On the Character of the Current Economic Crisis

Spyros Lapatsioras,[1] Leonidas Maroudas,[2] Panayotis G. Michaelides,[3] John Milios,[4] D. P. Sotiropoulos,[5]

1. Introduction

In the third chapter of *Capital* Marx observed: "As long as the social character of labour appears as the money existence of the commodity and hence as a thing outside actual production, monetary crises, independent of real crises or as an intensification of them, are unavoidable. It is evident on the other hand that, as long as a bank's credit is not undermined, it can alleviate the panic in such cases by increasing its credit money, whereas it increases this panic by contracting credit" (Marx 1991: 649).

As we know, financial crises are sometimes the prelude to, and sometimes the result of, a crisis of over-accumulation of capital. Sometimes, again, the financial crisis manifests itself independently of the broader economic conjuncture, that is to say does not have any significant effect on the level of profitability and the level of employment of the "factors of production" in the other sectors of the economy above and beyond the financial sphere or some specific parts of it.[6] This, for example, is what happened in the case of the international financial crisis of 1987, when there was a collapse of share prices in the international stock exchanges, providing the international press with the opportunity to speak of a "return to 1929 and the Great Depression". But it is also what happened in most of the more than 124 crises in the banking system that were recorded between 1970 and 2007.

It is thus evident that each specific financial crisis must be examined both in relation to its particular characteristics and in relation to its interaction with other

1 *Department of Economics, University of Crete (email: spirosla@gmail.com).*

2 *Business School, University of the Aegean (email: lmarouda@aegean.gr).*

3 *Department of Humanities and Social Sciences, National Technical University of Athens, (email: pmichael@central.ntua.gr).*

4 *Department of Humanities and Social Sciences, National Technical University of Athens, (email: john.milios@gmail.com).*

5 *Department of Sociology, School of Social Sciences, University of the Aegean, (email: d.p.sotiropoulos@gmail.com).*

6 In Volume I of *Capital*, it is written: "The monetary crisis defined in the text as a particular phase of every general industrial and commercial crisis, must be clearly distinguished from the special sort of crisis, also called a monetary crisis, which may appear independently of the rest and only affects industry and commerce by its backwash. The pivot of these crises is to be found in money capital, and their immediate sphere of impact is therefore banking, the stock exchange and finance" (Marx 1990: 236).

spheres of economic activity and the wider economic conjuncture, before it becomes possible to draw conclusions as to its causes, its extent and its consequences.

We shall argue that the current crisis is the outcome of permanent characteristics of capitalist relations of production and reproduction, but also of characteristics that are peculiar to the core of the neoliberal organization of this relation, that is to say to the core of the present form of appearance of capitalist relations of production.

2. Factors in the crisis

2.1 Some basic points from Marx

Marx showed in *Capital* that capitalism is not simply a system for extracting surplus labour or appropriating surplus product (the extraction of surplus labour and appropriation of surplus product are characteristics of *every* class society: the slave-owning society, the feudal, the Asiatic…). The distinguishing feature of capitalism is that *the process of generating surplus product takes the form of money producing more money as an end in itself*. In this context money is not a "produced commodity" as was believed by Classical Political Economy (and as is maintained even today in Ricardian readings of Marx) but the "reification of the capital relation".

Money is thus produced in accordance with the dynamics of expanded reproduction of the capital relation, first and foremost as credit money, as discounting of the future, as the *present portion of future profitability* and by extension *future income*. Thus, capitalism is "a system of production, where the entire continuity of the reproduction process rests upon credit" (MEW 25: 507. Marx-Internet 1894, Ch. 30). "This social character of capital is first promoted and wholly realized through the full development of the credit and banking system. (…). The banking system shows, furthermore, by substituting various forms of circulating credit in place of money, that money is in reality nothing but a particular expression of the social character of labour and its products" (MEW 25: 620. Marx-Internet 1894, Ch. 36).

The financial system is thus a basic lever for expanded reproduction of overall social capital.

One essential element in the functioning of the financial system is "economic time", the difference between present and future value, that is to say the expectation of future profitability (of future returns) on which present discounting is dependent. *The tendency towards expansion of the monetary means that are called upon to function as capital in accordance with the expected future production and profit is an inherently unstable element of the system, a perennial potential for financial crisis*.

One significant component of present-day developments in the sphere of credit and finance, not unrelated to the breakdown in the system of fixed exchange rates and internationalization and liberalization of financial markets, is the development of financial derivatives. Through financial derivatives there is a mingling, a linkage and a comparison in profitabilities at the international level between every type of financial security. International capitalist competition is sharpened, with corresponding intensification of the international mobility of capital and the pressure imposed on labour for increased "international competitiveness".[7]

---

[7] For an interesting analysis of the role of modern financial derivatives see Bryan and Rafferty (2006).

2.2 The neoliberal model for regulation of financing

Present-day developments in the financing process date from the beginning of the 1980s and have their origins in abolition of the restrictions that had been imposed after the crisis of 1929 on banks, the international movement of capital and the mode of operation of stock exchanges (particularly in London and the USA). In other words they have their origins in the emergence of what is called the *neoliberal framework for regulation* of the financial sphere. We say regulation and we do not use the usual term "deregulation" because in the neoliberal model there is no abolition of regulation, nor in the final analysis of the guarantees provided by the collective capitalist (the state) for such functioning of the financial system as is right and proper for accumulation. The post-war "Keynesian" regulation (Bretton Woods) was merely replaced by a different kind of regulation that is compatible with the functions required by the neoliberal model of the financial system. A comprehensive framework of rules and regulations for the financial system is in operation today. For example, the functioning of the central banks as technical centres for underwriting the operations of the money markets and the credit system, is carried out through a broad mesh of regulations, rules and hierarchies, and the procedure for decision-making beyond the boundaries of democratic legitimacy in itself comprises a major systemic reform. Another example is Basel I and II as systems for regulating the behaviour of banks that are under the control of the central bank, etc.

The basic characteristic of the regulatory framework for the financial sphere – which is a *structural characteristic and core component of the neo-liberal model* – is the development of extra-bank (i.e. non-traditional) financing of the public debt and enterprises by the international markets. The enterprises, at first large internationally active ones but with subsequent extension to medium-sized companies of suitable creditworthiness, finance their activities mostly through non-traditional sources of banking credit. They issue short-term commercial paper, sometimes using the stock exchange, sometimes resorting to a variety of non-bank financial arrangements (including insurance funds, mutual funds, hedge funds, insurance companies and a whole constellation of special forms of capital) entered into for this purpose. It is not only business companies that subsequently acquire access to non-bank financing and risk-management facilities but also those seeking housing loans, student loans, loans for the purchase of a car, credit cards, loans taken out by municipalities, etc.

