or other credit event) of an underlying reference entity. If there is no default event before the maturity of the contract, the protection seller pays nothing. The protection seller charges a fee for the protection it offers the buyer of the CDS. This fee is usually expressed as an annualized percentage of the notional value of the transaction.

³ Half of outstanding corporate bonds did not even trade once in the first three months of 2006.

declines in the stock market by delivering a cut in interest rates – carried an encouraging message to ‘markets’ that at the end of the day, the Federal Reserve would ‘clear the mess’ of the bubble busting. Greenspan was a strong supporter of financial innovations, including the most devastating: *“Especially in the past decade, technological advances have resulted in increased efficiency and scale within the financial services industry. Innovation has brought about a multitude of new products, such as subprime loans and niche credit programs for immigrants”* [2005].

Figure 4 indicates to what extent, (generous) money supplied by the Federal Reserve under Greenspan chairmanship was increasingly used for financial purposes. The growth of ‘broad money’ (M3) has been higher in the Euro zone than in the US between 1995 and 2007.

Figure 4: The growth of money in the Eurozone and the US (1995-2007)

Source : our own illustration, OCED data

Still, the use of M3 was quite different. In the Euro zone, the M3 growth was mainly attributable to M1 (‘narrow money’), i.e. the currency, demand deposits, and other deposits against which checks can be written. M1 is mainly held by public and most used for payments. Instead, in the US, the growth of M3 was much higher than M1, reflecting that a growing share of the former was oriented towards the acquisition of financial assets, be it by households or corporations (savings accounts, time deposits of under \$100,000, and balances in retail money market mutual funds listed in M2, repurchase agreements, money market fund shares/units and debt securities in M3-M2) .

For a couple of months, it has become fashionable to target the former Federal Reserve Chairman as the only or the main culprit of the current financial meltdown. For some, the recent financial crisis likely could have been avoided had the Fed not provided as much liquidity as it did from 2001 to 2004 [Bordo, 2008, p.17]. As the claim on Federal Reserve’s generosity is not ungrounded, finding it guilty for the current crisis seems rather contradictory with the critic made– generally by the same scholars - to the Federal Reserve attitude in 1929–to have run a deflationary policy which is held for the main driver to the financial crisis and its transformation into the large economic crisis ever seen.

c) The widening external US deficit was a complementary source in the creation of credit. The growing world imbalance, as measured by the rise in absolute current balances is striking. For most part, the deficit side has been concentrated primarily on one country – the US which is absorbing a significant fraction of the world’s savings to finance its external deficit. The damage created by this increasing external deficit is dismissed by some, who recall that at the end of the 19th century Britain ran a current account deficit financed by savings elsewhere in the Commonwealth. In our view, there are at least two significant differences between Britain and US leaderships. One, the flows of capital revenues (the difference between all payments and obligations received from foreigners and payments and liabilities to foreigners) were strongly positive for England while for the US the steady deterioration of the net financial flows contributes to the widening deficit of the balance of payments, and two, the Gold standard acted as a disciplinary, even if deflationary framework.

The financing of the structural US deficit by permanent trade surplus from emerging and some industrialized countries has established a self-expanding world financial circuit.

This self-expanding world financial circuit which took momentum in the last months preceding the crisis was considered with some distance by some commentators, and benignly labeled as Bretton-Woods II (Dooley,Folkerts-Landau,Garber 2003). The system

seemed to be rational, since the arrangement was nice for many exporting countries who found a profitable way of recycling their surplus while allowing the US to be a 'consumer in last resort' thanks to the money borrowed from abroad.

Indeed the self-expanding and spiraling circuit was bound to come out in a large crash. The share of the federal debt held by foreigners jumped from 41,3% in December 2002, up to 53,1% in December 2007. Since the public debt considerably increased in absolute value over this period, this means that US debt assets held by foreigners almost doubled, from 1246 billion \$ in December 2002, up to 2355 billion \$ in December 2007. More compelling, according to our own computation of the US *flow of funds* data, in the recent months, as the financial crisis worsened, foreigners contributed to as high as almost two-thirds to the additional 533 billions \$ US bonds auctions between September 2008 and September 2009. Besides Foreign official holdings, private flows also massively accrued to the US in recent years. In the current decade, US banks reported more U.S. Liabilities to Foreigners than claims on foreigners. Official and private flows constituted deposits in the US bank system and in the Treasury circuit. These flows were transformed by U.S. banks into loans to domestic corporations, households and US government. In turn, these loans were used for buying goods and services, as well as financial assets, both creating more deficits (because of growing consumption and imports of intermediate inputs) and rising the price of financial assets (because of an increasing demand by investors). It is the whole US economy which is indebted by any standards.

The three drivers, deregulation/innovation, monetary policy and US external imbalances combined to create a huge accumulation of ammunitions for financial markets, and beyond the financial realm, for strong imbalances in production and consumption. Since we have entered the era of financial globalisation, the effects can be perceived on a world scale. The amount of the monetary global base – measured as M3 + foreign reserves in figure 5 - steadily grown since the end of the 1990s (figure 5) .

Figure 5 : World*: Global monetary base (as % of global nominal GDP)

Note : World defined as on the graph.

Ill named liquidity

Academic and business literature speaks of money, credit, liquidity and other flourished names (including 'candy floss money' by a FT columnist) in a more or less interchangeable way. In our view, this reflects the weakness of mainstream economics on what is money, as well as on the relation (or in this theory rather the lack of relations) of the latter with finance. This could reflect the non-starter conceptual definition of money offered by monetarism. The disarray was quite perceptible in the humiliating hearing of A. Greenspan [Andrews, 2009]. Likewise, in the first years of the 2000s, Regulators have increasingly acknowledged that trying to control the volume of money was out of their reach. Significantly, the Federal Reserve and the European central bank stopped to collect and publish figures on M3, with this indicator being the one to be monitored as an essential yardstick against which the fight against inflation had to be won. It was in March 2006 when the Fed motivated its decision by stating that "*M3 does not appear to convey any additional information about economic activity that is not already embodied in M2 and has not played a role in the monetary policy process for many years*". It would probably more accurate to say that, as put in the 1980s by Gerald Bouey, former Governor, Bank of Canada "*We didn't abandon the monetary aggregates, they abandoned us*" (quoted in Collins, Bruce, Thorp, 1999).

Against the euphoria climate background created by exuberant financial innovations – including the use of complex electronic devices and software, regulators’ impotence was eventually theorised at that time by those who envisaged that Central banks could become redundant because of the development of electronic money and financial innovations. References could be innumerable, suffice to mention one of the most preeminent central banker. M. King, when he was deputy Director, Bank of England, declared that because of electronic transaction development, *“There is no reason, in principle, why final settlements could not be carried out by the private sector without the need for clearing through the central bank”* [1999]. The underlying and wrong assumption lying behind the claim that money could be managed without interventions of Central Banks replicates the neoclassical belief that money is a good as any else, which only sheds a ‘veil’ on the real economy, hence it can be managed by private and market rules.

The alarm clock of the financial crisis rang the end of this kind of ‘benign neglect’ –to paraphrase R. Triffin – adopted by policy-makers in charge of monetary policy. A decade and the more severe financial meltdown later, M. King, having accessed to the role of Governor of the Bank of England discovered that a monetary economy of production cannot be simply seen as more sophisticated than a barter economy : *“Banks are, entirely legitimately, concerned primarily with their commercial interest. The Bank of England is concerned with the interests of the UK economy as a whole. The two sets of interests are not always the same”* [2008].

The financial meltdown paved the way for a discussion on how to define liquidity, the extraordinary growth of which – and sudden disappearance – struck analysts. The need not to confuse liquidity with money has begun to receive some attention, with subtle distinctions being made between different kinds of liquidity. A first type of taxonomy establishes a difference between monetary liquidity and market liquidity: *monetary* liquidity is associated with macroeconomic variables such as short-term interest rates or aggregates of money supply, while *market* liquidity is the degree to which large transactions can be carried out in a timely fashion with a minimal impact on prices [Becker, 2007]. A different kind of difference can be made between *market* liquidity – defined as above – and *funding* liquidity, the ability for counterparties to borrow immediate means of payment to meet liabilities falling due. The former is asset-specific, while the latter is institution-specific [International Monetary Fund, 2008a].

These analysis highlight some critical aspects of the current crisis. Still one, the rise in liquidity is in general *theoretically* not explained and two, difficulties to *measure* both types of liquidity are widely acknowledged, as is the fact that, as said by the Federal Reserve Bank of New York’ President, *“Although these two concepts [funding and market liquidity] are distinct, they are closely related and are often mutually reinforcing* [Geithner, 2007] . He concludes that, despite numerous measures for both funding and market liquidity *“none of these measures provides a reliable way of judging how vulnerable markets are to a reversal”*.

Other definitions of liquidity are used for other purposes. Let’s take ‘Global liquidity’, a wording which has been thriving in last years. As it’s not a matter of funding or market liquidities any longer, global liquidities does not receive a consensual definition. They are alternatively defined either as the stock of official reserves, or the sum of those reserves and the US money base, or the sum of official reserves and world M3 (world restricted to the couple of leading trade nations, as in figure 5), etc. Here, liquidity is used as an equivalent to ‘world aggregate money’ while the latter is not defined. The fact that a part of

the 'liquidities' – official reserves held by foreign central banks – is made up of gold is seen as not relevant from a theoretical agenda perspective. Instead, we think that even though gold is not the main form of hoarding any longer (it accounts for hardly 2% of Official reserves' Central banks) , its foretold death is quite premature, as witnessed in the agreement by European central banks, extended from previous ones, to reassert that gold remains an important element of global monetary reserves, and to implement a third five-year cap on gold sales, with the decisions that planned disposals by the International Monetary Fund would be accommodated within the total ECB ceilings⁴.

The mainstream definitions of liquidity have been criticized from a Minskyan perspective, and as rightly said liquidity is the elephant in the dark room that is the global financial system. [Nesvetailova, 2008]. Liquidity as a financial category varies according to the context and level of economic activity, as well as to the phase of the business cycle. Liquidity of the market or a portfolio of assets during purported good times is not the same as liquidity during an economic downturn or a financial crisis

At the core of the whole process, there is the phenomenon of 'liquidity illusion' which relied on three identified factors: Ponzi finance; collective thinking by investors; and the credibility function performed by the credit rating agencies. The subprime mortgage industry was a giant Ponzi scheme, financial innovation (securitization) led banks to adopt an 'originate and distribute model', in which 'old style' prudent banking was derided as boring and conservative, while the risk-takers were considered sophisticated, innovative and shrewd. Finally the credibility function needed to sustain the collective belief in the liquidity was performed by the credit rating agencies. Basically, this analysis is Keynesian: Financial innovation initially does add to a sense of greater liquidity in the markets. Still, as observed by Minsky newly introduced credit products and channels, while adding to a sense of greater liquidity in 'good times', also contribute to progressive illiquidity of the system as a whole. This replicates Keynes's wordings in *The general Theory* that there is no more anti-social maxim than the fetich of liquidity, because the maxim "*forgets that there is no such thing as liquidity of investment for the community as a whole*" [1964, chapter 12].

This framework helps to understand why the blurring of boundaries between *illiquidity* and *insolvency*, a distinction which has been at the core of Central Bank policy issues for two centuries, has become so difficult to maintain. Still, a critic of liquidity as used by mainstream economics has to be based upon a theory of money that addresses its multiple and contradictory functions, an issue that will be addressed in Part 3.

2) EXPLORING FINANCIALISATION : THE ROLE OF FINANCIAL CAPITAL

Heterodox analysis is in general more inclined to an investigation of the relation between the financial and the production and consumption crisis. The purpose of financialisation approach is to provide an analytical framework addressing these complex relationships. Its basic thrust is that financial interests and financial 'logic' as well, penetrated and pervaded across the board of every aspect of economic and social life. We compare financialisation with finance capital approach.

⁴ Also, China's Officials have made it clear that the country would diversify its holdings, including with gold buying. The problem is that, according to a Chinese Economist with UBS "*if China decided to hold 5 % of its current \$2 trillion reserves in gold, it would need to buy more than 3,000 tons of gold, which is equivalent to about one year of world production*", quoted in *China Daily*, 27/07/09

What is financialisation ?

It has been observed that, as the concept of financialisation gained momentum in the academic community, most of analysis addressing those issues came from the periphery of hard core economists [Engelen and Konings, 2008]. Indeed, there are a lot of definition, motives, and dynamics affecting the meaning of financialisation. For sure, financialisation covers a large range of issues, with different and sometimes conflicting analysis. Convergence is on the fact that around the end of the 1970s, a new relationship appeared between finance and production, with an increasing influence of the former on the latter. There is a large agreement that is based on the Epstein's definition (2005, p.3) : *"the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies"* (2005,p. 3) or the Krippner's one : *"financialization [is] a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production"* [2004, p.174].

