

## The crises in the financial regulation of the finance-led capitalism: a minskyan analysis

**Ana Rosa Ribeiro de Mendonça**

Institute of Economics/ University of Campinas - UNICAMP

**Simone Deos**

Institute of Economics/ University of Campinas - UNICAMP

**Resumo:** Os mercados financeiros, por sua natureza e pela extensão dos problemas gerados quando ocorrem crises financeiras, são submetidos a aparatos de regulação mais desenvolvidos e complexos, relativamente a outros setores da economia. O regime de regulação bancária ora vigente é centrado na idéia de requerimentos de capital para os bancos relativamente ao risco mensurado de seus ativos, mensuração esta que é feita, crescentemente, de acordo com a “leitura de mercado”. Por isso pode ser chamada de auto-regulação supervisionada. Nossa hipótese é que esse marco regulatório não é adequado para economias capitalistas com sistemas financeiros extremamente desenvolvidos - para um regime de acumulação *finance-led* -, o que a atual crise parece ter evidenciado. Faremos essa discussão com base na visão de Minsky de que as economias capitalistas são inerentemente instáveis.

**Abstract:** Financial markets are submitted to more developed regulatory mechanisms than those found in other sectors of the economy, which can be explained by the nature of the financial transactions and, consequently, the very harmful consequences of financial crises for the whole economic system. The current banking regulation regime is based on risk sensitive capital requirements and on market-based risk measurement and management, and could be called a supervised auto regulation. Our hypothesis is that this regulatory framework is not adequate for capitalist economies with highly developed financial systems and, not to say, to our specific accumulation regime: finance-led. The strength of the current crisis makes room for this hypothesis. In light of the current crises, the purpose of this paper is to present a discussion of the financial - especially banking - regulation from a minskyan perspective

**Àrea:** Instabilidade financeira e recessão.

## 1. Introduction

Financial markets are submitted to more developed regulatory mechanisms than those found in other sectors of the economy, which can be explained by the nature of the financial transactions. The specific nature and great importance of these transactions and, consequently, the very harmful consequences of financial crises for the whole economic system justify the more developed regulatory and supervisory regime to which the institutions in case are submitted, with the explicit purposes of ensuring the soundness and stability of the system.

The current banking regulation regime is based on risk-sensitive capital requirements and on market-based risk measurement and management, and could be called a supervised auto-regulation. Our hypothesis is that this regulatory framework is not adequate for capitalist economies with highly developed financial systems and, not to say, to our specific accumulation regime: finance-led<sup>1</sup> (Guttman 2008). The strength of the financial crisis that begun in 2007 and became systemic in 2008, with very hard consequences on the real side of the economy all over the world, makes room for this hypothesis. Otherwise, the supervised auto regulation comes out of this new regime and its logic of free-market regulation.

In light of the current crises, the purpose of this paper is to present a discussion of the financial - especially banking - regulation from a minskyan perspective. It is important to highlight that financial regulation is understood as a core part of the monetary regime<sup>2</sup>, which is considered by regulation theory as one of the main institutions of the capitalist economy. The crisis stimulates the discussion regarding the “deep logic foundations” of the current financial regulation framework. For doing so we have to step back in order to analyze how financial crises are generated. We will do that based on Minsky’s view, an author that postulates that the financial cycles and crises are endogenously generated. We understand that in very important points the minskyan approach is close to the regulation theory approach. According to Boyer (2004), one particular aspect of the regulation theory is to be able to analyze simultaneously the properties of a regulation mode and the endogenous factor that can destabilize it.

With this purpose we will present in this paper, in the next section, the central elements of contemporary banking regulation, and in the third section the current regulators’ response to the crises. In the fourth section we will present the major ideas of Minsky’s Financial Instability Hypothesis appropriately “adjusted” to the finance-led capitalism. In the concluding remarks we will discuss how far the rationale of the Basel Accords is from the minskyan point of view.