This financing model presupposes securitization of debt and international mobility of capital, that is to say *the bringing into existence of an international space of multiple investment spheres for individual and isolated capitals, a space whose functioning makes these prerequisites into expanded consequences*. The financial markets have developed into a complex multi-dimensional system. They are not just money markets, bond markets, share markets, currency markets and commodity markets. They also include a rights market and a market in fixed-income securities and every other kind of security. As a result, an *international of capital* has come into existence that is permanently on the lookout for secure profits and self-valorization of money. Members of this International are combing the planet in search of reliable returns. Reliable returns in the sense that risk management (that is to say the probability of the expected return not being achieved) is the basic concern in an international market where multiple divergent forces are determining returns. It is a complex technique that prides itself on being a science.

From Marx we know that capitalist relations of production are engaged in expanded self-reproduction. *And the minimum element constituting that process is a claim to appropriation, a title of ownership of value and the terms of its production, a promised appropriation of surplus value*. *Securitization of claims on future value and surplus value is thus unequivocally an element in the capital relation*. Its reproduction amounts to a perpetual production of securities and a perpetual endeavour to overcome resistances of the valorization process, resistances that stem from “nature” and from labour: to overcome resistance in the potential spheres of utilization and to overcome resistance to profitability created by other capitals. Risk management is incorporated into the production process precisely because there can be no assured outcome of any struggle against something that is resisting. What we see as risk management is therefore nothing other than the continuation by other means of the everyday class war against labour in the sphere of production, the continuation by other means of the everyday war between capitals whose aim is to secure the normal rate of profit in an international sphere of investment. Securities markets and risk management techniques have always been part of the same logic as the class power of capital and the wars that it wages.

The neo-liberal model for financing capitalist production and reproduction played an important role in facilitating resurgence from the crisis of overaccumulation that made its appearance in the 1970s and continues to have an important function for capitalist accumulation and expanded reproduction.[8] The crisis had made its appearance at the beginning of the 1970s as a crisis of stagflation with increased unemployment and underemployment of the accumulated capital. The cause of these phenomena, i.e. the substantial outcome of the crisis of overaccumulation, was the fall in the rate of profit in the countries of developed capitalism that occurred in consequence of the overall pattern of social contradictions and antagonisms. These have rendered superfluous a section of the accumulated means of production.[9]

The functioning of the financial system and the means by which it is activated (for example the various forms of security) do not comprise merely vehicles for speculative investments. They are much more so components of a mechanism that makes a decisive contribution to the mobility of individual capitals, establishing the conditions for their competition. It thus functions as a key link in the reproduction of overall social capital. *Exposing individual capitals to international competition for financing of their activities makes it possible for there to be rapid reward of profitable, and punishment of insufficiently profitable, investments*.

This function has contributed, and continues to contribute, to transformation of banking activity because of the change in the correlation of forces between banks and the money market. More specifically, and as always in relation to our subject, the process of liberalization of the financial system had significant consequences for the functioning of the banks, which may be summarized as follows:

---

[8] For a Marxian interpretation of the overaccumulation crisis see Milios et al. (2002).

[9] According to Marx “Overproduction of capital and not of individual commodities – though this overproduction of capital always involves overproduction of commodities – is nothing more than overaccumulation of capital” (Marx 1991: 359). “Periodically too much is produced in the way of means of labour and means of subsistence, too much to function as means for exploiting the workers at a given rate of profit” (Marx 1991: 367).

(a) Bonds and shares are both securities. But, in order for them to be able to act as sources of finance for individuals or insurance funds or other non-traditional banking institutions, businesses or private citizens (for example with housing loans, etc.) *other forms of securitization of debt must be developed*. Securitization of debt has become an important process. It has contributed both to the emergence of the contemporary credit system and to its current crisis.

(b) The various non-bank financial schemes in operation on the international capital markets are not afflicted with the regulative restrictions that apply for banks, and are able to lend money at low rates of interest. This has had consequences for the functioning and the structure of the banking system. The new arrangements have squeezed bank profits and changed the composition of their workload, i.e. led to an increase in loans to households and loans to cover consumer and housing expenditures and a reduction in loans to businesses.

Consequently, with the gradual reform of the system, the banks were led into increased securitization as a means of expanding their turnover. They turned to securing commission from financial facilitation as a source of profit. When a person takes out a loan (s)he is required to secure a certain amount of capital so that there will be some guarantee in the event of the borrower's non-observance of his obligations. But this diminishes his(her) prospects of lending money himself because he is obliged to tie up a certain amount of capital. If someone sells the loan, that is to say issues a security whose holder receives the cash flow from the loan, firstly he is not required to tie up capital, secondly he is able to withhold a proportion of the cash flow *as commission* for issuing the security and so to find a different source of profit, which is directly dependent on the extension of credit that is thereby achieved, that is to say the number of loans that are issued. This nevertheless entails some restrictions. Firstly, in general the expansion of credit contributes to a rise in property values, secondly the increase in interest rates affects the value of existing securities in the event of conversion into cash or in the event that they are used as collateral for the purpose of obtaining cash. This poses potential dangers of disturbance to the credit system, leading the monetary authorities to judge that they should raise interest rates. Low interest rates, by contrast, facilitate the expansion of credit, under some conditions beyond the limits set by the requirements of capitalist production.

As for the form taken by household finance, it should be borne in mind that competition between individual capitals is conducted through profitable investments exploiting innovations and seeking out unexploited regions or regions that can provide an advantage by comparison with other individual capitals. Banks are not exempt from this rule. Intensified competition in lending to households, insofar as such loans have now come to account for a significant proportion of bank profit, is the basis for issuance of subprimes and other equivalent types of loan, and the basis for effective exploitation of this type of loan within the overall process of securitization.

(c) Liberalization has led to excessive expansion of certain banks involved in international transactions which – though for some they represent outmoded practice – are very important *nodal points*, not only from the viewpoint of scale of transactions and obligations but also from that of the links they maintain within the overall context of the international financial system.

(d) Moreover, given the development of "over the counter" (OTC) markets, of various off-shore companies, the development of "Special Purpose Vehicles" (SPVs), of different money markets, bonds, securities, swaps, etc., or in other words the development, in general, of international activities utilizing a complex network of financial transactions and money flows that are mostly evading all supervision and/or oversight, the system has become more intricate and complex. At the same time the development of new forms of finance (for example derivatives) has resulted in complex models of pricing and credit risk assessing that depend on parameters for which in all likelikhood no data exists. To the extent that information does exist it is likely to be very vulnerable to small changes (to say nothing of its inability to incorporate or measure potential risks and uncertainties created by the complexity of this network of relationships within the capitalist process of production and reproduction). Moreover, in contrast to the ideologies of abolishing the role of the intermediaries what is conspicuous in the current crisis is the emergence of new intermediaries and a network of multiple interlinkages entirely lacking in transparency.

Finally, the emergence and consolidation of the neo-liberal model did not take place from one day to the next. It did not appear as a comprehensive ready-made model but as a process of gradual elaboration taking into account failures, successes and the shifting environment. It did not automatically gain currency in all countries. It appears to have begun to be propagated, though still sometimes in a desultory fashion, following its rise to supremacy in the United States and Britain. For reasons that have to do both with the history of its emergence and with the mode of articulation of international networking, the USA and to a less extent Britain have been the centres of the international financial sphere, from which tools, innovations, organizational forms, etc. have been propagated to the rest of the international system. Thus one element at the core of the model is this complex articulation of relations whereby Wall Street (along with other financial centres in the USA) and the City of London have functioned as a centre for dissemination of new regulations and forms of organization of the financial system.