As this convergence could be qualified by those underlining that a similar process already took hold in the late 1800s, which was long analysed by liberals (Hobson) and Marxists (Hilferding) , this does not preclude all scholars to point out some new qualitative features :

- The increasing role held by non-bank financial institutions, including traditional ones (pension funds, mutual funds, insurance companies) and new ones (Hedge, Sovereign, Equity funds). Noteworthy is the direct and massive drain of resources collected from workers through pension scheme.
- The domination of finance interests has been conscientiously favored by governmental policies. To give one example, rise of pension funds have been eased which cut in pay-as-you-go benefits. This trend was orchestrated by international financial institutions (OECD, World Bank) which have long been proponents for pension schemes based on financial markets. The total value of pension assets managed globally rose by 10% to \$30.4 trillion at end-2007, of which OECD countries accounted for 98% of the end-2007 global total (Total assets fell by some 18% to \$25 trillion at end-2008).
- Financial globalization reached an unprecedented level, even though by some standards, 'first' globalization ushered in an era of 'global finance' [Bairoch, Kozul-Wright, 1996]. As China is obviously a category of its own, this country contributed significantly to developments of global reach by financial institutions.
- The opening of new fields for capital accumulation meant also the increase in financial markets power. Massive privatisations of public utilities and companies boosted existing stock markets. 'Commodification' of knowledge, through the extension of intellectual property rights, creation of International and national markets for tradable emission contributed to create new financial markets
- Cultural norms have considerably changed from the 1980s onwards. Market ideology dubbed as «market fundamentalism" by Stiglitz, took hold in many aspects of the professional and private daily life. The current crisis has made this creed falling apart, especially in countries traditionally market-friendly oriented (US, UK).

Financialisation encompasses a range of definitions⁵, which all reflects the perception of the growing influence of finance on economic and social life. Some address a macroeconomic

⁵ Including supportive ones, which are not addressed in this paper. For example, in a report commissioned by the French government and written by a group of practitioners and academics, it was noted that *"Financial globalization [which is used as synonymous of financialization in the report, C.S.] is unquestionably a force for*

perspective with the emerging of a finance-led regime of accumulation restrictive. Financialisation reflects the process of decline in bank credit disintermediation, the transfer of power from Banks to financial markets [Aglietta, Rebérioux, 2004], or the setting up of an hurdle rate set by financial markets for investment projects which leads to an increase in growth [Boyer, 2005]. In contrast, some prefer to speak of a finance-dominated regime of accumulation in such a way that financialization can positively or negatively affect growth [Stockhammer, 2008]. Others look at the sweeping changes taking place at the microeconomic level in large companies. The rise of financial revenues (dividends, interests) both in companies and top managers' revenues (for the latter stock-options) is characteristic of financialisation. At the other end of the spectrum, financialisation can be defined in a very large manner as a social process whereby financial assets, relations and institutions become core features of a new accumulation regime in advanced capitalist economies [Pineault, 2008]. Or, as a process "which summarises a broad range of phenomena including the globalisation of financial markets, the shareholder value revolution and the rise of incomes from financial investment" [Stockhammer 2004, p.720]. It reflects an increasing shareholder power vis-à-vis management and labourers [Hein, 2009]. In a more Marxist vein, financialisation reflects a new regime of accumulation [Chesnais 1994] and is complementary to 'commodification', a process seen as a on-going one [Harribey, 1999, Serfati, 1999]. Alternatively, financialization is simply defined as the increased ability to trade risk [Hardie, 2008].

According to literature, principal impacts of financialisation are to (1) elevate the significance of the financial sector relative to the real sector; (2) transfer income from the real sector to the financial sector; and (3) increase income inequality and contribute to wage stagnation [Palley, 2007].

A taxonomy of issues addressed by literature addressing financialisation is presented in figure 6.

Figure 6: The Financialisation debate : a tentative taxonomy

Source: Author

Finance capital as an ideal-type for capitalism

Financialisation is a loose notion used to address a series of core issues addressing the relations between the buoyant and exuberant financial activities and the process of value creation and distribution in the 'real world'. Finance capital can be a complementary, if not alternative, framework, useful to understand some critical changes in contemporary capitalism (For a comparison between financialisation and finance capital frameworks, see Lapavistas 2008).

In previous works, it has been explained why our reading of the category of *finance capital* does not limit to the one developed by Hilferding in his seminal work (1981, first edition 1910) [Serfati, 1996]. Hilferding defines finance capital control as the control exerted by banks over large corporations through fixed capital loan. At an *organisational* level, this amounts to a fusion of banking and industrial capital (1970). This definition of finance capital meets serious limits. One, it has been argued that this organizational structure was historically and geographically (the Rhenan capitalism) bounded [Sweezy, 1942]. Two, in our view, finance capital takes on a double dimension. It is an *institutional* sector, made up of

economic growth in the world today. It increases the availability of capital and lowers transaction costs, thereby contributing to the widespread sense that "there has never been so much money available" for business opportunities [Morand, 2006, p.48].

firms the business of which is based on financial activity (the financial industry as distinct from the automotive or energy industry). Still, finance capital is also a *functional* process which represents a kind of ideal-type for capitalism.

Finance capital has been around well before the development of industrial capitalism that took place throughout the 19th century in Europe. It is defined by, and relies on, quite different socio-economic relations than the latter. Accumulation of financial claims (shares, bonds ...) gives their owners the right to *appropriation of revenues* which seems disconnected from the 'logic' and objectives of value *production*. The nature of financial capital is rentier by essence. This explains the strong attacks launched by Ricardo and the then political economy (except Malthus) not only against financiers, but also landowners, unproductive agents who act as parasites on value created through the labour process by 'productive laborers or workers'.

For Marx, well before when Keynes spoke of capitalism a 'monetary economy of production' (Keynes), money as an independent expression of a certain amount of value, is the form through which capitalists can control that the process of valorization is correctly carried out. This explains why money capital took up so much momentum over decades. *"Just because the money-form of this value is its tangible and independent form, the compelling motive of capitalist production"*, what is critical for capitalists is not so much production of goods, which *"appears merely as an indispensable and intermediate link, as a necessary evil of money-making"* [Marx, 1885, volume 2, Book 2, p.189], as valorization of money generating *"value and yield interest, just as it is a faculty of a pear tree to bear pears"* [Marx, 1981, p. 516]. While it is no time here to address fundamental differences between Keynes and Marx on monetary and financial issues, it is worth to remind that the rare moment when Keynes approvingly quotes Marx is on the M-C-M' (M money, C Commodity, M' $>$ M) which for Marx reflects the very specificity of capitalism compared to other market economies. According to Keynes, Marx *"pointed out that the nature of production in the actual world is not, as economists seem often to suppose, a case of C-M-C', i. e., of exchanging commodity (or effort)". That may be the standpoint of the private consumer. But it is not the attitude of business, which is the case of M-C-M', i. e., of parting with money for commodity (or effort) in order to obtain more money"* [Keynes, 1979, p.81].

That money can generate money as a 'pear tree bears pears' is obviously a fallacy. Financial revenues have *in fine* to be funded from value created and existing wealth. The process generating profits at a microeconomic, and even at the mesoeconomic level (say the financial sector), through capital gains, dividends, interests, cannot be expanded at the macroeconomic level. Otherwise we would have to imagine a country exclusively made up of rentiers, draining revenues from the rest of the world.

It is hardly surprising that finance capital, i.e. the social and economic power of money advanced as capital and generating financial revenues increased its power over the lasting decades of the 19th century. It is true that in the post-War II decades finance capital was kept under some control. This was made possible because of the 1914-1945 period of severe crisis and meltdowns it had gone through, as well as because of the huge amount of physical resources and workforce needed to rebuild large infrastructures destroyed by wars. Still, at least as important, the control put on finance capital was a result of the implementation of Keynesian-based governmental policies. It is only as late as the end of the 1970s that a series of major drivers provided finance capital with the opportunity to consolidate its economic and social power in an unprecedented way. Main drivers include the outcomes of the 1973 crisis, in particular the availability of large amounts of financial

resources by oil producing countries (petrodollars), the collapse of the Bretton-woods systems, the deepening of public deficits coupled with a dramatic change in Federal Reserve's monetary policy in 1979-1980, and the coming of financial market-friendly policies by national governments and International financial institutions, Consensus Washington based (anti-inflation, deregulation, opening of capital account, ..) [Helleiner, 1994] .

In the three last decades, it is not only finance capital that has been buttressed, other forms of *rentier* capital also based on property rights have been thriving. Intellectual property rights policy, supported by WTO since its inception in 1995, means privatisation of accumulated knowledge which results from collective activities. Privatisation of life process reflects a similar 'enclosure' of common goods. Workers themselves are invited to valorize their 'human capital'. Finance capital has acted as a prototype for the generation of other types of rentier capital. The 'commodification' process, as it is sometimes described by critics of neoliberal globalization, requires not only 'markets', but enforcement of property rights embedded in revenues generating financial claims. Commodification of the world goes hand in hand with the development of financial claims as the universal form of wealth.

Transnational corporations as industrial- financial groups

The *functional* process through which money becomes capital (that is an amount of money generating more money than the one advanced) for its owner thanks to its advance as property claims (stocks) and loans (bonds, bank credit,...) is not restricted to bank and non-bank financial institutions (mutual, investment funds, etc.). In our view, non-financial Transnational corporations (TNCs) are a preeminent contemporaneous component of finance capital, albeit in a different institutional configuration that the classical banking control over industrial firms carefully analysed by Hilferding.

Based on an international political economy perspective, we have argued that TNCs cannot be only viewed as being bigger and more internationalised than other firms. They represent a distinct type of firms, a category of their own as they are industrial-financial groups [Serfati, 1996, 2008]. An industrial group is usually defined as the set of companies owned by another company, called the holding company⁶. The very role of the holding company is to manage property rights and financial claims. The process is anything but new, as it began at the end of the 19th century, with *corporatization* in the USA, creation of *Joint stock* Company, as the legal and dominant form of large firms and and *sociétés* in France (For a comprehensive analysis, see John Scott [1997]) in the UK. Still, the role of the holding/parent company traditional role of the holding company, as centralizing property rights and financial claims on hundred of affiliates producing goods and services has been consolidated and diversified in the two last decades.

Global finance has not only concerned financial institutions, it also allow non-financial TNCs to rearrange their activities in giving more weight to finance revenues. It's not only a matter of change in the structure of TNCs' financial resources (on the liability side of their balance sheet) which mainstream finance economics is focused on, but also, as put simply by Schleifer and Vichny the central role of "*corporate governance [to deal] with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment*" (1997, p.737) .

⁶ A definition given by the IMF revised Benchmark states that an "*enterprise group [is..] all the enterprises located in different economies and under the control or influence of the same owner wherever located*".

In their quest for more financial revenues accruing to their corporations, TNCs' managers developed an active management of their assets. They raised more fresh funds (equities and bonds) from more to financial markets, and less from credit banking. In this process, they were helped by the loosening of regulation (offsheet products) and financial innovations (securitisation). Their presence on derivative markets has become massive⁷.

Organizational changes were aimed at reinforcing the role of finance (profits, intra-TNCs transfers, tax evasion, etc.) in TNCs activities which took hold in recent years are quite visible. The role of the holding company, as strategic and financial core of TNCs, has been dramatically enlarged with the multiplication of finance-dedicated vehicles. Noteworthy, albeit understudied by scholars of TNCs is the role of *Special purpose entities* (SPEs) . The direct involvement of SPEs created by banks and non-bank financial institutions in the current financial meltdown has been documented, even though in 2007, SPE's importance in the Enron and other 'industrial' corporations' fraud had been already forgotten) . Throughout the 2000s, industrial TNCs speeded up the creation of SPEs.

That SPEs are created mainly for the purpose of maximising financial revenues is explicit in their definition, as given by IMF : "*SPEs are autonomous legal entities, directly or indirectly wholly foreign owned, that are part of a group company, without substantial real economic links with the host economy, engaged in a variety of cross-border financial activities, which are aimed at the passing through of all types of financial and non-financial assets, liabilities and related income to third countries*" [International Monetary Fund, 2004] . Likewise, in international conventions, for the purposes of balance of payments data, SPEs are included in the category of financial intermediaries along with depository institutions (banks, other than the central bank) and other financial intermediaries, except insurance companies and pension funds [OECD, 2003] . Reflecting their opacity, official jargon is ill stabilized. Some propose to separate classical SPEs and 'empty SPEs', [OECD, n.d.], they call them 'shell SPEs', others call them International business companies (offshore company formed under the laws of tax heavens) , or in the U.S. Controlled Foreign Corporations.

While the relations between holding companies and the growing number of SPEs have become increasingly puzzling, even for close specialists and regulators, it is clear that the objectives that SPEs can perform are clearly financial-revenues/tax avoiding-oriented. Just to give an example [but see also IMF, 2004], the taxonomy of SPEs proposed by United Nations Economic Commission for Europe (UNECE) [2008] lists three types of Special Purpose Entities. The most important category among SPEs consists of financing and holding companies that act as a financing chain on behalf of the non-resident parent company. The second category consists of royalty and license companies to whom ownership of intellectual property rights have been given by their parent companies and collect income in the form of royalties or as fees on (sub) licenses. The third group are factoring corporations that conduct the invoice of sales of the worldwide company on behalf of the parent company.