## 2. Banking Regulation and Basel Regulatory Regime

As already presented, financial markets are subjected to more developed means of regulation and supervision than other segments of the economy, which can be explained by the

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<sup>1</sup> Alternatively called patrimonial capitalism (Aglietta 1998 *apud* Guttman 2008), finance-led growth regime (Boyer 2000 *apud* Guttman 2008) or finance dominated accumulation regime (Stockhammer 2007 *apud* Guttman 2008). According to Epstein (2005), finance-led capitalism is defined by the increasing role of financial motives, financial markets, financial actors and financial institutions in the functioning of the domestic and international economies. This new accumulation regime is related to a very different financial system. One of the main features of this new financial system is to be centered on typical investment banking activities, like the underwriting of securities, instead of being based in traditional commercial banking activities (Belluzzo 2005, Guttman 2008, Kregel 2008a and 2008b).

<sup>2</sup> According to Boyer (2004) a monetary regime is defined by the group of rules that are used to manage the credit and payment system.

characteristics inherent to the nature of the transactions performed in these markets. Among such characteristics, it is possible to select a few that might explain the vulnerability of financial institutions, and banks above all, to crisis, as well as, in the context of a crisis, the possibility of contagion that can lead to systemic risk.

Banking institutions are, along with the Monetary Authority, participants of the monetary system, receivers and originators of cash deposits, fully liquid instruments. They operate leveraged, i.e., their liabilities are substantially larger than their capital and, in general, they are transformers of tenors – the tenors of liabilities operations are shorter than that of the assets. Besides, financial contracts are transactions that involve rights and obligations to be performed in the future and thus the value of contracts depends on the trust that they will be performed.

Banking institutions play a central role in the credit and payments systems, and trustworthiness is the crucial element for their operation, given the high level of leverage and the difference of tenors in the transactions. A break of trust in the agents in a certain institution might bring about, concerning its role in the system of payments, adverse movements of withdrawal of deposits by clients – not only in the institution in point, but also in other institutions, according to the logics of “first come first served” – which might generate problems in the relation assets/liabilities, even if these accounts are balanced.

It is thus important to underline that contagion movements might be generated even in sound institutions and then bring about systemic problems. And, in turn, problems of liquidity or solvency in the banking system might pass on to the entire system, or to part of it, given its importance in the operation of the payment system, as well as in credit transactions.

Such a situation appears even more serious upon consideration of the role and format of the institutions’ action in mediating resources. This is so because such action does not restrict itself to the relations with investors/savers and final borrowers, since they also act as lenders and borrowers on the interbank market, as well as agents of securities issuances that can result from the securitization of loans. To this must be added their role as leveraging agents and collateralizers of non-banking financial institutions’ positions, such as hedge funds and, more recently, structured investment vehicles (SIV).

All these characteristics justify the more developed regulatory and supervisory regime to which the institutions in case are subjected, with the explicit purpose of ensuring the health and soundness of the system and of protecting small investors. This regime might be thought of from two different points of view. On the one hand, it can be viewed as instruments and mechanisms that may be activated at times when the problems are already under way, as a means of softening their effects and of avoiding contagion, thus constituting a safety net – among such instruments, one could underline the activity of the monetary authority as a lender of last resort and the existence of deposit insurances. On the other hand, it can be seen as rules and regulations that constitute an regime of prudential regulation and supervision, which reinforce the system’s capability of avoiding or absorbing the above mentioned problems.

Prudential regulation implies the establishment of specific rules concerning the behavior of agents and, more recently, also regarding information disclosure, which must be accompanied by norms of monitoring and supervision. In general, such rules are preventive, i.e. they are thought of as means of aborting potential problems. For decades prudential regulation adopted in various countries attempted to minimize the possibility of problems arising through

mechanisms that restricted the action of institutions<sup>3</sup> and was fundamentally based on the regulation and control of balance sheets. The action of institutions was restricted and it was controlled by the imposition of limits regarding the structure of their assets and liabilities portfolios.