3. The relationship between the financial system and other elements comprising the core of neo-liberalism

The development of the financial system under neoliberal hegemony is linked to other basic elements comprising the core of the neoliberal model. We will be brief.

i) One declared objective has been to "deregulate" the labour market as a means of reducing the power of wage-earners to demand wage increases and better terms of employment. This has been pursued both by repressive methods and through monetaristic policies for fighting inflation, and has led to a significant increase in unemployment. It has also been pursued through the weapon of disciplining the behaviour of business and states that is made available through neoliberal money markets. Here it should be noted that monetaristic policies of high interest rates at the beginning of the 1980s, apart from significantly boosting unemployment, also had the result of generating a significant sphere for investment of international capital: higher levels of state indebtedness.

ii) Moreover – and in one aspect a continuation of (i) – *international trade and outsourcing, that is to say the exposure to international competition for the purpose of devaluing and excluding insufficiently valorized (=non-competitive) capital, are predicated, among other things, on the freedom of movement of capital along with the rest of the neoliberal complex of financial regulation* (non-bank financing, development of differentiated international financial markets). These elements have been mechanisms for schooling labour in the requirements of capitalist restructuring and continuing accumulation. Confining ourselves to the effects that non-bank financing of businesses has had, we detect some significant effects on the mode of operation of these businesses, particularly those that have access to money markets. To name just a very few: *Firstly*, we see an *increase in company debt* in relation to the capital, insofar as the debt increases the profitability of the capital and so sends signals of profitability to the money markets. *Secondly*, for regular continuation of financing *it is demanded* that every enterprise *have high profit indicators* – every suspicion of insufficient valorization increases the risk of burdensome terms of financing and reduces the companies' competitive potential (e.g. increases the risk of its being taken over). *Thirdly, shares do not comprise the key measure for financing of enterprises* but are raw materials for buyouts and mergers. In other words there is a handling of cash flows and sale and repurchase decisions with shares that increases the share prices (which can play a role in accumulation when what is required is investment that will have a long-term yield). The trade unions, indeed working people in general, experienced these results as loss of bargaining positions. The argument was and is simple: "accept what we propose, otherwise the company will lose its potential for financing". In this case, for example, doubts will be generated as to its profitability and there will be danger of it being bought out, with resultant loss of workplaces, or of the production chain being restructured and a part of the chain transferred to other countries.

iii) *Privatization of sectors of state activity and change in the composition of state activities*. Expansion of the space for investment of individual capital is another central element in the neoliberal model. Privatizations are an important factor in bringing about a broadening of the financial sphere. This too has consequences for wage-earners. At a minimum there is a requirement for increased financing of individual needs as distribution "free of charge" is replaced by commodities which have a price (or insofar as the method of costing changes when they pass into the control of private capital). As a result, a basis is created for *an increase in the debt of households* that have access to the banking system; but the potential is also generated for penetration, when required, by banks into new sectors of the market, such as, for example, student loans. Within the same logic as privatization and greater sanctification of profit is reduction of tax for businesses that contribute to maintenance of high levels of state debt. Reforms to the insurance system have introduced noteworthy pursuers of risk-free profits (insurance companies, mutual capital, hedge funds, etc.) into the company of the banks and so have evidently brought new pressures to bear on wage earners.

iv) *The securing of consent to the neoliberal model was underwritten by the possibility of access to cheap loans* (in order to finance consumer spending or housing or other expenditure) *and by participation in this global hunt for profits* (among the most conspicuous examples of such participation being the private insurance funds or mutual funds). In this way, the withdrawal of the state from funding universal insurance systems for health, education, social services, etc., will be eased. *Accordingly, the seeking out of potential borrowers, that is to say the incorporation into the credit system of certain groups in the population is not merely the result of the greed of the banks and all types of investor but an injunction that is part of the scheme of neoliberal regulation*. The privately-owned home as a dream that could be made to come true by virtue of neo-liberal financial regulation became a declared goal of all representatives of the model. The privately-owned home as an item of property became a means for access to other facilities of the credit system.

From a different viewpoint, the squeeze on wages, a result and objective of the neoliberal model *also* put a squeeze on consumer expenditure, such that the introduction of appropriate measures to facilitate *consumer credit* became an escape-route for the system, a solution to the problem of managing aggregate demand on the part of the collective capitalist. Today's crisis exposes the difficulties involved in this solution for management of aggregate demand and for organization of consent to the neoliberal programme. In the place of subprimes one can very readily imagine problems with securities from credit cards and quite likely tomorrow securities from student loans, etc.

4. Banks, housing loans and securitization

The securitization of housing loans can be understood as being part of a *production chain*. Let us describe it, employing a minimum of "links".

As raw material we have a form of debt that is accompanied by certain guarantees. The greater the guarantees the greater can be the debt. The bank that issues the loan is required to hold some capital against the loan. Transferring the debt to a third party it can release the capital and start the whole process again. Its profit from the expansion of credit is the commission it receives from ceding credit to a third party. The third party can be another bank or a special purpose company[10] (SPV). Let us suppose that it is a special purpose company. It gathers together the loans in the form of securities describing a cash flow (instalments) with mortgages as collateral. With the assistance of mathematical financial models (the process of whose "production" comprises another link in the chain, which we propose to leave out of the analysis) it packages them as loans of the same kind from the viewpoint of the credit risk, of delays in payment, of inability to repay and other attendant features, and it issues new securities grouped into different categories in terms of profitability and credit risk (an incomplete description of collaterized debt obligations - CDOs). For someone e.g. an insurance fund, to be able to purchase securities, he must have a guarantee of the financial "quality" of the securities. *What is thus required is independent evaluation of the securities*. To what extent they can be profitable, that is

[10] Here we include for purposes of simplicity all the forms of SPV: SIV (structured investment vehicle) and above all banking hedge funds.

to say can represent risk-free investments with a "suitable" return, is certified by *credit rating agencies (CRA).* Certification is important for managers of various entities that are obliged by company regulations only to make risk-free investments (insurance funds, mutual funds) but also for the managers of all companies and other organizations insofar as evaluation of security affects the credit risk they undertake and so the amount of capital they are required to tie up to offset risk in relation to their anticipated profit. Moreover these credit rating agencies are also involved in the process of issuing securities as advisors on the securitization process on account of the specialized knowledge and the expertise they possess in evaluating credit risk and the "sound" costing of securities.