This strong rise in financial activities and resulting creation of financial purposes-oriented branches was coupled to a growing domination of a financial logic on TNCs' industrial activities. In recent years, TNCs have been involved in substantial changes in the management of their Global value chain (GVC). A major goal was to cut down labour costs.

⁷ According to a 2009 study released by International Swaps and Derivatives Association (ISDA), 94% of the world's 500 largest companies use derivative instruments to manage and hedge their business and financial risks

“Vertical disintegration”, “slicing up of the value chain”, “refocusing on core competencies”, “outsourcing and offshoring”, are some of the words used to describe the process. Driven by financial markets pressures and thanks to the development of ITC and other related technologies allowing for more modularity in the design and production, teleworking, etc, TNCs have increasingly seen their activities as a ‘bundle of assets’, each of them being monitored on profitability and financial criteria (e.g. for sale to financial investors). Overall, we interpret the shift in TNCs’ strategy at the era of globalization in connection with the blurring of the frontiers between their search for value appropriation through a direct production process and through rent capture gained momentum [Serfati, 2008].

3) MONEY, FICTITIOUS CAPITAL AND REAL EFFECTS : FAN ANALYTICAL FRAMEWORK FOR ANALYSING THE CURRENT CRISIS

Money: a multi-function category

If we are to get a better understanding of how what seemed to be a liquidity excess (transformed into a ‘saving glut’ by Bernanke) suddenly evaporated, we need to adopt a view which clearly distinguishes between liquidity and money. Liquidity does (and should) not define a *type* of money (or money capital) which could be measured as an aggregate quantity (as it is above) but the *capacity* (or not) of any asset to be more or less quickly converted in cash (means of payment). Apparently, it seems to be this correct definition which is used when monetary aggregates are measured by Central Banks. There is a continuum, depending on the degree of liquidity, which defines the ascendant categories of the monetary aggregates culminating in the called ‘broad money’ and which, in passing, differs considerably among countries [IMF Manual, 2000]. Usually, M_1 components (which include currency, checking account balances) are ordinarily used for spending on goods and services. M_2 equals M_1 plus assets slightly less liquid (savings deposits, retirement accounts and deposits below \$100,000). M_3 equals M_2 plus marketable instruments issued by monetary Financial Institutions. As said before, in 2006 the Federal Reserve announced that it would drop M_3 - which in the US used to include large-denomination time deposits, repurchase agreements (RPs), and Eurodollars -. Besides Monetary aggregates proper, liquidity aggregates are also defined, somewhat esoterically as including “*in addition to broad-money liabilities, other liabilities that are viewed as somewhat liquid, but not sufficiently liquid to be included in broad money as nationally defined*” [IMF, 2000, p.65].

The problem with those definitions, evident in the difficulty to put the different components into different rubrics, is that this continuum in the degree of liquidity is based upon a *quantitative* approach which obliterates the *qualitative* differences within *money* components. These differences do not refer to the more or less difficulty to transform financial assets into cash. Such difficulty is an *evidence*, not an *explanation* for the fact that financial assets and money are two different, albeit interrelated, conceptual categories.

Conceptual issues related to money (including money capital) are not a debate regarding the history of economic thought. They directly lead to a reflection on the mechanisms and drivers that are at the core of the current and unique financial crisis. Those issues are closely linked to the role of banks in the finance-driven globalization.

Banks, pivotal to finance-driven globalization

It has been commonplace in the two last decades to speak about the declining role of banks through disintermediation, securitisation, etc. The rising power of non-bank financial institutions is quite undeniable, in particular in the US where, over the 1990-2009 period,

the non-bank financial institutions and bank institutions compounded yearly growth rate in financial assets, respectively reached 9,4%, and 5,8% [McKinsey Institute, 2009] .

This has often been seen as leading to a decline of the vital role held by banks in capitalism. Still, their role is primarily linked to monetary functions, and we have to turn to the different functions of money, and the contradictions generated by their contemporary developments if we are to analyse the current crisis.

Historically, the influence of the banking system has been rising in relation, a) with the growing use of banknotes as a substitute for commodity (gold) money, b) the development of credit to economic agents (business, households, governments) which has soared their assets. Credit could be made against bills of exchange and other commercial papers or deposits. Still, as largely evidenced, bankers advance credit 'in blank', i.e. without counterpart, they need not have uncommitted funds on reserves. As observed by Minsky, *"He would be a poor banker if he had idle funds on hand for any substantial time [. . .] Banks make financing commitments because they can operate in financial markets to acquire funds as needed"* [2008, p.256 quoted by Kregel, 2009] . To give an illustrative example, in the middle of 2008 major UK banks had assets of just over £6 trillion and equity capital of around £200 billion [Bank of England, 2008,p.27].

In both cases that is, against or without counterparts, banks are not only advancing means of payment to borrowers. They are creating interest-bearing capital for their own benefit. Credit titles act as putative means of payments for the concerned agents, but they are interest-bearing capital for banks as they transform (discount) those titles into currency.

In contemporary capitalism, this role is growing as banks are at the core of monetary relations. Thus, the connection between banking activity and the so-called 'real' economy is straightforward.

Endogenous money, as developed by Post Keynesian macroeconomics analytically provides a critical linkage between the financial and real sectors, with the link running predominantly from credit to money to economic activity [Palley, 2003] . The basic idea is that bank credit demand is driven by the production decisions of firms, and in turn the argument that a unidirectional line of causation runs from bank loans to monetary aggregates the working capital needs of private businesses. The underlying theory of money is that quantity controls over the supply of credit money are simply not feasible, whereas fiat money can be controlled by Central Banks [Moore 1988].

There are two problems with this analysis. One, it underestimates credit creation by the banking system for the needs of the financial system itself. That is, non-financial corporations are supposed to be the driving force for credit demand, to which banks adapt their supply [Ertuk, Ozgur, 2009]. As banks remained the main source of credits flows in the two last decades, an increasing share of credits was both used by borrowing institutions to acquire financial assets, and used by banks as collateral to sell securities and use the proceeds to lend credit. This was at the core of the securitisation process of the early 2000s. Two, when we turn to the basic thrust made by endogenous theory, it is true that part of creation of credit by banks is closely linked to the production and consumption process. Credit as money performs a specific role of buying (and receive goods) before paying, which is a distinctive role of money as a means of exchange (or purchase). It gives firms the opportunity to produce ahead of the return of sales, or gives households the benefits of using a home (or a car) before wages can fully meet the price of the goods bought.

Still, credit does not resolve difficulties and contradictions which lie in the accumulation and distributional process, which could concern the imbalance between production branches

(industries) and/or between production and consumption. This function of money as means of payment paves the way for dysfunctional effects in the production and consumption process, when the one who hoped to settle his debt (cancel the credit) cannot get the money he needs. Credit creation by the banking system could aggravate the severity of the crisis by overstretching the debt-led process of production or/and consumption, and by giving the false feeling that thanks to banking credit, payment will never be a problem. Moreover, how much credit quantity is 'produced' by the banking system does not warrant its adequacy with production (and consumption) needs. As put by Itoh and Lapavistas in their discussion of endogenous credit money theory, "*the fact that banks create money and that the demand for such loans is primarily determined by the process of real accumulation, is no guarantee exists in the exchange value of credit money*" [1999, p.243].

To put another way, the contradictions in the accumulation process as they reflect in the monetary side refer to the Gordian knot of the distinction between *liquidity* and *solvency* crisis. During quiet times, when the cycle trend is upward, policymakers and academics as well have no difficult to establish a clear separation between both types of crises. What seems missing to smooth out the difficulties that develop in the accumulation process is liquidity, a problem which is easily addressed by the Banking system. When times get harsher, it is rediscovered, as aptly and recently made by a Central Banker that:

- a) the ultimate private sector providers of credit are always the commercial banks,
- b) they are leveraged institutions, even if they does not fund themselves in wholesale markets: retail deposits are debt. So banks' capital adequacy can quickly be imperiled by a fall in asset prices. (Leverage indicating nothing else that the more or less ability of bank to create interest-bearing capital through credits) ;
- c) In that sense, the 'liquidity' and 'solvency' explanations of the current crisis are inseparable [Tucker, 2009] .

As a matter of fact, the 'normal' course of balanced settling of bills of exchange and other commercial papers gives periodically way to brutal interruption of the chain of payments. What is frenetically demanded in this case is not 'liquidity', but money having an universal acceptance (at the least within the country). With the end of commodity money (gold and silver) as 'general equivalent', fiat money (currency) and banknotes have become the basic form of money universally accepted. That does not mean that banks manage money at their will and on equal footing with Central banks, as believed by mainstream economics (see above). For all its extension in contemporary economic and social relations, banking money remains dependant on Central Bank, as evidenced by the need for the latter to intervene during financial crisis, to support banks through provision of its own money. During these times, the so-called Central Bank's 'high power' money becomes an 'absolute power' money. Careful economists have observed, sometimes with some amazement that Central banks have suddenly become "Owner in last resort" through recapitalization of banks as well as "Market makers in last resort" that is providing "*liquidity to markets either by accepting illiquid collateral in repos or other kinds of open market operations, or by purchasing illiquid assets outright*" [Buiter, 2007].

This sudden and surprising role held by Central Banks is grounded on the uniqueness of money as a commodity acting as an 'general equivalent' for any other commodities. The institutional design of the monetary system is a pyramid-like one , at the basis of which Central banks play a critical role in the process of validation of the different 'private' money emitted by banks, their mutual convertibility, and in hard times, their convertibility in the one universally accepted (high power money) [deBrunhoff, 1971].

Conflation of banks and financial markets: endogenous mechanisms of fictitious capital creation

A unique aspect of the current situation, which acted as an essential driver for the crisis and could explain its exceptional gravity even by comparison with 1929, is the conflation between banks and financial markets activities. What was called disintermediation had nothing to do with somehow a decline in banking activity; instead this marked the irresistible interpenetration between once called direct (markets) and indirect (bank) funding. What emerged from three decades financial liberalization and innovation is a complex and opaque intertwining of the different component of the bank- and non-bank financial institutions (sometimes likened to the Finance Insurance Real Estate sector). The system as a whole has considerably grown. To give an example, according a Bank of England's report, the value of assets of the large complex financial institutions' (LCFIs', which in this report includes the world's largest banks and other financial intermediaries that carry out a diverse and complex range of activities in major financial centres) nearly tripled between 2001 and 2007 [Bank of England, 2008].

The gravity of the current crisis is a result of the increasing porosity between banking activities and financial markets, which has considerably amplified the capacity of banks to create credit (and interest-bearing capital). That is, banks not only rely on the 'stickiness' of customer deposits, even though callable at little or no notice, their capital base also comprises of equity and debt, that have to be refunded from financial markets. The same goes for various short-term liabilities, such as commercial paper, certificates of deposit, repurchase agreements, swapped foreign exchange liabilities, and wholesale deposits [International Monetary Fund, 2008, p.70] . With deregulation allowing for the creation of non-regulated and off-balance sheet conduits, securitisation and other devices for easing access to funding, banks' thirst for borrowers could not never be quenched. Their borrowing needs to fund their loans gave considerable momentum to non-bank financial institutions, nicely called 'shadow banking'. The shadow banking system includes investment banks, mortgage brokers/originators, hedge funds, securitization vehicles and other private asset pools and by chance has long been lightly regulated by a patchwork of agencies, and generally not supervised prudentially [Turner Review, 2009]. Indeed, 'shadow banking' could have been 'shading' some obscure and complex banking operations. As put by Blackburn, core financial institutions had used a shadowy secondary banking system to hide much of their exposure [Blackburn, 2008,p.46].

Securitisation was a channel which transmitted risks to 'markets'. Such claims became a motto, as securitisation in all its forms was fully endorsed by international community (and most academics as well) , before the financial crisis revealed that banks had in reality kept most of the risks . As late as April 2006 IMF's *Global Financial Stability Report, 2006* stated that *"the dispersion of credit risk by banks to a broader and more diverse set of investors, rather than warehousing such risk on their balance sheets, has helped make the banking and overall financial system more resilient"*. It noted that this dispersion would help to *'mitigate and absorb shocks to the financial system' with the result that 'improved resilience may be seen in fewer bank failures and more consistent credit provision"* [International Monetary Fund, 2006, p.51].

A closer look dismisses this claim. When the crisis broke it became apparent that most of the holdings of the securitised credit, and the vast majority of the losses which came about, were not in the books of end investors intending to hold the assets to maturity, but on the

books of highly leveraged banks and bank-like institutions. To an increasing extent, credit securitised and taken off one bank's balance sheet, was not sold to end investor, but bought by the propriety trading desk of another bank; and /or sold by the first bank but with part of the risk retained via the use of credit derivatives; and/or 'resecuritised' into increasingly complex and opaque instruments (e.g. CDOs); and/or used as collateral to raise short-term liquidity. [Turner Review, 2009, p.16].