Among the issues dealt with by this sort of regulatory regime, one must underline the (lack of) liquidity of the institutions' assets as compared to their liabilities. In this manner, ensuring the deposits' liquidity, by means of imposing limits to the nature of assets and stimulating the build-up of reserves to meet potential withdrawals always appeared as the central elements of these regimes. Among the various instruments or mechanisms deployed by these regimes were: i) limits of indebtedness and leverage; ii) liquidity ratios<sup>4</sup>; iii) limits to the bank's exposure to single borrowers; iv) limits regarding the composition of assets and the line of activity that each institution could develop.<sup>5</sup>

However, major transformations in the financial markets during the seventies and eighties made useless an important part of this set of rules for control and restriction. And these transformations resulted from an important set of three interrelated, but nonetheless different, factors: financial innovations, deregulation and liberalization. Institutional innovations, created by agents that were active in the financial market, and an intense process of financial liberalization and of deregulation of the markets, resulted in the minimization or even neutralization of rules and norms that restrict the action of financial institutions in their constant never-ending search for profitability and, in some cases, liquidity. Regarding financial innovations, one should emphasize the following: i) the expansion and dissemination of derivative instruments; ii) the intensification of the process of securitization that contributed to banking disintermediation and to make the institutions' assets portfolio more flexible; iii) the strategies for diversifying income sources. This last point concerns the development of liabilities management processes, which resulted in the diminished importance of deposits as a liability instrument, which in turn rendered regulation by means of deposit-related ratios less effective.

Deregulation, on its turn, by softening or even eliminating barriers between banking and non-banking institutions, expanded the scope of action of financial institutions.<sup>6</sup> Liberalization of capital flows across borders allowed an improvement in the integration of different domestic markets as well as the creation of international ones.

A reorganization of the regulatory and supervisory regime began to take place as the perception of its inadequacy to the new situation grew. In spite of the fact that a few instruments and mechanisms were maintained, the central logics of prudential regulation came to lie on the risks of an institution's assets. It is founded upon the assumption that threat to financial institutions and, thus, to the system of payments would be related to risks assumed through a bank's transactions. The regulatory concern should thus no longer focus on a bank's liability profile and move to its assets.

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<sup>3</sup> A few systems, such as the North American, imposed geographical limits, limits regarding the line of products and limits concerning the association of banks with other types of companies, financial or not. The logic of segmentation prevailing in the North American regulatory structure was to avoid contagion movements between different markets.

<sup>4</sup> Imposition of quantitative parameters to evaluate the permitted operations, with a level of liquidity based on the availability of primary and secondary reserves.

<sup>5</sup> The last one especially when the financial system acquired a segmented aspect, i.e. when there are many specialized institutions.

<sup>6</sup> Banking institutions began to operate in other markets and with other instruments, which meant important changes in the composition of their assets' and liabilities' portfolios, and also different risks exposures.

The demand that banks should maintain a minimum capital coefficient is a crucial element of this new format of prudential regulation, and some authors present it as a process of financial re-regulation. By means of these elements, the regulatory authority imposes on banks the need to maintain a minimum ratio between its own capital and the assets on its portfolio.

The major argument put forward to justify the generalization of the capital index is the stimulus generated by using part of the bank's own capital, which would compensate for incentives for taking on excessive risk. Prudential regulation would thus stimulate the maintenance of more secure portfolios by means of minimum capital demands since in adverse situations not only savers, but also shareholders, would be affected by losses. Such point is central for the 1988 Basel Accord (Basel I).<sup>7</sup>

At the time of its creation and first modifications (1996 Amendment), Basel I was seen by regulators and supervisors as a major step forward on the format of regulatory framework, based on capital risk sensitivity. However, some weakness of the simple risk-bucking approach of Basel I came to the fore. It was seen as not suited to deal with the rapid and extensive evolution in market such as repurchase agreements, securities borrowing and lending, margin loans and over-the counter derivatives. The Accord also stimulated regulatory capital arbitrage (Kroszner, 2007a; Kroszner, 2007b).