The next link in this process is the actor who is to purchase the various categories of security. Banks, for the most part, hedge funds, insurance funds. A common practice also is for the category of securities with the highest profitability – that is to say the one that incorporates the greatest risk of suspension of the cash flow and that will be the first to lose from increasing delay in payment of installments by the borrower – to be retained by the issuing bank. It is still, however, not the final link and the ultimate recipient. There are at least two more links that need to be taken into account. Firstly, every person or institution who purchases a security is entitled to take out insurance, so insurance companies are added as a link in the chain, either in the traditional manner or via the CDS (credit default swap) market.[11] Secondly, either the final holder of the security or the SPV is entitled to use the securities as collateral so as to finance his activity in the money market. That is to say, using as collateral securities she has in her possession she is able to take out short-term loans (which he is naturally able to recycle by securing yet other short-term loans). This market is an international market *par excellence* that has developed within the neoliberal model as an alternative to short-term borrowing from banks.

The relationship between banks, SPVs and the money market is the key point around which confidence in the banking system began to collapse. Specifically, when the first signs appeared that securities on housing loans could be facing unpredicted losses, the credit risk for various categories of the relevant securities began to rise. This generated a need for a restriction in the expansion of, and a change in the composition of, the portfolios being held by a number of different finance organizations. The SPV companies, that were dependent for their financing on the ABCP (asset-backed commercial paper) market (that is to say a money market in which short-term loans are issued on the basis of securities), were not able to find disposable resources. This situation was further aggravated by the downgrading of the credit rating agencies examining the creditworthiness of CDO (collateralized debt obligation) securities, which supported the financing of SPVs. The securities in their possession were not easy to sell and in conditions of unpredicted losses any attempt to sell them would reduce their estimated value, thus multiplying the problems for all the financial organizations holding such securities. As result, this inability to secure finance led many SPVs to seek funding through credit lines they had to the "mother"

[11] That is to say the market for contracts by means of which the first party pays the second an insurance premium and the second undertakes to cover losses arising from some more or less formalized events that might have an effect on cash flow or the value of a security in the possession of the first party (for example cessation of servicing of the security's cash flow on the part of the issuer of the security, or premature paying-off of the debt which has the effect of reducing the overall cash flow), in both cases events that have become increasingly prevalent in recent years.

banks as well as to the utilization of other guarantees that had been agreed upon. All of this happened at a time when the international banks were themselves confronted with a need for larger amounts of capital and limitation of risk. At the same time it was through these actions that there was exposure of a – for the most part unknown – network of informal agreements between the big banks and "affiliated" SPV companies. Insofar as the other players in the financial and credit system did not know what agreements were current between each bank and the SPV companies, there was a more general suspension of confidence, given indeed that the securities being managed by the SPV companies usually involved many times the amount of capital in the "mother" banks.

This situation has led to an increase in interest rates on interbank loans, an increase in demands for collateral, collapse of the CDO securities market and a serious deterioration in the credibility other securities on housing debt, contraction of the possibility of financing through the ABCP market, an increase in risk insurance for all categories of debt and extensive liquidity problems for the big banks – the hub of the international finance system. It has also led many SPV companies to the verge of bankruptcy, forcing the mother banks, in the interest of protecting their own credit-rating, to take back the securities being managed by the SPVs and liquidating them.

There is one point to be remembered here. The relationship between SPVs, i.e. banks, and the money markets shows that the banking and the extra-banking modes of financing are not necessarily antagonistic in their relations with each other. It is just that neoliberal financial arrangements, instead of bringing – as promised – lenders and borrowers into direct contact by abolishing the intermediaries (i.e. the banks), created new kinds of intermediaries, with a more complicated, non-transparent (insofar as the relevant information is personal) and fragile relational structure. For example the old problem of the relationship between long-term lending and short-term depositing, which banks dealt with internally, has now turned up as an *external* problem between different players on the market: Long-term and illiquid placements on the one hand (the SPVs) and extremely powerful incentives for other players to move freely *en masse* towards whatever, on each occasion, they perceive to be low-risk securities. This is what explains the paradox of having an "excessively bloated" credit system and at the same time minimal liquidity when it is required, given that its functioning is based on securities that are not easily convertible.

The upholding of the liquidity of the system largely by units chasing secure profits which accordingly when they are in doubt reduce the liquidity of the system is not the cause of the crisis but a symptom of the contradictions that activate the neoliberal model. This type of behaviour is a permanent characteristic of the capitalist financing relationship – one must be persuaded that the fiscal plan is worthwhile. Beyond that, the immediate suspension of confidence is employed by the neoliberal regulatory model as a way of disciplining the markets and facilitating profitable business plans and ultimately the composition of the international money markets in which the "cavaliers" of risk-free profit are a constituent element of the model and indeed embody the objective of the model.

5. Interpretations of the crisis

The reasons for the current crisis can be traced to the contradictory requirements that the neoliberal model for regulating the capitalist economy and its expanded reproduction is called upon to serve. This amounts to saying that it is a *systemic crisis* in the sense that it has been produced by, and has afflicted, the core of the neoliberal model. We can ascertain this by making a critical survey of the other interpretations of the crisis.

There are interpretations of the crisis that situate it at each of, or all of, the points in the chain of securitization described above. Before we examine this in detail let us point out that what predominates is a seeking out of causality as synonymous with responsibility: “It is their fault”. But the attribution of responsibility to subjects or to extraneous factors is likely to hinder comprehension of the crisis as a crisis engendered by the model of economic regulation itself.

5.1 Subprime loans as cause of the crisis

The commonest approach focuses on the issuing of subprime loans. These are loans that are generally made available to borrowers who do not fulfil some formal requirements for taking out a conventional loan.[12]

These are loans made available to the poorer layers of society and to minorities, which therefore from the viewpoint of the credit system (which bears the greatest credit risk) they also require higher interest rates to counterbalance the risk. But they are also made to borrowers from other income strata who are deeply in debt, as well as those who use this form of borrowing for buying and selling houses. Finally, they represent an opportunity for borrowing for the purpose of rescheduling loans. There are other categories of loans with similar characteristics.

It seems tautological, given that the crisis began with securities on subprime loans, to consider that the issuing of this type of loan is responsible for the emergence of the crisis. Even if we assume that this line or reasoning is correct, it cannot explain why such a crisis did not emerge between 1998 and 2001, when once more there was an increase in delays in paying instalments and so similar problems with the securities issued on the basis of them.

The reasoning is nevertheless fallacious. Not because it is not true, *but because it obscures the factors that operated in such a way as to nurture the crisis and then trigger it*. Why were subprime loans issued? And why were there borrowers who took them out?

The latter question seems to be easier to answer. Firstly, home ownership and the availability of cheap loans to make it possible was a significant factor in the securing consent to the neoliberal programme not only in the USA but also in other developed countries. In the course of development of the conditions for crisis, in 2002 the US president announced the (neo-conservative-oriented) *Homeownership Challenge*, according to which the possession of one’s own home was at the heart of the American dream. He then took steps to implement the programme, whose aim was to increase the proportion of homeowners, particularly among minorities (Afro-Americans and Hispanics – those categories of the population among whom four years later one could observe the highest levels of inability to pay off loans and the

[12] One example of such disqualifiers is a bad credit rating, that is to say delays of more than 90 days in paying instalments. Other examples include having an income insufficient to justify the taking out of a loan of such high value, or being employed in a job which does not guarantee a regular flow of payments, or lacking suitable documents that could justify the size of the loan in relation to the client’s declared income, etc.

highest levels of home foreclosures), that is to say to groups mostly excluded from the traditional credit system. To carry out this programme, which "could be implemented only by the state", many organizations responded, offering new types of housing loan so as to increase the options available to borrowers (evidently including the various categories of subprime, which took off spectacularly after 2002). Secondly, through the availability of loans, tax breaks and credit facilities (made possible by the existence of the home as an asset), *the significance of the house itself changes*: It is converted (also) – even when seen as a "roof over one's head" – into a basis for bolstering one's income and as a entry ticket to the facilities provided by the credit system.