Endogenous mechanisms leading to the swelling of credit mean that looking for a clear separation between the demand and the supply side on financial markets could be a dead end. This point has been underlined by acute observers: *"Given the critical role that the sector plays in the economy and the positive feedback mechanisms at work, increases in the supply of funds (e.g. credit) will, up to a point, create their own demand, by making financing terms more attractive, boosting asset prices and hence aggregate demand. In a sense, a greater supply of funding liquidity ultimately generates additional demand for itself"* [Borio, 2007, p.9, bold added].

This interaction between 'supply' and 'demand' set in a self-expanding process of creation of credit (hence interest-bearing capital) by banks. During booms, banks increase their liabilities more than they increase their assets; during downturns, banks reduce their liabilities more than they reduce their assets. Thus, the overall book leverage of bank holding companies—the value of the companies' total assets divided by the value of the companies' total equity (where equity is calculated as assets minus liabilities)—rises during booms and falls during downturns, establishing a pro-cyclical pattern. Procyclicality could even be amplified if banks want to keep up the same leverage. In this case, during booms they will raise their liabilities (in order to get their leverage constant⁸). In many cases, they will do through an increase in their debt and will buy securities with the funds received. The demand of securities during the boom by banks increases the value of assets on financial markets when their value is already raising, and vice-versa during the bust [Adrian and Shin, 2008]. This means, against conventional wisdom, that *"by selling a bad loan, you get rid of the bad loan from your balance sheet. In this sense, the hot potato is passed down the chain to the greater fool next in the chain. However, the second action has a different consequence. By issuing liabilities against bad loans, you do not get rid of the bad loan. The hot potato is sitting in the financial system"* (..) *"The picture is of an inflating balloon which fills up with new assets"* [Shin, 2008, p.331]. It is one reason why, in a critical review of measurement of 'liquidity', Adrian and Shin propose to measure liquidity as the growth rate of financial intermediaries' balance sheet, and in more concrete terms, as the rate of growth of repos, since repos and other forms of collateralized borrowing are the tool that financial institutions use to adjust their balance sheets [Adrian and Shin 2008,p.5].

Fictitious capital, real effects

Analysing the role of credit and money-capital in relation with the process of accumulation, Marx noted that *"With the development of interest-bearing capital and the credit system, all capital seems to double itself, and sometimes treble itself, by the various modes in which the same capital, or perhaps even the same claim on a debt, appears in different forms in different hands"* [See Marx, 1894, Book 3, chapter 29] . Marx read the origin of fictitious

⁸ A simple arithmetic, as presented by Adrian and Shin, is as follows. Let's suppose a rise in value of assets is 1%, and the volume assets rise to 101 from 100. Liabilities were 10 (equity) + 90 (debt) . They now value 101, of which 11 are equity. If the desired leverage is 10, banks will have to raise their purchase of security (debt) by 9, and buy assets for a value of 9. New balance sheet : assets : 110, Liabilities : 110 (11 equity + 99 Debt)

capital in the development of the credit system, the joint-stock system (equity shares traded in the stock market), with the active involvement of governments through their public debt.

In the two last decades the process of duplication and more of replications of loanable money capital reached a magnitude which had nothing to do with the one Marx observed over one hundred and fifty years ago. As a result of deregulation and financial innovations (Securitisation based on the development of complex structured products), a continuum has been established between short and long term financial markets, between bank and non-bank institutions (Special Investment vehicles and other 'conduits') , between spot, forward and future markets. This contributed to the lengthening of links along the financial chain, as well as an increase in their interdependence.

Fictitious capital as an *analytical category* is quite operational to highlight both endogenous mechanisms of credit creation and its real, and devastating, effects, as well as understanding why the relations between industrial and financial capital have reversed compared to those existing over one century and half ago⁹. As *fictitious* is evocating what is usually called wealth paper and identified to 'virtual' wealth, and often compared to a wasteful game played on casino-like markets, an essential specificity of Marx's analysis is on linking financial and real accumulation through the concept of *capital*. Capital is not only a physical good (e.g. a production good) or a financial asset (interest-bearing capital), it also embodies social relations. A production good is not mainly a way to produce goods, but the social power able to command labour. Money capital is not an accumulation of money, even as hoarding; it allows its holder to claim a share of the value created by labour or the existing wealth. Thus, fictitious capital refers to a real socio-economic power for his/her holder.

As capital is not reducible to a physical good (machines..) , but structures an (unequal) social relation by Marx, it is possible to distinguish between two 'incarnations' of capital, a property (financial claims on value created thanks to the process of production of goods) and a productive (means of production, labour workforce) one. This duality of the capital does not mean that the same capital exists "*twice, once as the capital-value of titles of ownership (stocks) on the one hand and on the other hand as the actual capital invested, or to be invested, in those enterprises. It exists only in the latter form, and a share of stock is merely a title of ownership to a corresponding portion of the surplus-value to be realised by it*" [1894, volume 3, Chapter 29] .

Thus, the generation of fictitious capital is inherent to the separation between commodity and money; it is based on the *ownership* of capital, not on the creation of real values (even if of course, in fine rent accruing to holders of financial assets depends on the creation of value in the production). Now, additional sources of fictitious capital are made possible by a series of factors that over time have built additional layers for its development. One, the monetary system has been long deprived from any reference to a commodity (with gold historically acting as a monetary standard), which gave to the banking system more leverage and free reins to create credit. Two, financial markets are by themselves a pure locus for fictitious capital creation and circulation: rise and fall of stock prices have a quite

⁹ Cf "*The real way in which industrial capital subjugates interest-bearing capital is the creation of a procedure specific to itself—the credit system. The compulsory reduction of interest rates is a measure which industrial capital itself borrows from the methods of an earlier mode of production and which it rejects as useless and inexpedient as soon as it becomes strong and conquers its territory*" [Marx, 1863, Addenda to Part 3] .

distant, if any, relation with what happens in the 'real' economy. Three, in the three last decades, a multitude of financial innovations, stimulated by generous monetary policies, incredibly increased the size of volume of financial assets dealt with on financial markets.

Derivatives appear as the more sophisticated form of creation of fictitious capital. In hardly one decade, they have become the core of financial markets. Between 1998 and 2008, the global market for all derivative instruments increased by a factor of 6 to \$1,285 trillion (Bank for International Settlements data). Derivative markets have contributed to connect the different types of traditional markets (stock, money, foreign exchange, commodities, etc.) with each others. They involve not only financial institutions (banks and non-banks) , but also transnational corporations (figure 7) .

Figure 7: Derivatives markets: at the core of financial markets

Source: Author

The correspondence between financial assets traded with on derivative markets and productive assets allowing for a possible creation of value is quite loose¹⁰. The volume of contracts is so high that they give the (right) impression that their multiplication has very little to do with the real process of production. Indeed, derivative contracts seem to be a perfect way to create an endless chain of credits, derived from primary financial assets, and then replicated thanks the lucrative imagination of financial institutions (The Lehman bankruptcy in September 2008 reportedly left 900 000 derivative and financial contacts outstanding with counterparties, (quoted in OECD, 2009b) To take an example, recalling Ponzi finance, the financing of assets (trade receivables, credit car receivables, junk bonds, government bonds) by a SPE bank-created is largely accomplished through the issuance of commercial paper to investors, called for this reason asset-backed commercial paper (ACBP).

In relation with their fictitious nature, derivative contracts have become the locus for extremely high fragility. Here are some reasons :

1. Extraordinary leverage : Both institutions (e.g. Structured investment vehicles (SIVs)) and contracts have become more leveraged
 2. mismatch in maturity : banks and SIVs borrow short, lend long term : ACBP programs are perpetual ('evergreen') , as the conduits emitting this program have to fund them through short term paper issuance.
 3. Over-The-Counter (OTC) products have by definition :
- + Little liquidity, as they are structured products tailored to the specific needs of clients (it is the essence of OTC compared to Standard derivatives markets) , hence
 - + No official price, as they are negotiated at prices not made public by the parties.
4. 'piling up' of multiple layers of securities. For example, in the pre-2007 crisis, Mortgage-Backed-Securities (MBS) , pulling together hundred or even thousands of loans were issued. They constituted the lower layer on which 'cash' Collateral Debt Obligations (CDOs) were backed by pools of dozens and more of MBS bonds. Then, an additional layer was made of 'synthetic' CDOs, in which structured products were used to fund other structured products. That is, in a synthetic CDO, the originating bank could keep the mortgages or other loans on its books and, instead, transfer just the risk associated with the loans by buying a form of protection known as a credit default swap (CDS). CDS, which add another layer to the creation of credit, are more

¹⁰ Cf remarks by the Head of OTC derivatives regulation " *if you buy an iPod, \$3000, on average, in derivatives are somehow related to that*", [Gensler, 2009]

fragile than most derivative contracts, e.g. interest or the exchange rates. While the latter depend on observable market prices, CDS are different. The risk they cover – credit risk – is not immediately observable but requires specific information about the borrower, which typically only banks have had.

5. There is no other validation for derivatives contracts than the perpetual circulation of claims, which obviously must end and trigger a massive destruction of (financial) value. That does not mean a zero-sum game. Banks that control markets as dealers generate huge profits with fee. There are currently 55 banks who act on either side as the counterparty for almost 90% of the outstanding contract volume worldwide. However, the market shares are not evenly distributed among reporting dealers. Because of the high fixed costs of making the investment required to put in place and maintain the systems that can handle high volumes of transactions, the pace of concentration has been unabated, with the top 5 dealer's market share on foreign exchange being over 55% in 2008, up from 35% in 1998 [Bank of International Settlements, 2009].

It is often referred to the *alphabet soup* of the innumerable acronyms which became so popular on the financial markets, in particular on derivative markets. They have been instruments of the swelling of fictitious capital through their circulation between the different segments of markets and institutions (figure 8)

Figure 8 : Alphabet soup : But who cooks the meals ?

Source : Author

4) A CRISIS OF ACCUMULATION AND PROFITABILITY

What happened in 2008 is not a financial crisis which 'contaminated' an healthy 'real' economy. The magnitude of the current crisis cannot be only explained by what happened on the financial markets. It cannot be understood either as propagation, or a contagion from the financial side to the 'real' economy. It is this way the current crisis is mainly analysed: an exuberant financial sector contaminated the otherwise healthy and buoyant production sector. In our view, the financial crisis is a moment which come first and paved the way for a major structural crisis.

Two major changes in value distribution

Capitalism history is characterized by different institutional configurations and the three last decades marked a considerable change in macroeconomic policy and accumulation regime. The institutional configuration which took place that at the late 1970s replaced the Keynesian-led policy 'social compact' which in an unprecedented (and since then not followed) way had boosted in developed countries both economic growth and social improvements. The power of finance capital deeply changed the institutional framework of contemporary capitalism.

The domination of finance capital, in keeping with neoliberal, Consensus Washington-based macroeconomic policies, brought about dramatic changes in the distribution of added value. In the early 1980, in relation with the changes in corporate governance, a shareholder 'revolt' took place against the excess of power held by top executive managers. From an academic perspective, this revolt was buttressed by the agency theory which was critical of the strong imbalance existing in the relation between shareholders (the principal) and the managers (the agent). The latter were said to 'spoil' the former because of asymmetrical information. The very goal of the reforms should be to «*motivate managers*

to disgorge the cash rather than investing it at below the cost of capital or wasting it on organization inefficiencies” [Jensen, 1986, p.324].

This radical shift in corporate governance brought about two major interrelated changes. The first change was in the distribution of value added. Since the mid-1980s, in all industrialized countries the profit share increased and conversely the labour share declined so much, that the trend is considered as ‘an epochal change’ [Ellis, Smith, 2007] . Figure 9 shows that the process has been particularly strong in the EU.

Figure 9: The share of wages in value added

Source: OECD

Reasons for the steep rise in the profit-to-value added ratio are multiple. One, increase in productivity has been made possible by the wide use of Information and Communication technologies (ICT). The process has been coupled with wages stagnation and in many case drastic wage cuts, made possible by persisting high levels of unemployment, facilitated by macroeconomic policies which have been carried out since the early 1980s. Two, wage levels were also kept downwards – a policy often dubbed by critics as a ‘race to the bottom’ as a result of the weakening of bargaining positions by wage-earners -. Three, this downward spiraling in salary gains was aggravated by the opportunity for – or the threat by - companies to delocate (offshore) in emerging countries.

A further significant driver for profit rise, in particular in the US came out of offshoring. According to Milberg’s findings [2008], except for energy, the lower price paid for imported service and material inputs led to an average profit share growth. The authors find that a 1% increase of service offshoring – reflecting lower imported service input prices –increased the profit share by 0.22% between 1998 and 2006. A 1% increase of material offshoring – reflecting lower imported material input prices – led to an average profit share growth between 0.51 and 0.69% [2008].

Finally, at a global scale, a striking feature of capitalism trajectory was its ability to restore profitability and increase the profit-to-added value ratio through diverse uses of ‘primitive accumulation’ [Serfati, 2004] . China could be an epitome for the uneven and combined process of contemporary capitalism. The country stands less the ‘world factory’ than a formidable machine to produce value and surplus value based both upon high technological process and primitive accumulation benefiting from the expulsion of dozens of millions of rural workers.