Thus, in a context of stagnating real wages and withdrawal of the state from a whole range of social services formerly provided "free of charge", the potential for increasing one's disposable income offered by entry into the credit system (particularly if the mortgage each year increases in value with the increase in land prices) is an important element not only of individual strategies but also of relief from the pressures being exerted by the system. There are other points that could be cited (for example the fact that, depending on the location of the house, one might have access to "more reputable" schools than those in the area of one's current residence), what has been said is nevertheless enough to show that the development of the subprime market was set in motion by profounder elements in the neoliberal model and that today's crisis marks the limits of incorporation of social needs through the neo-liberal model. In other words the management of aggregate demand via borrowing and expansion of credit as a means of counteracting constraints on wages is not an effective management mechanism.

As for the first part of the hypothesis, that the issuing of subprimes is simply part of the speculative activity of the bankers who issued them, it is worth stressing that to understand the deeper significance of financial crises it is not useful to make very general references to "speculation" in the sphere of finance. *All business activity is "speculative"*. Every investment of capital aims at securing the highest possible level of profit. The choice of one or the other sphere of economic activity is simply the *means* for achieving the goal. Capital is continually migrating from one sector of business activity to another. It increases or reduces its involvement in the financial sphere. It chooses between production of one commodity or another, its only criterion being to serve the objective of higher profit. References to speculation or profiteering thus offer little to aid comprehension of the specific mechanisms out of which each concrete financial crisis emerges.

Speculation as the reason for the issuing of the subprimes is linked to another more highly elaborated explanation for the appearance of the crisis: the *originate and distribute* (O&D) model for the functioning of banks that has become predominant as banking practice, enabling banks to acquire sections of the market and profitability after the consolidation of the neoliberal model. This is another way of saying the securitization process.

5.2 The securitization process or the O&D model as cause of the crisis

The issuing of subprimes is a product of the capacity for securitization possessed by the banks that issued them. Given that they simply originated the loan and distributed the risk by selling the securities to others while retaining a commission for that service (O&D: an operational model for banks), they did not have sufficient incentive to examine the quality of the credit underlying the loan they had issued, as they would have had if they had kept the loan on their own balance sheet without being able to transfer it. Because their profitability depended on the volume of securities they issued, they indeed had every incentive to extend credit without too closely examining the risks.

First of all, not all subprime loans are securitized. Securitization covered 28% in 1995 but this figure from 1998 onwards began to fall, only recovering from 2001 onward. In 2001 50% of the value of the subprime loans issued were securitized. This percentage gradually rose to 60% in 2003 and between 75% and 80% from 2004 to 2006. But this is not the important figure when attempting to assess the validity of the above argument.

The relaxation of the regulations and conditions for the issuing of credit, with easy acceptance of guarantees in periods of rapid growth of credit in a context of cyclical economic upturn is a general phenomenon and not something innovatory. In the specific case we are examining, in a context of record low interest rates, low inflation and stable growth in the developed economies, it appears as a natural consequence of the conditions of functioning of credit in a capitalist economy. Note that the relaxing of requirements for issuing of credit, above and beyond questions of incentive, does not involve only the initial issuers of the loans, the banks that securitize the loans, but also involves security holders, as may be seen from the observed general squeeze on the differences between all types of return from interest rates on risk-free securities (a clampdown on credit spreads) *to the pursuit of "normal" profitability of capital*.

One line of explanation for the credit crisis which considers securitization of loans the *cause* of the crisis, that is to say the transfer of risk outside the portfolio of the lender, because if provides him with incentives to downgrade the quality of loan issuing, has as its *necessary* supplement a second *cause*, which is faulty assessment of the credit risk by the credit rating agencies. Because otherwise one cannot explain why securities were bought which corresponded to low quality loans (unless one evoke the ignorance of "naïve" investors).

Nevertheless, persisting in the logic of "mistakes", that is to say including the "second cause" one is not enabled to explain how many holders of capital (most of them banks with research departments and immediate access to a plethora of data) internationally made a "mistake" in their purchase of securities. It suffices to take into account the common knowledge that higher yields means higher risk insurance and the fact that a certain exchange of written communications between analysts in the international organizations and the central banks has been in public circulation since 2004 at the latest, which made it clear that the methods of price calculation and credit evaluation of CDO departments are "unsound", because they do not take into account a variety of factors.

Here we have to do with the intermingling of practices that are always socially over-determined (and it is on such relations that the elaboration of the specific *mechanisms* is based) such as those of the rating agencies, the lending and securitization mechanisms, etc. No manager of capital can easily say: "I know that the CDOs are high-risk and not easily sold and for that reason I inform you that this year you will be content with 3% profit. Don't look at others who are earning 9% profit because your money is at risk". In 2001 he would have received the answer:

“introduce suitable differentiation into your portfolio, take security measures or risk insurance and throw in some money and we’ll see”. In 2005 they would have told him he was a fool because others have earned a lot of money by retaining a larger proportion of their portfolio in CDOs. Faced with the demand for guaranteed securities and high profits, in the climate that prevailed after 2001, we can imagine the answer of the bank directors when they find out that they can make money from issuing securities and expanding borrowing, and by falling in with the responses of the remaining parties in the securitization chain.

But the pursuit of (risk-free) profit on a global scale has never been the privilege of a few. It is the outcome of arrangements (abolition of restrictions) imposed by (and making possible the elaboration of) the neoliberal model and also comprising a prerequisite for it. One consequence of neoliberalism is that a borrower who has lost his house because of a sudden increase in installment payments owing to expiry of the period of grace and insufficiency of his income may simultaneously be a participant in the mutual fund that financed the mortgage-based securities and sought the issuance of the subprimes on account of the greater profitability, as well as being holder of a truncated portion of his pension on account of the fall in value of the securities in which his insurance fund was investing. His life is thus divided up in the same way as the portfolio whose fate is determined by the good and bad moments for the markets.

Before moving on to the composition of the various factors that have nurtured, and then triggered, the crisis we propose to examine one final point, which is also projected as one of the underlying reasons for it.

5.3 The bubble in housing prices and low interest rates

In the United States a sharp rise in house prices is to be observed between 2000 and 2006, with some areas showing a greater rise than others. For example in Los Angeles and Miami a price rise of more than 160% is to be noted in a period of six years, while in Detroit the corresponding figure is 10%. On the basis of this increase in prices, construction activity starts to grow after 2002, leading to a record high level of supply of apartments in 2006 and probably playing an important role in the falling off in the increase in price rises in 2006, which in turn had an effect on the servicing of debt. Because above and beyond the fact that this period saw the expiry of the period of grace on a great proportion of loan contracts or low-repayment-rate subprimes that had been taken out previously, we have at the same time a hike in interest rates with concomitant difficulties in servicing debts, and simultaneous incapacitation of the chain of loans for buying a house, which you could later reschedule on more favourable terms because its value would have risen. Nevertheless the average increase is considerably smaller, in fact many times smaller, than what was observed in other countries. The reasons for the increase in prices are not traceable only to expansion of credit. They should also be sought out in what was said earlier about the importance of owning one’s own home and also in the fact that following the dot.com meltdown the purchase of a house seemed like the next risk-free refuge for investments. Another important factor was of course the record-low interest rates after 2001 and the squeeze on various high-risk premiums.

There is nevertheless a big difference between recognizing the importance of the factor of low interest rates and regarding it as *the* reason for the increase in house prices. Much moreso when it takes the form of a proposal that the FED should increase interest rates so as to bring a halt to the bubble in the housing market. For a start, after 2004 when the FED increased interest rates, a doubling in the proportion of subprime loans can be observed (from 335 billion in 2003 to 540 billion in 2004 and 60 billion in 2006). In general after 2004 and the gradual increase in interest rates, the categories of loans being made available included non-conventional variable-interest-rate loans, that is to say the loans through the medium of which the crisis made its appearance. Even worse, the monetaristic-leaning proposal claiming for an increase in interest rates large enough to be capable of curbing the rise in house prices (that is to say quite a significant rise), it amounted indeed to a proposal that the economy should be led into a recession in 2001 so as to avoid the recession of 2008.

6. The cavaliers of risk-free profit and lives of precarious subjection

References to a general characteristic (speculation) or to the imperfections of the mechanism of functioning of the financial system (O&D, faulty assessment, non-correspondence of interests, information imbalance between the parties to a contract, etc.) sheds little light on the two ends of the chain in the crisis process. *The ends of the chain are the most important because they show up the contradictions in the neo-liberal model that have nurtured, and then triggered, the crisis*.

The rise in house prices, the issuing of subprimes, securitization, evaluation of securities, the relationship between SPVs and the money markets… none of these are causes. They are forms of appearance and vehicles for unfolding of the elements and relationships that comprise the neoliberal model, that is to say the particular form of organization of capitalist social formations after 1980.

Having in the previous sections described the basic elements and the relationships that make up the core of the neoliberal model for arranging the financial system we will confine ourselves here to drawing certain summary conclusions.

1) The squeeze on salaries and flexibilization of work relations, that is to say reduction in the bargaining power of workers against capital, are a success story of neoliberalism but *at the same time* represent one of the conditions for the nurturing and triggering of the crisis. The basic element in the equation is an accumulation of contradictory demands from the financial system. The international order of the "knights of risk-free profit" performs a crucial function for the capitalist mode of production, one that is an inseparable core element of the neoliberal model. But the effects of its action (increasing inequality in income distribution, with reduction in the share accruing to wages, and new types of commodification of human needs) pose problems for management of aggregate demand in the interests of smooth functioning of expanded reproduction and accumulation, as well as problems in organizing consent to the model, insofar as restrictions are placed on the capacity for managing the inequalities that are generated through extension of credit to groups that were previously excluded from it. *In other words the conditions for increase in class domination of capital appear simultaneously as conditions undermining that domination*.
2) The process of the money markets' acquiring "depth", that is to say the process of incorporation into the "International of Capital" of every possible available sum of money that can be deposited in the various separate spheres

of the financial system is also a crucial element for the international dimension of the financial system as well as for mobilizing the entirety of the capitalist mode of production for the purpose of increasing profitability and accumulation. Thus, for example, it is regarded as a condition for the financial sphere acquiring "depth" that insurance systems be privatized or in any case that flexible criteria for management be developed to enable participation in the international financial system. It represents success for the model that it enriches the markets with numerous players and mobilizes every sum of capital that cannot be directly invested in the production process so that it participates in the "club" of demands on future profit. Without the broader non-bank financing there would be no securing of the mobility of capital and the broader funding potentialities. Without this depth, credit could be destabilized by the failure of a single player. At the same time, however, this "depth" means ever great pressures for risk-free profit, for issuing of securities, in other words for intense competition, so that unexplored markets can be subordinated to the world of credit, with consequent downplaying of risk and massive withdrawal from participation and funding when secure profit is jeopardized.

Let it be noted here that competition between capitals in showing high profit levels, competition which is significantly enlarged and accelerated by the international organization of finance, as we have seen, means that banks have to extract profits from exploitation of housing loans and from the securities that they issue. This situation coexists with the withdrawal of the state from provision of housing, which now becomes a profit-making activity. This situation in itself means that under the pressure of producing securities and through competition between companies *subprimes will be produced and risks will be downplayed*. The conditions emerge, that is to say, for a crisis to be generated.

3) In parallel with depth goes the international character, a constitutive element of the model and its success, insofar as the economic world in its entirety is transformed into a "profit chart". The international character together with depth and custodianship of risk management techniques and tools (such as CDS) for ensuring security against risk, ensure greater spread of risk. *A little risk for many and so no great risk for any one party and none for the system as a whole*. But these same elements, depth and the international character, in combination with the demand for security of profit functioned, when the first doubts appeared in relation to the housing credit securities not as factors for spreading risk but for planetary proliferation of risk. Each individual faces an unknown risk, so let him wait for the storm to blow over so as not to communicate to me also her own risk which is thus the manifestation of a global systemic danger. It is finally worth noting that the "wisdom of the markets", an important element in constructing the core of the neoliberal model, prescribes market evaluation of property (market-to-market value). It is this that has caused the lack of trust between the players because the fall in value of the securities has spoilt the balance-sheets of the institutions maintaining them and protracted the uncertainty. The solution adopted is a familiar one. But the result is that it has become possible for a number of elements not to be factored into the overall assessment.

4) Before proceeding with characterization of the crisis we should note one important point. All these elements of previous crises over the last two decades have functioned through different combinations of factors and to differing extents. Nevertheless, because they did not strike at the heart of the model, it was possible for those seeking to implement it to resort to a dismissive device: the basic idea is sound. It is just a question of applying its principles with greater consistency or at any rate taking measures that don't involve allowing the emerging problems to draw into question the central conception. Today this is no longer possible. The heart of the system has taken a hit and the metaphysical/ideological concessions that continue to legitimate it are treated as such by broader circles.

7. On characterization of the crisis: From financial crisis to crisis of overaccumulation

The above arguments make it possible for us to characterize the crisis. *It is a crisis that has appeared in the financial sphere and is systemic*. Systemic in the sense that it has been engendered by the elements and the relations that are at the core of the neoliberal model. It is systemic also because it has struck at important nodal points of the system and through them at the terms of operation of the "International of Capital". It is systemic also because it has hit the most powerful organizational centre of the model. The markets and the financial institutions of the United States, which were the key control points for the overall system of organizing markets, intervening in them and promoting financial innovations and financial tools. If we take it into account that Britain, the world's second financial centre, has also been affected (and very powerfully), we obtain some picture of how the system has been centrally affected. It is also systemic in that the capacity of the collective capitalist to guarantee the functioning of this arrangement has been incapacitated.