The second and radical change distribution-related brought about by corporate governance has been in the strong rise in dividends payouts. Increase in dividend payouts is indeed a companion feature of the rise of profits’ share in value added.

In the US, Euro zone and the United Kingdom, while profits were growing, the rate of growth in fixed investment was rather modest by historical standards and its decline began before 2008 (figure 10)

Figure 10 : Productive investment (in volume terms, Y/Y as %)

Source: Natixis

These drastic changes in primary (between labor and capital) and secondary (between retained profits and dividends) distribution, for a large part of both post-keynesians and Marxists heterodox, are held accountable for the economic crisis, beyond the financial crisis proper.

There are two main types of analysis: a) a too low level of household consumption, even overstretched by skyrocketing levels of indebtedness, did not incite companies to invest, b) a rising share of profits was ‘diverted’ of accumulation, and distributed to shareholders,

with two different destinations for profits: they were not invested either (or both) because of a 'lack of investment opportunity' or (and) of institutional pressures exerted by rentiers. For some, this distribution pattern explains the growing gap between the high rate of profit and the rather modest rate of accumulation [Husson, 2009].

There are a couple of problems with those analyses. Firstly, a set of qualifications would focus on methodological issues. The rise in the rate of profits is not a compelling fact, and some researchers find a stagnating rate of profit over the last decade [Kliman, 2009]. Also, macroeconomic data could hide differences between firms, measuring of capital depreciation which is a component of gross profits raises huge challenges, fixed investment by foreign affiliates could be underestimated in national accounts which focuses on parent company's inquiry forms, could be addressed. Then, a part of profits released by companies' records has been creative accounting-based, be they by financial companies the profits of which jumped from below 5 per cent of total corporate profits, after tax, in 1982 to 41 per cent in 2007 [Wolf, 2008] or by non-financial corporations. With the financial crisis unfolding, we now know more on the very light 'substance' of these profits.

Leaving aside those methodological issues, from a theoretical perspective, we think that there is no reason not to combine the role of distribution-based drivers, which referred in the Marxist thought as 'realisation' crisis, with those referring to the productive (over)accumulation-rate of profit loop. There is a continuum going from production to consumption and again to production. At a first glance, ever since the extension of industrial capitalism and its first crisis in 1830, economic crisis in modern times always took the form of unsalable commodities. Still, what appears at the lower end of the process as overgluted markets has been prepared, if not preceded at the upper end of the process, by a volume of accumulation producing too much goods. Logically, if not chronologically, crisis of accumulation is the driving force which provokes realization crisis.

Our analysis stresses that accumulation is an imperative for capitalism. It is a process based upon the reconversion of the greatest possible portion of profits (surplus-value in a Marxist analysis) in productive capital (labor power and equipment goods). As this structural compulsion can be mitigated by institutional factors (the current overwhelming power of rentiers and the unprecedented scope of financial drain being a point in case), a slowdown in the accumulation process has *in fine* to be accounted for by what happens on the side of production relations, that is what happens to the mass of surplus value and/or to the rate of profit side.

There is a close link between accumulation and profits, as the magnitude of accumulation plays a critical role, not only in the mass of profits created (surplus value in Marxist wordings) but also in the level reached by the rate of profit¹¹. That is, it is not enough that the share of wages in the added value falls, as it clearly did throughout the three last decades. The rate of profit is also dependant upon the cost and productivity¹² of equipment and other non recurring expenditures. Because of the dramatic increase in fixed capital (equipment, etc.) and in other non-recurring expenditures, assessed by managers to be indispensable to corporations in the context of oligopolistic competition and rent-seeking

¹¹« [F]or the rate [of profit, C.S.] is determined by the proportion, in which the variable capital produces value, while the mass [of profit or surplus value, C.S.] is determined by the proportion of variable capital to the total capital", Capital Vol. III Part III The Law of the Tendency of the Rate of Profit to Fall, Chapter 14.

¹² A traditional decomposition could be Profit rate = productivity of capital x share of profits. That does not mean that productivity of capital exists of its own. Here, we only mean that the increase in the cost of fixed investment has to be at least matched by a corresponding increase in the mass of profits.

(Research&development, advertising, Intellectual property rights, ...), a sufficient high volume of accumulation (which includes not only new productive equipment but additional workforce) is needed to allow the *volume* of profits generated to be sufficient if the *rate* of profit is to be maintained at the same level. Put another way, capitalism dynamics needs to be self-expanding, with accumulation proceeding as a spiraling upward loop until when difficulties in accumulation become too strong for the process to go on. Then, the spiraling growth ends, and cumulative feed-backs contribute to a reverse process of slowdown in accumulation. That means that the mass of profits become insufficient to keep the volume of accumulation at a level which allows counteracting the fall in the rate of profit triggered by an increase in the output-to- fixed capital ratio (the rise of organic composition of capital in the Marxist analysis).

As far as the last expansion cycle is concerned, overaccumulation, as partially reflected in (excess) capacity utilization, occurred only after the financial crisis (in the US, according to Federal Reserve data, the brutal slump in utilization of industrial capacity began in March 2008, up from 80% to 70% in March 2009)¹³. Clearly, overaccumulation is a relative concept. As was stated by Kalecki, Steindl and others, oligopolistic competition is for a while able to prevent overt overproduction and overinvestment. Moreover, as investments decisions are made by individual companies, and not planned by a central institution nor by the self-equilibrating 'invisible hand' of an auctioneer, an overaccumulation situation has generally to be observed *ex post* in data including manufacturing capacity utilization, unsalable goods, etc. Again, the fact that manufacturing capacities appear in excess as an outcome of the economic downturn does not mean that, by profitability standards they were not too much important before the economic downturn. Indeed, overaccumulation had already been manifest at the end of the 1990s in automotives and other sectors. Friedman offers interesting insight on the telecommunication sector by arguing that because the stocks' prices were too high, the cost of capital to the firms that issued the stocks was too low, and so communications companies laid millions of miles of fiber-optic cable that nobody ended up using [Friedman, 2009].

Thus, what appeared in 2008 as an overwhelming capacity excess on the supply side compared to a too low level of demand was indeed prepared by a deterioration of production relations in years before September 2007. A serious indication of previous-financial crisis difficulties can be found in the downward trend of Multifactor productivity (MFP) growth in most OECD countries throughout the expansion cycle that began around 2002-2003. It was also the case of labor productivity, which despite a dramatic increase in job flexibility and decrease in the wage-to-added value ratio (see above) went through a downward trend since the 1973 crisis (Figure 11).

Figure 11: labor productivity annual growth rate (y-to-y)

Source : Author's illustration, OECD data

This downward trend in productivity before the current crisis trend does not result from technical inefficiencies; it has to be linked to a slowdown in the pace of accumulation. The annual growth rate of fixed capital, as a proxy for the rate of capital accumulation, was

¹³ The deterioration is far from over. As the percentage of capacity utilization in US total industry was on average up to 80,9% in the period 1972-2008, it fell to 74,5 in September 2008, and was as low as 70,5 % in September 2009 (-6% y-to-y).

negative over the 2001-2010 period (figure 12). Interestingly, for all what has been said on the 'decoupling' of represented by Newly Industrialised economies, the annual growth rate of fixed capital also declined in absolute terms in those countries.

Figure 12 : Annual growth of fixed capital in advanced and newly industrialized Asian economies (annual percent changes), 1991-2010

Source : Author's illustration, OECD data

To sum up, there is not an unilinear process flowing from distribution and underconsumption) to production, but interactive feedbacks between distributional imbalances and accumulation process. Despite highest levels of exploitation of labor power (wages-to-profits ratio) as those observed above, both the mass of surplus value and the rate of profits (surplus value-to-wages plus equipment ratio) were insufficient to maintain a steady high level of accumulation during the 2000s. As said, creeping overaccumulation of capital, i.e. productive capital generating insufficient levels of rates of profits, which loomed in the 1997 so-called Asian crisis in core industries (automotives, telecommunications), turned overt from 2006/2007.

Difficulties which plagued OECD countries' accumulation of productive capital during the 2000s, well before the 2007 financial crisis, has begun to receive some recognition, including from OECD [OECD, 2009a], a striking break with the optimist economic outlook envisioned as late as December 2007, when the Organisation assessed that the subprime crisis would have little effect on the 'real economy' [2007]. Not incidentally, sectors already plagued with over industrial capacities since the end of the 1990s (automotives, telecommunications) were not the only to go through enduring difficulties in the 2000s recovery. The US construction sector, underpinned by loose credit arrangements underpinning, had displayed dismal and worsening productivity performance since 2002. The rate of labor productivity has been steadily negative since 1997, culminating in an abysmal -12% growth rate in 2008 [Brackfield, Martins, 2009].

Explanations for the slowdown in US productivity in the before the 2007 crisis is put forward by Fernald and Matoba (2009). They find that 'Total factor productivity'—a measure of the efficiency with which labor and capital are used—has fallen during the current recession. But, after adjustment for lower utilization of labor and capital, such productivity has risen strongly over the past two years. That is, had capital and labour gone on being used at full capacity, the GDP would have keep on growing. This *a contrario* highlights what overaccumulation means : capital and labor are not fully used as soon as profits that can be collected are assessed insufficient by managers. An additional explanation given by the authors is also worth of interest. The authors suggest that once the US recovered in the mid-2000s, firms began to spend large amount of money in "*unobserved intangible investments*" (p.3). We have challenged elsewhere the ubiquitous notion of intangible assets and documented that their value is for the most financial market driven [Serfati, 2008]. Expenditures 'for the preparation of future' is all about is capitalist accumulation. That does not mean – *pace* Keynes – that any outlay by a firm will bring about value creation. *Sunk* costs, which include significant pieces of 'intangible' investments -by essence-, might be not recovered. The growth of intangible investments contributes to the productivity slowdown, as they are 'wasteful' expenditures. This is the case of marketing,

branding, intellectual property, and even pieces of ‘development’-oriented activities, which are charged as R&D, are also marketing and other close-to-market ones)¹⁴.

5) THE POLITICAL ECONOMY OF RESCUE PACKAGE

Huge size of stimulus: show me the money

In the two last years, amount of money spent by Central banks and governments have reached levels that would have beyond imagination of any expert only a couple of years ago. Stimulus packages carried out in industrialised (and most emerging) countries have been overwhelming, even by historical standards (see OECD, 2009c) (figure 13).

Figure 13: Fiscal stimulus and support to the financial system as a % of GDP

Source : Author’s illustration, based on UNCTAD data.

Figure 13 provides some insights on governmental packages. One, all in all, support for the financial sector accounts for over 90% of total governmental spending, as fiscal stimulus accounts for only 10%. Two, differences between developed and developing countries are striking, not surprisingly by the magnitude of the spending, but also in the balance between the both types of spending.

Governmental involvement reached such a magnitude in industrialised countries as for some to address concerns on what capitalism is about. Zingales asked: “« *Do we want to live in a system where profits are private, but losses are socialized ? Where taxpayer money is used to prop up failed firms ?*” and concluded that “*For somebody like me who believes strongly in the free market system, the most serious risk of the current situation is that the interest of few financiers will undermine the fundamental workings of the capitalist system. The time has come to save capitalism from the capitalists*” [Zingales,2008] . Similar concerns are expressed by Rogoff who fears that with the Bank rescue package “*we will be forever trapped in a framework where taxpayers are forced to bail out banks in bad times, while wealthy shareholders reap huge profits in good times*” [Rogoff, 2008]. More sarcastically, Roubini observed that “*Comrades Bush and Paulson and Bernanke will rightly pass to the history books as a troika of Bolsheviks who turned the USA into the USSRA (United Socialist State Republic of America)*” [2008] .

Uncertainty in the stimulus effects of governmental policies

When the financial crisis burst out, the massive state involvement was endorsed by the economist community in is quasi-unanimity. The sequence of events is as follows. One, financial rescue packages aiming at supporting ‘too-big-to-fail’ banks were set up in emergency; two, governmental measures were taken to try to stop the depressionist spiral. Governmental policy included two types of measures, tax cuts and public spending. Looking at the US case could illuminate policy-oriented and theoretical issues. The debate revolved around the magnitude of multiplier effect of governmental spending and of their effects in terms of reduction of unemployment. For instance, Obama’s Economic Advisors, Bernstein and Romer, estimated that multiplier effects of the stimulus package through four years, would be 1,55. “[U]sing the 1% of GDP equals 1 million jobs rule of Thumb”, they find that with an 3,4% GDP increase by 2010Q4, over 3 million of jobs will have been saved or created. The model is criticised by those who find that the multiplier associated with a permanent increase in government spending by the end of 2010 lies only between 0, 5 and 0,6. That means that government spending does not induce additional private spending but

¹⁴ The pharmaceutical industry is suspected to charge a number of non development – in the sense given by the *OECD Manual* – and perform head-to-head trials for marketing and product-differentiation purposes, [CBO, 2006]

instead quickly crowds out private consumption and investment [Cogan,Cwik, Taylor, Wieland, 2009].

Unsurprisingly given the low multiplier effect hypothesis, the package effect on unemployment is also disappointing, with about 600,000 additional jobs only created by the end of 2010. Differences in government spending multipliers come from at least three points : a) the Fed will be allowed to increase its interest rate (hypothetised as close to 0 by Bernstein and Romer) , b) rational agents (firms and households) will modify their expectations in response to the new fiscal policy measures, c) The negative wealth effect which will happen because people realise that higher government spending and debt today ultimately require raising more taxes in the future, will result in cuts in consumption spending [Bernstein and Romer, 2009] .

Similar critic was made by Taylor [2008]. According to the permanent-income theory (Friedman), or the life-cycle theory (Franco Modigliani), temporary increases in income will *not* lead to significant increases in consumption. However, if increases are longer-term, as in the case of permanent tax cut, then consumption is increased, and by a significant amount. Taylor advocates, not stimulus packages focused on people who might consume more, as basic Keynes economics would have proposed, nor tax rates increase on businesses or on investments, but an across-the-board approach where both employers and employees benefit.

NeoKeynesian R. Barro also strongly challenges the validity of the stimulus package, arguing a) that the multiplier effect would be probably less than 0,8, and b) that government should *“avoid programs that throw money at people and emphasize instead reductions in marginal income-tax rates -- especially where these rates are already high and fall on capital income”* [2009] . Projections released by the Congressional Budget Office (CBO) are also disappointing. While the stimulus would increase economic output and employment in the short run, the GDP would, by 2019, have an estimated net decrease between 0.1% and 0.3%, as compared to the CBO estimated baseline). Against this framework, growth is close to its potential output on average, and that potential level is determined by the stock of productive capital, the supply of labor, and productivity.

This long-term (slightly) negative effect is anticipated by CBO’s projections because capital accumulation will be affected through a ‘crowding out’ effect of government debt [Congressional Budget Office, 2009]. CBO’s basic assumption is that, in the long run, each dollar of additional debt crowds out about a third of a dollar’s worth of private domestic capital (with the remainder of the rise in debt offset by increases in private saving and inflows of foreign capital).

Distributional issues

As this debate could seem somewhat technical, its background and outcomes as well refer to distributional effects. It has been evident that the crisis has unequal effect on social groups. In developing countries, as stated by an ILO report, the crisis effects are disproportionate on vulnerable groups such as women, youth and migrant workers (figure 14) [2009].

Figure 14: Projected increase in vulnerable employment and working poverty (Millions, change from 2007 to 2009)

Source: ILO: Global Employment Trends, 2009.

In the US, Baker contrasts the differentiated effects of tax cuts and government spending. Based on a 1,5 multiplier for government spending, he find that \$100 billion of additional government spending will lead to an increase in employment of 1 million workers, while a

temporary cut in payroll taxes will generate 860,000 jobs and \$100 billion cut in corporate taxes will lead to just 200,000 new jobs [Baker, 2009] . He also argues that insofar as tax cuts are substituted for government spending, there will be fewer jobs created by the stimulus and that African Americans and Hispanics will feel this effect disproportionately. Despite these and other warnings, a large share of governmental spending has been focused on banking rescue, as can be seen from figure 1. As far as the European Union is concerned, the picture is pretty worrying. As noted in a report commissioned by European trade-unions, *“Problematic in the light of the expected rise in unemployment appear to be the paucity of measures directed at the labour market (active labour market policy)”* [TUAC, 2009, p.5] . It was in particular the case in France, where the report notes that *“French unions were united against the first stimulus package because of the lack of a social dimension”* [p.29].

Overall, it has been noted that thus far, while the banking system was channeled huge amounts of money through rescue packages and easy access to loans from central banks, production and consumption failed short of being boosted by bank credit. Indeed, the bulk of money banks received were used for the purpose of reinforcing their reserves. Disentangling the drivers for paucity of lending to business and households is difficult, as the latter could come from the demand side (a retrenchment in the demand for funds by borrowers) or supply side (reduction in banks’ willingness to lend). May as it be, spreads between loan rates and the funding rates widened considerably across the board until the beginning of 2009 and have moderately declined in the United States and in the euro area while remaining broadly unchanged in the United Kingdom [BIS, July 2009].

Against this background, it is worthwhile to observe that a large skepticism is shared by citizens of all industrialised countries. Public opinion is clearly critical of governmental and Central Bank initiatives. In the US and in the leading European countries, they give their governments much responsibility in the recent economic downturn and its consequences by an overwhelming margin. As to financial support by their Central banks, discontent is highest (figure 15).

Figure 15 "Do you feel the European Central Bank/Bank of England/Federal Reserve has responded appropriately to the challenges of the economic downturn and its consequences?"

Source: Harris Poll, Adults surveyed online between May 11 and May 18, 2009

In the community of heterodox economists, there is no shortage of people to criticize the bias in favor of the banking system and business of governmental packages. Outstanding names are Krugman, Stiglitz. Still, critics come also from some mainstream economists, worried that mighty pro-finance institutions lobbies may have strongly influenced governmental agendas. *“The quiet coup of Wall Street”, “Becoming a Banana Republic”* because *“elite business interests—financiers, in the case of the U.S.—played a central role in creating the crisis, making ever-larger gambles, with the implicit backing of the government”* and other strong words do not come from heterodox, nor anti-capitalist activists. These remarks are expressed by is a former chief economist of the International Monetary Fund [Johnson, 2009]. He was comforted by the Goldman Sachs’ CEO who said after his company reached record trade revenues and quarterly earnings in 2009Q2, *“Our model really never changed, we’ve said very consistently that our business model remained the same”* [Harper, 2009].

Possible scenarios and might of finance capital: déjà vu?

Increase in governmental deficits and debt has been impressive in the two last years and more cumulative effects are forthcoming. According to International Monetary Fund' projections, combined government budget deficits of advanced economies will rise from 75, 2 % of GDP in 2007 to 93, 6 % in 2009. In some countries, the level will go up much higher. US government debt is projected to grow from 63 % of GDP in 2007 to 100 % by the end of 2010. Japan's government debt, already at 188 % of GDP after more than a decade of fiscal stimulus efforts, is projected to increase to 226% by the end of 2010.

In 2009, according to OECD gross borrowing by OECD governments are expected to reach almost USD 12 \$ trillion, from 9 \$ trillion in 2007. For the OECD area as a whole, it is estimated that almost 60 % of gross borrowing needs for 2009 will be covered by issuing short-term debt, witnessing a rise in risk-adverse attitude from financial investors, even with regards to governmental paper.

The bulk of public indebtedness goes with industrialised countries, to begin with the US. The US will account for 64% of total gross borrowing, up from 61% in 2007, and Euro zone governments' gross borrowing will reach 19% in 2009, up from 17% in 2008 (OECD, 2009) . Again, emerging countries could play a significant role for developed countries' banks, even if not reflected in spreads. Ominously, IMF warns that the recent decline in sovereign debt spread, as measured by Emerging Market Bond Index Global (EMBIG) spreads model does not result from domestic economic fundamentals that continued to deteriorate in many countries at the date of the report (October 2009), but was driven almost entirely by improved global risk appetite and core market liquidity [International Monetary Fund, 2009, p.21]. It is likely that spreads will bounce back up in the case of aggravated difficulties (including the political risk) in emerging countries.

History shows that there are three main outcomes to such a high rise in public deficits and debts as the one endured by industrialised countries in recent months: strong macroeconomic recovery allowing budget primary surplus to meet debt payments requirements, speed-up of inflation lightening the real charge of public debt, and strong rise in governmental interest rate due to the fall of the price of oversupplied Treasury bonds. Let's examine briefly the three (not mutually exclusive) scenarios which could follow the huge rescue debt-funded packages implemented in industrialised countries. The first one – a strong macroeconomic recovery – is expected/hoped by those who believe that government stimulus, coupled with buoyant demand from emerging countries, will boost macroeconomic growth rates up at their levels reached before the crisis. This outcome is unlikely. To begin with, a strong uncertainty is surrounding the stimulus effects of governmental policies (above). Two, references to history, the case of the post WWI made by those who minimize the debt burden attached to current rescue packages could be misleading. In Europe and in the US, there was a dramatic need for huge infrastructure spending in the aftermath of the war. Instead, according to experts, a striking feature of the current situation is that even if and when economy recovers, the 'potential output' will be lower than it was in the early 2000s. Experts agree that recovery is to be slow and protracted.

Even a strong recovery could not be sufficient for governments to be able to meet their debt commitments. A basic tenet of the state solvency constraint is that:

$$p + s \geq (r - g) b$$

With the permanent primary surplus (as a share of GDP), p , the permanent seigniorage (as a share of GDP), s , the state debt (as a share of GDP), b , the long-term real interest rate, r , and the long-term growth rate of real GDP, g [See Buiter, 2009] .

In other words, when and if the real interest rates is higher than the macroeconomic growth rate, and with a state debt-to-GDP $b = .8$ (80%), the primary surplus p has to be positive, a fact that it is far from sure even with strong macroeconomic growth rates.

Also, debt state sustainability not only depends on the dynamics of the macroeconomic recovery, but also on the level of real interest rates required by financial markets. Taking into account this variable leads to the second scenario, the one laden with a steady increase in interest rates as it is often observed after the generation of large rise in public deficits. Actually, this scenario is likely. Reasons for rise in future interest rates are denied by those who support the stimulus package, observing that until now, at odds with the Ricardian equivalence, the sharp increase in borrowings made by the U.S. Treasury since 2008 did not carry, a sharp increase in interest rates along [de Long, 2009]. Still, that the situation of low and stable yields on public bonds will last long is dubious. One, as a long story evidences it, rise in interest rates is generally triggered by a growth in public debt [OECD, 2009]. Two, the US could be a special case thanks to the flight to quality (and even on that, see below), and three, the relative low level of interest rates mainly comes from huge liquidity available to financial investors from Central Banks. Remarkable, and hardly noticed except by a few analysts (in particular Artus, 2008) is that OECD's central banks have been maintaining abundant liquidity, even after the return to normal in the interbank market. Hopes were that that overfunded banks would channel credit to firms and households which would kick off demand of equipment and consumption goods. Those hopes have failed short of materializing so far and the downward trend in lending to households and corporations is strikingly similar in all industrialised countries (figure 16). In the US, 868 \$ billion through the Fed's 1.75 \$ trillion asset purchase program, and despite direct asset purchases of about \$500 billion in total outstanding liquidity facilities as of the end of July 2009, most of the new liquidity appears not to have extended beyond banks [Parisi-Capone, 2009]. In Europe, despite massive liquidity injections by the European Central Bank, the annual growth rate of loans to households has gradually fallen from the peak recorded in April 2006, when it stood at close to 10%, to levels of close to zero in recent months (-0.2% in August 2009) [Smaghi, 2009] . As put by Kregel, the only benefit to banks from 'quantitative easing' is the zero effective cost of funds [2009]

Figure 16 : Loans to the private sector * (Y/Y as %)

Sources: Datastream, FoF, ECB, BOE, Natixis

Indeed, liquidity made available at low interest rates to banks has fueled their strong demand of financial assets, primarily governmental bonds and financial institutions. Large amount of liquidity buttressing a high level of demand of bonds by banks is a reason why, despite huge quantities of public bonds adjudications, interest rates on public bonds have been contained at reasonable levels so far. Thus, as evidenced in the US, a direct effect of large public through Central Bank and governmental initiatives has been to provide funding to financial institutions, which allowed them to purchase assets at very low prices, with the hopes they will rise in coming months.

Another reason for the relatively low level of governmental bonds' interest rates despite huge volume of Treasury bonds issuance is that Central Bank have themselves bought large amounts of public bonds under the umbrella of the 'quantitative easing' component of the new monetary policy initiated to cope with the crisis. Large purchases of public bonds by

Central Banks have been, together with a further rise in emerging and oil-producing countries' official reserves (hence a demand for T-bonds) , a major reason why yields have been surprisingly stable.

It is likely that this situation will not last. As bluntly said by the Governor of the Bank of England, "*We shall all be paying for the impact of this crisis on the public finances for a generation*" [King, 2009]. Since the mid-2009s, long-term yields have begun to rise, triggered by the perception by financial investors of an increase in sovereign credit [Bank of International Settlement, 2009]. Emerging markets are said to have smoothly weathered the storm so far. Still, all emerging markets are not on a same equal foot. Eastern Europe looks worse off than some of Asia or Latin America (except defaulters, such as Ecuador and Argentina). Still, other analysts are less optimistic on Latin-America economies. The era of primary budget surplus, enjoyed by Latin America between 2003 and 2008 seems over, and the risk of higher budget deficits on interest rates are potentially much stronger in Latin America than in advanced economies [Eyzaguirre, Clements, Canales-Kriljenko, 2009] .

Another driver for future long-term interest rate could be a decline in the foreign appetite for US assets. In recent months, it seems to have been the case, with sales by private foreign investors exceeding buying of US bonds by Foreign central banks. In 2009 for the first time ever, the net capital in flows of US assets (public and private) has become negative, a fact that could constrain US policymakers to increase Federal bonds' interest rates in coming months.