It is not necessary to start again from the beginning, that is to say from housing policy and its financing in the USA. If, at the moment that the crisis has affected an important nodal point of the system measures were taken that approached the problem as a crisis of capital and not just of liquidity, that is to say, in other words, if there had been the Brown plan before the Paulson plan had been formulated (making the latter superfluous) it is quite probable that this crisis would not have assumed the dimensions that it has. There would unavoidably have been a credit squeeze, but quite likely not to the extent, and at the speed, that we have now seen. *In other words the implementation in the collective capitalist's organization and policies of management of the neoliberal model (e.g. Paulson's policies of defending "self-correction by the markets") up to the "very last minute", played a role in accelerating and spreading the crisis*.

The danger of systemic collapse of the credit system has been minimized by comparison with the situation of several months ago (the days after the collapse of Lehman, in September 2008). Nevertheless, this does not mean that there will not be significant damage to other banks, insurance companies or other private capitals even outside the sphere of the financial system. That is to say, the crisis is still unfolding but it is now taking on the characteristics of a crisis of overaccumulation, which, starting from a ruthless squeeze on the financial sector also drags in other sectors and introduces the economic system as a whole to the operations of liquidation of inadequately utilized capital (obviously at an unequal rate in the different countries and with an intermeshing of the developments in each country both with the developments in other countries and with the financial system).

The interconnectedness of events is thus the reverse of what is often maintained (e.g. Brenner 2008). What is involved is not a continuing crisis of overaccumulation dating from the 1970s, which has fed superfluous capital into the sphere of finance, in this way leading to speculation, the "bubble" and the crisis. The preceding crisis of overaccumulation of capital had already been blunted with the contribution of the neoliberal settlement (in which a decisive nodal point was the functioning of the financial sphere). There had been a return of profits to levels approaching those of the early seventies, production had been restructured, labour made more flexible, wage levels frozen. The share accruing to wages was continually contracting. But the blocking of the sphere of finance and credit funding on which expanded reproduction of capital was based was necessarily translated as "involvement" of this expanded reproduction. It was initially expressed in overproduction of (unsold) goods, given that a credit squeeze implies restrictions on productive and individual consumption (perpetuated by credit). This in turn meant an abrupt fall in profitability and the necessity for cutbacks in production, that is to say lagging dynamism in the means of production, overaccumulation of productive capital, necessity for a new cycle of restructuring.

The latest decision framework, variations on the Brown proposal, for participation of the state in capital or nationalization of banks and other enterprises, is not an answer for the elements that nurtured and triggered the crisis. There has accordingly been a mobilization of the international bureaucracy via various institutions suitably inoculated against the "virus" of democracy, and it is now promising to discuss the crisis and take measures to prevent its recurrence.

This is only to be expected. A crisis at the heart of the system puts on the agenda the question of rearrangement and naturally "registration" of the international correlations of power. Systemic crisis does not necessarily spell destruction for the system. It means exposure of its contradictions. And the representatives of the collective capitalist perceive the situation more or less as follows (on the basis of the current dynamic of unfolding and proliferation of the crisis): that it is a disease that is not going to pass just with a pill but will require some kind of an operation that will enable the *same* organism to continue to function, albeit in a different way, for example without excessive speeding-up. But each attempt at regulation means a redistribution of power and most probably cancellation of functions. However from the new arrangements that are anticipated there will be no interference with the international character of the finance system, securitization, the deepening of the market, the squeeze on working people. *These are inviolable terms of each new set of arrangements, on the basis of today's strategy of capital. They are strategic options with no fall-back position*. Thus, as perceived by a plethora of organizations and shapers of policy, state intervention must be chronologically limited, must aim exclusively at the generally recognized problem and must leave no trace behind it when the time comes for it to withdraw (particularly traces that would hinder the "free" functioning of markets).

If, then, the core of the neoliberal dogma must remain intact, with mere readjustment of the relations and the pace of the functioning of its constituent elements or the regional machinery (with the overwhelming correlation of power in favour of capital simply taken as a given), the workforce will continue to be treated as the dependent variable, destined to absorb all the shocks, current and future.

Nevertheless, crisis at the heart of the system also entails breaches in the terms of its ideological hegemony. Citizens understand quite simply: if the state intervenes to save the banks why can it not do the same for the insurance funds, for the health system, for...

The traces left behind by the current conjuncture of the crisis do not however require any particular skill to detect. Firstly, discredit is brought to bear on a basic ideology that the state is "bad because it is incompetent" and the markets "good because they are both competent and effective". States are being called upon to act as guarantors of stability, in other words to implement interventionist policies. This is not something easily to be erased from the collective memory. Secondly, the crisis is having adverse effects on the capacity for generating consensus because of the effects it is having on the working population and "underdogs" generally. The limitations of demand management, not through strengthening of wages and the terms of employment but through encouraging excessive household indebtedness, have become evident to all. Both these phenomena strengthen the political forces that seek a different way of managing the capitalist system. From this viewpoint it should not pass unnoticed that P. Krugman (Nobel Prize 2008) in his book *The Conscience of a Liberal* is in effect calling for state intervention for the creation of trade unions in branches where there is an uninsured workforce, defending the idea of a public and universal health system, demands which make manifest the tension that has been accumulated on account of the polarization imposed by the class struggle. Thirdly there is a readjustment in the international correlation of power. A reform of the international financial system always harbours an inherent potential that there will be a rewriting of international rules and obligations, thus affording an opportunity for recording the correlations of power that have emerged.

The labour movements cannot comprise part of this new regulation, which is directed against their interests. On the other hand, the crisis for the first time in decades gives them the opportunity to intervene so as to change the correlations of power and impose solutions that secure their own interests in the face of those of capital. The point today is that social insurance is dependent on the profitability of the insurance funds, education on the privately funded "research programmes" and on student loans, work on the international evaluation of the profitability of the enterprise on the world's stock exchanges and financial markets, food on the smooth functioning of the futures markets, the operations of the municipalities on mutual funds and international securities markets, the environment on pollution rights, the covering of basic social needs on the level of credit card debt.

In present-day conditions the project of de-commodifying needs, that is to say the defense of social organization on the basis of freedom in satisfaction of needs and not the repressive calculus of valorization of capital... is urgent.

Selected Bibliography

Agarwal, Sumit, 2007. "Comparing the prime and subprime mortgage markets". *Essays on issues*, FRB of Chicago , August 2007, No. 241.

Amato Jeffery D and Craig H Furfine 2003. "Are credit ratings procyclical?", BIS Monetary and Economic Department, Working Papers, No 129.