The third scenario unfolding from the huge increase in governmental debt is inflation. As well known from post WWI Keynesian policies, inflation is seen as the best tool for rentiers' euthanasia. Hence, strong emphasis put by financial markets-friendly policies to give absolute priority to maintaining inflation rates at low levels. Main concern for inflation rise, and for some hyper-inflation, comes from monetisation of sovereign debt.

A critical variable for inflation expectations could be commodity prices. Still, in industrialised countries, besides that socio-economic fractions united against any return of inflation remain mighty, underlying economic drivers mitigate the possible adverse effects of commodity prices. They include low risks of wages hikes due to strong unemployment levels, technological innovations, outsourcing of production in lower wages countries, underutilization of fixed equipment by corporations [see among others, Artus, 2009] . This leads P. Krugman to state that, as there is no real risk of inflation, the current inflation fear-mongering is partly political, coming largely from economists who had no problem with deficits caused by tax cuts but suddenly became fiscal scolds when the government started spending money to rescue the economy [Krugman, 2009] .

A virtuous loop ?

As a serious obstacle to the virtuous loop set in for banks and financial investors could be a rise in inflation rates, the events that unfolded since the beginning of the crisis reveal the might of the political economy bloc organized to make low inflation an absolute priority of Central Banks'agenda [Papadatos, 2009] .

Thus, a *virtuous* loop has been created for the banking system and financial investors (figure 17).

Figure 17: A virtuous loop for Finance capital

Source: Author

Funds received from capital injection, loans and other ways have been transformed in Treasury bonds and bills underwritings. To take the EU case, in 2009 banks have increased their margins on lending to households and non-financial corporations at levels never seen

since 2003 [European Central Bank, 2009]. In a similar vein, since interest rates on government bonds have been steadily rising in recent months, the spread with interest that banks have to pay on money they have borrowed from governments is widening.

Mutual satisfaction from financial markets and financial sector are evidenced by the surge in Stock market indexes, big bank's profits and distribution of bonus in the second half of 2009. As it is usual in crisis and their aftermath, consolidation of the financial sector is underway, preparing for a new generation of 'too-big-too-fail' institutions. Consolidation means that financial activities, such as trading of foreign currencies, bonds, fall in the hands of a fewer number of financial intermediaries, mechanically raising their revenues and profits. Goldman Sachs' bonuses reached their highest point ever since the foundation of the company one hundred and forty years ago [InMan, Observer, 2009]. It is worth to recall that the Company is prime broker of US government bonds. Consolidation happening in the course of the current crisis is particularly dangerous because large financial interrelations will lead to a rapid spread of financial problems when one institution fail, and because large and diversified financial institutions are extremely hard, if not impossible, to supervise and to regulate properly [Tymoigne, 2009]

ANNEX: FIGURES

Figure 1: The credit pyramid

Source: Author, from various statistical data

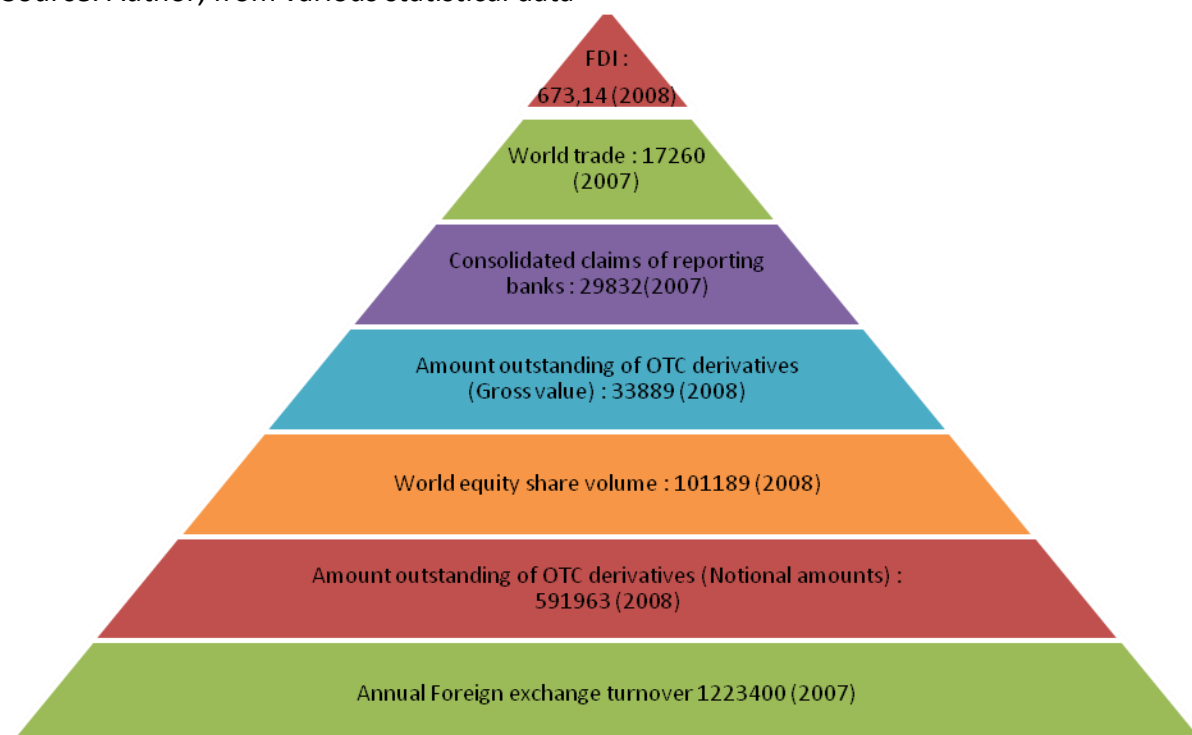
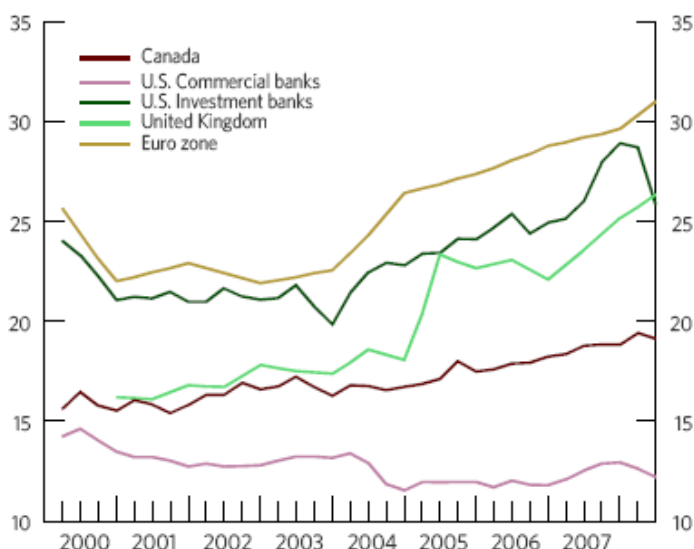
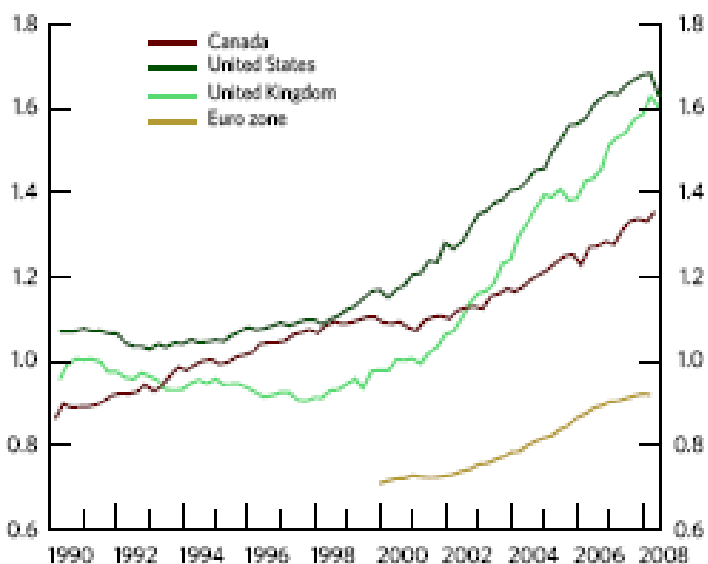


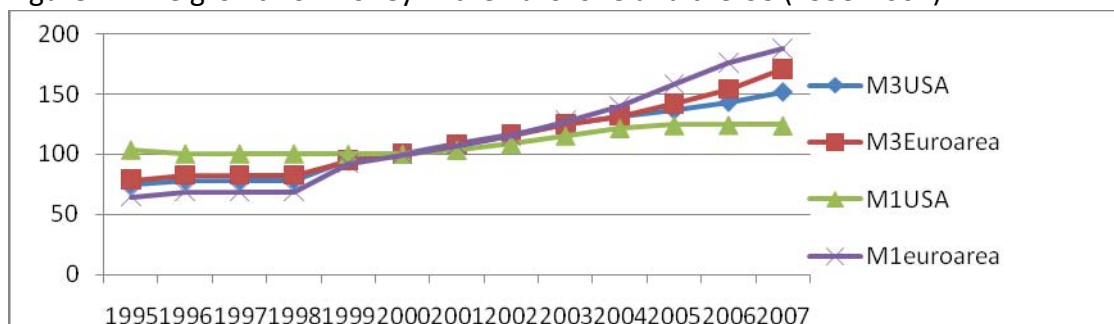
Figure 2: Banking Sector Leverage : Assets as a multiple of capital



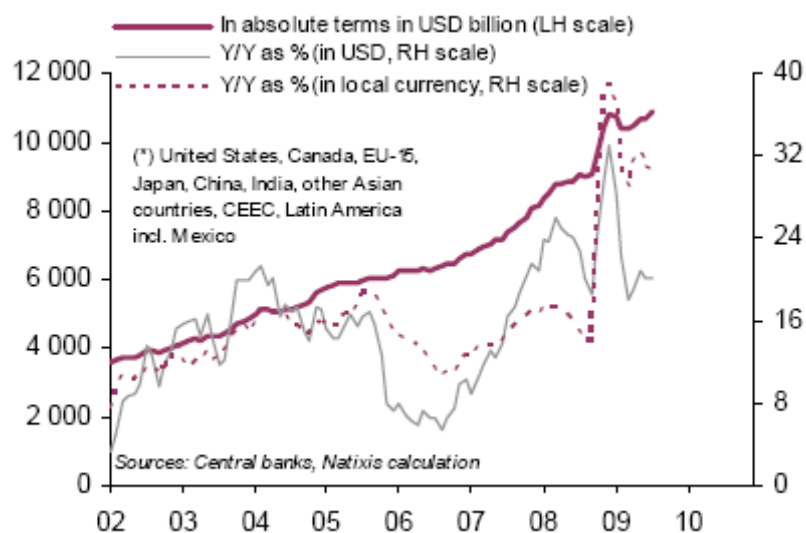
Sources: Bloomberg and bank financial statements
 Figure 3: Household Debt as a Share of Personal Disposable Income



Note: 1 means 100%
 Source: Bank Of Canada, *Financial System Review*, December 2008
 Figure 4 : The growth of money in the Eurozone and the US (1995-2007)



Source: our own illustration, OECD data
 Figure 5: World*: Global monetary base (as % of global nominal GDP)



Note: World defined as on the graph.