Arestis, Philip and Malcolm Sawyer. 2006. *A Handbook of Alternative Monetary Economics*, Edward Elgar Cheltenham, UK • Northampton, MA, USA.

Ashcraft Adam B. and Til Schuermann, 2008. "Understanding the Securitization of Subprime Mortgage Credit". Federal Reserve Bank of New York, Staff Report no. 318, March 2008

Berger Allen N., Anil K. Kashyap, Joseph M. Scalise, Mark Gertler and Benjamin M. Friedman. 1995. "The Transformation of the U.S. Banking Industry: What a Long, Strange Trip It's Been". *Brookings Papers on Economic Activity*, Vol. 1995, No. 2, (1995), pp. 55-218.

Bliss, Robert R. and George G. Kaufman, 2002. "Bank Procyclicality, Credit Crunches, and Asymmetric Monetary Policy Effects: a Unifying Model", Federal Reserve Bank of Chicago, Working Papers WP-2002-18 http://www.chicagofed.org/economic_research_and_data/publication_display.cfm?Publication=6&year=2000%20AND%20200

Borio, Claudio, 2008, "The financial turmoil of 2007–?: a preliminary assessment and some policy considerations", BIS, Monetary and Economic Department, Working Papers No 251.

Borio, C, Furfine, C. and P.Lowe, 2001. "Procyclicality of the financial system and financial stability: issues and policy options", BIS Papers no. 1, March.

Brenner, R. 2008, "Devastating Crisis Unfolds", IV Online magazine: IV396 – January, http://www.internationalviewpoint.org/spip.php?article1417

Bryan, D. and Rafferty, M. 2006, *Capitalism with Derivatives. A Political Economy of Financial Derivatives, Capital and Class*, New York: Palgrave-Macmillan.

Catarineu-Rabell, Eva, Patricia Jackson and Dimitrios P Tsomocos, 2003. "Procyclicality and the new Basel Accord– banks' choice of loan rating system", Bank of England 2003, Working Paper no. 181, , http://www.bankofengland.co.uk/publications/workingpapers/index.htm

Duménil Gerard and Dominique Lévy, 2005a. "The nature and contradictions of neoliberalism". http://www.jourdan.ens.fr/levy/

Duménil Gerard and Dominique Lévy, 2005b. "Costs and benefits of neoliberalism. a class analysis". http://www.jourdan.ens.fr/levy/

Dymski Gary A., 2007. "From Financial Exploitation to Global Banking Instability: Two Overlooked Roots of the Subprime Crisis". SOAS Conference, "A Crisis of Financialisation?", 2008.05.30, http://www.soas.ac.uk/events/event43769

Feldstein, Martin S., 2007. "Housing, Credit Markets and the Business Cycle". NBER Working Paper 13471. http://www.nber.org/papers/w13471

Fender, Ingo and John Kiff, 2004. "CDO rating methodology: Some thoughts on model risk and its implications". BIS Working Papers, No 163, http://www.bis.org/publ/work163.htm

Goodhart, Charles .A.E., 2008. "The background to the 2007 financial crisis". International Economics and Economic Policy vol. 4, no.4 pp.33-346.

Greenlaw, David, Jan Hatzius, Anil K Kashyap and Hyun Song Shin, 2008. "Leveraged Losses: Lessons from the Mortgage Market Meltdown", US Monetary Policy Forum Conference, New York, 29 February 2008, http://research.chicagogsb.edu/igm/events/conferences/2008-usmonetaryforum.aspx

Greenspan, Alan and James Kennedy 2007. "Sources and Uses of Equity Extracted from Homes". Federal Reserve Board, Finance and Economics Discussion Series, Staff working papers, 2007-20, www.federalreserve.gov/pubs/feds/2007/200720/200720pap.pdf

Greenspan, Alan, 2002. *Cyclicality and Banking Regulation. Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago, Chicago, Illinois., http://www.federalreserve.gov/newsevents/speech/2002speech.htm

Jobst, Norbert and Arnaud de Servigny, 2007. *The Handbook of Structured Finance.* McGraw-Hill, New York (chapter 12, 13).
Kregel, Jan, 2007. "The Natural Instability of Financial Markets". Working Paper No. 523, Levy Economics Institute of Bard College, http://www.levy.org/
Kregel, Jan, 2008a. "Minsky's Cushions of Safety. Systemic Risk and the Crisis in the U.S. Subprime Mortgage Market". Public Policy Brief, No.93, Levy Economics Institute of Bard College, http://www.levy.org/
Kregel, Jan, 2008b. "Changes in the U.S. Financial System and the Subprime Crisis". Working Paper No. 530, Levy Economics Institute of Bard College, http://www.levy.org/
Krugman, Paul. 2007. *The Conscience of a Liberal.* New York: W.W. Norton & Company, Inc.
Kuttner, Robert. 2007. "The Alarming Parallels between 1929 and 2007". *The American Prospect*, October 2.
Marx, K. 1990. *Capital, Volume one*, Penguin Classics, London
Marx, K. 1991. *Capital, Volume three*, Penguin Classics, London.
Marx-Internet 1872. *Capital, Volume one*, http://csf.colorado.edu/mirrors/marxists.org/ archive /marx/ works/
Marx-Internet 1894. *Capital, Volume three*, http://csf.colorado.edu/mirrors/marxists.org/ archive/marx/works/
MEW (Karl Marx/Friedrich Engels – Werke), Band 23. 1968. *Das Kapital*, Bd. I, Berlin: Dietz Verlag.
MEW (Karl Marx/Friedrich Engels – Werke), Band 25. 1983. *Das Kapital*, Bd. III, Berlin: Dietz Verlag.
Milios, J., Dimoulis D. and Economakis, G. 2002. *Karl Marx and the Classics. An Essay on Value, Crises and the Capitalist Mode of Production*. Aldershot, London: Ashgate.
Palley, Thomas I. ,2007, "Financialization: What It Is and Why It Matters". Working Paper No. 525, Levy Economics Institute of Bard College, http://www.levy.org/
Ruckes, Martin, 2004. "Bank Competition and Credit Standards". *The Review of Financial Studies*, Vol. 17, No. 4, (Winter, 2004), pp. 1073-1102.
Shiller, Robert J., 2007, "Understanding recent trends in house prices and Home Ownership", Kansas City FED, Jackson Hole Symposium 2007.
Wojnilower, Albert M., 1962. "Changes in the Quality of Business Loans of Commercial Banks", *The Journal of Finance*, Vol. 17, No. 4, (Dec., 1962), pp. 667-668.
Wojnilower, Albert M., Benjamin M. Friedman, Franco Modigliani, 1980. "The Central Role of Credit Crunches in Recent Financial History", Brookings Papers on Economic Activity, Vol. 1980, No. 2, pp. 277-339.
Wray, L. R., 2007. "Lessons from the Subprime Meltdown", The Levy Economics Institute, Working Paper No. 522, www.levy.org.
Wray, Randall L. 2008. "Financial Markets Meltdown. What Can We Learn from Minsky?" Public Policy Brief, No. 94, Levy Economics Institute of Bard College, http://www.levy.org/