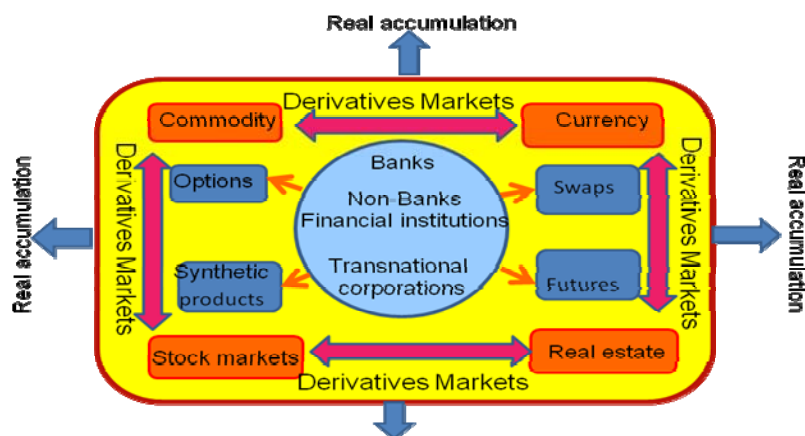
Source: Natixis Flash Markets, "Was the severity of the crisis foreseeable?", 04 December 2008, No. 556

Figure 6: Financialisation : a tentative taxonomy

ISSUES	ISSUES
<p>1) TEMPORALITY :</p> <ul style="list-style-type: none"> • End of the seventies : almost scholars, but : • Long term trend : cyclical process (Arrighi, 1994) • 'Second globalisation' (Bairoch, Kozul-Wright, 1996), • Finance capital as ideal-type of capitalism (Chesnais, 1994, Serfati, 2000, Harribey, 2001) 	<p>2) FINANCIALISATION DRIVERS:</p> <ul style="list-style-type: none"> • Accumulation or/and underconsumption crisis • finance capital-friendly governmental policy : Macroeconomic (anti-inflation, high interest rates), substitution of capitalization pension schemes to pay-as-you go ones • Social Structure of accumulation (Kotz, 2008), Political counter-revolution (Dumenil, Lévy, 2004) • Geoeconomic rivalry : Angloamerican capitalism vs Japanese and European continental capitalism (Gowan, 1997) • Discursive role : economics as artifact, financialisation as a set of processes constituted in practice through discourses of economy (Langley, 2004) , (McKenzie, 2007)
<p>3) CHARACTERISTICS:</p> <ul style="list-style-type: none"> • Global financial system : rise in autonomy and power, unsustainable trajectory (Serfati, 2009) • Macroeconomic regime : rise in financial activities and revenues, changes in distribution of value-added (profits vs wages), increase of the financial sector (Krippner, 2004, Epstein 2004) • Microeconomic regime : shareholder value-oriented corporate governance (pay-out dividends and interest revenues vs retained earnings) (Lazonick, M.O'Sullivan, 2000), Finance as a way of corporate control, (Fligstein 1990) • Microeconomic regime : financialisation of daily life (Martin, 2002) , • Coupon-pool capitalism regulating households and firms behavior (Froud, Johal, Williams, 2002) • Comparative institutionalist framework (Engelen, Konings, 2010) 	<p>4) RELATIONS BETWEEN 'REAL' AND FINANCIAL SPHERES</p> <ul style="list-style-type: none"> • From financialisation to accumulation : Kaleckian, post-keynesian models (Hein, 2008, Orhangazi (2008), van Treek (2008), 'profit without accumulation' (Cordonnier, 2006) • From accumulation to financialisation : overaccumulation, underconsumption, 'stagnationist' approach (Foster, Magdoff) • Dramatic shift in the balance between production and circulation (Lapavitsas, 2008) • Feedback process between financialisation and accumulation • structural and hierarchical embeddedness in industrial circulation (Pinault, 2008)
<p>5) DYNAMICS</p> <ul style="list-style-type: none"> • Macroeconomics : <ul style="list-style-type: none"> - Financialisation can be good or bad for macroeconomic growth, coherent but fragile framework (Stockhammer), introduce un steady growth regime (Boyer, Aglietta) - 'Contractive' or slow growth (Crotty 2007) • Microeconomic : <ul style="list-style-type: none"> - increase income inequality and contribute to wage stagnation (Palley, 2007) - Finance has penetrated across all commercial relations to an unprecedented <u>direct</u> extent (Fine, 2009) 	<p>6) METRICS</p> <ul style="list-style-type: none"> • Quantitative : Ratios <ul style="list-style-type: none"> - Business : <ul style="list-style-type: none"> Financial sector/GDP (%) Financial profits (dividends+interests)/total profits (or financial profits-to-retained profits) - Households : <ul style="list-style-type: none"> Financial revenues/Total disposable revenues Households : <ul style="list-style-type: none"> Financial revenues/Total revenues Financial undebttness/Total revenues (Montgomery, 2007) • Qualitative : <ul style="list-style-type: none"> Role of financial markets compared to bank intermediation (Froud, Haslam, Johal, Williams, 2005)

Source : Author

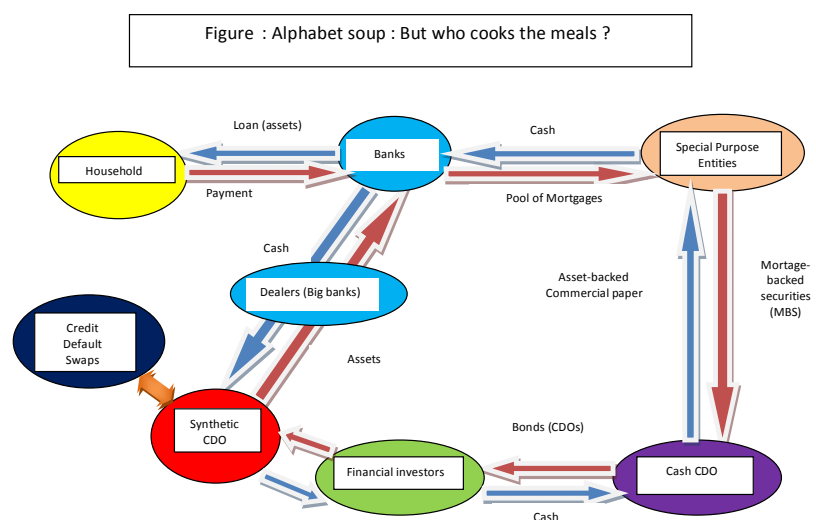
Figure 7 : Derivatives markets : at the core of financial markets



Source: Author

Figure 8 :

Figure : Alphabet soup : But who cooks the meals ?



Source : Author

Figure 9: Fiscal stimulus and support to the financial system as a % of GDP

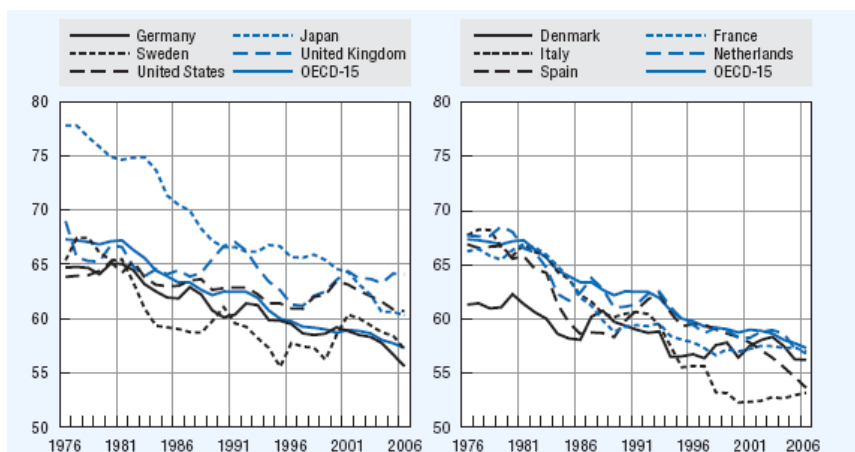
	Fiscal Stimulus (1)	Support to the financial sector (2)	Support to the financial sector/Fiscal stimulus ratio (2/1)
Developed economies	3,7	48,5	93
Developping economies	4,7	2,9	38
Transition economies	5,8	7,4	56

b) Comprises capital injection, purchases of assets, lending by government treasuries, central bank support provided with treasury backing, liquidity provision by central banks and guarantees, excluding deposit insurance provided by deposit insurance agencies. Liquidity provision by central banks only includes the new special facilities established to address the present crisis and excludes the operations of the regular liquidity facilities.

c) Country grouping weights based on current dollars.

Source : Author’s illustration, based on UNCTAD data.

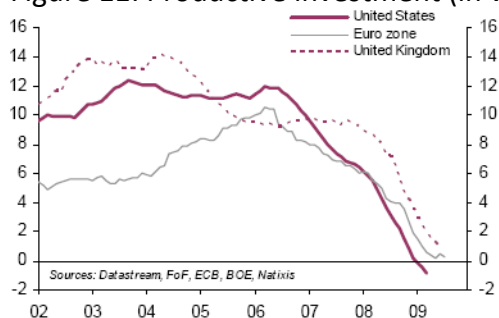
Figure 10: The share of wages in value added



Note: Total wages are measured as total compensation of employees and the self-employed (valued at the business sector compensation rate). Total wages are expressed as a share of the Gross Domestic Product. OECD-15 is the average of the ten countries shown plus Austria, Belgium, Finland, Greece and Ireland.

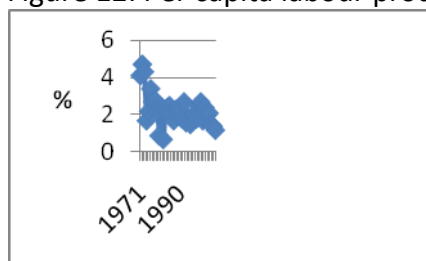
Source: OECD

Figure 11: Productive investment (in volume terms, Y/Y as %)



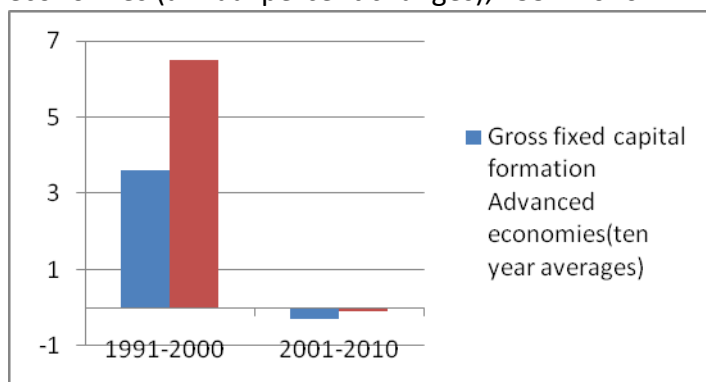
Source: Natixis

Figure 12: Per capita labour productivity annual (y-to-y as %)



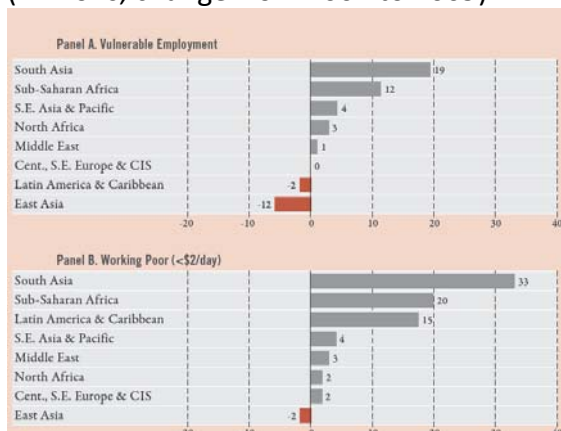
Source : Author's illustration, OECD data

Figure 13: Annual growth of fixed capital in advanced and newly industrialized Asian economies (annual percent changes), 1991-2010



Source : Author's illustration, OECD data

Figure 14 : Projected increase in vulnerable employment and working poverty (Millions, change from 2007 to 2009)



Source: ILO: Global Employment Trends, 2009.

Figure 15: "Do you feel the European Central Bank/Bank of England/Federal Reserve has responded appropriately to the challenges of the economic downturn and its consequences?"

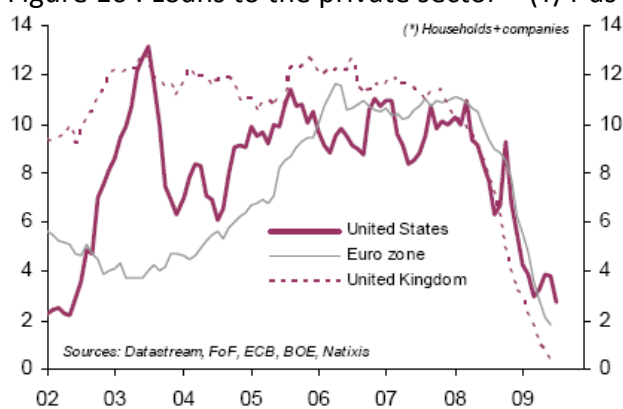
	Great Britain	France	Italy	Spain	Germany	United States
Complete responsibility	18	16	27	27	19	20
A lot of responsibility	45	46	44	26	55	47
Some responsibility	23	20	19	20	19	22
A little responsibility	11	12	7	17	6	9

Base: All EU adults in five countries and U.S. adults who say economy in their country has gotten worse

Note: Percentages may not add up to 100% due to rounding

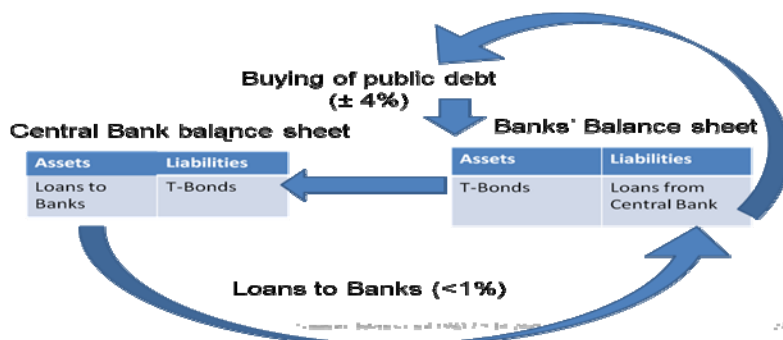
Source: Harris Poll, Adults surveyed online between May 11 and May 18, 2009

Figure 16 : Loans to the private sector * (Y/Y as %)



Sources: Datastream, FoF, ECB, BOE, Natixis

Figure 17: A virtuous loop for Finance capital



Source: Author

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