In mid-2004, the Basel Committee of Banking Supervision (BCBS) made Basel II public and it is currently being adapted and implemented in many countries. The central idea has been kept, i.e. the need to maintain minimum ratios between risk-weighted assets and the capital, as also the fundamental objective of "...to develop a framework that would further strengthen the soundness and stability of the international banking system while maintaining sufficient consistency that capital regulation will not be a significant source of competitive inequality among internationally active banks." (BCBS, 2004). However, the new structure is much more complex than the former one. It aims at making progress in the process of risk measurement by integrating into the regulatory framework the alleged most accurate methods of risk measurement developed by the market's institutions themselves. Furthermore, it introduces the treatment of operational risk, alongside credit and market risks, which were already present in Basel I. The focus of regulation and supervision would apparently become more and more centered on the quality of risk management and on the adequacy of its measurement. The expected results were sounder and more stable international banking system, based not only on a more risk-sensitive system, but also on a private-sector understanding of risk, given that Basel II integrates into regulation the market praxis.

From our point of view, however, the relevant question is if this regulatory regime, which is based on risk sensitive capital requirements and on market-based risk measurement and management, is adequate for capitalist economies with extremely developed financial systems. In order to address this point we will lie on Minsky's perception that contemporary capitalist economies are inherently fragile from the point of view of the financial structures they generate. It is based on this assessment that we intend to make a criticism of the current model of banking regulation. Before that, however, we will present in the next section the current regulators response to the observed fragilities of the regulatory regime.

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<sup>7</sup> The originally idealized space for the Basel Accord was the internationally active banks from the G-10. However, Basel's rules were adopted in more than 100 countries.

### 3. The current regulators response

At the beginning of 2008, even before financial systems have entered a new and deeper round of the crisis, BCBS announced the necessity to strengthen Basel regime through the enhancement of several of its aspects and the prompt implementation of the Basel II, as these were understood as fundamental steps to enhance the resilience of the banking system. According to the BCBS chairman, "...the key building blocks to core bank resiliency are strong capital cushions, robust liquidity buffers, strong risk management and supervision, and better market discipline through transparency." (Wellink, 2008b, p.1) The initial proposal brought forward was marked by the following issues: i) enhancing the capital treatment of complex instruments and credit exposures held in the trading book; ii) strengthening global sound practice standards for liquidity risk management and supervision; iii) strengthen banks' risk management practices and supervision<sup>8</sup>; and iv) enhancing market discipline through better disclosure and valuation practices. In other words, according to BCBS it would be necessary to strengthen capital and liquidity buffers, enhance risk management and market transparency and also enforce the logic of sound risk management.

After a period of discussion and the worsening of the turmoil observed in the third quarter of 2008, the BCBS had a more straight evaluation of the crises and also a better sense of the direction of the possible and necessary changes. According to the Committee,<sup>9</sup> the turmoil revealed significant weaknesses in risk management at banking institutions. As in almost all financial crises, extremely high leverage and risk concentration played a fundamental role. The evaluation was that, in some cases, the risk concentration resulted from poor risk management. The Committee also concluded that the model "originate and distribute" may have implied that banking institutions were not entirely aware of large risk exposures and concentrations. According to BCBS, one of the main lessons from this turmoil for regulators and supervisors is that they should concentrate attention on the "big picture" and the longer-term horizon. In other words, they should not pay attention strictly on singular indicators - as excessive leverage, risk concentration and maturity mismatches, on and off-balance exposures- but on the combination of all these forces, which have been proved to be extremely troubled.

This perception may explain the direction of the proposal of changes on regulatory regime presented by BCBS in November 2008 (BCBS, 2008b). They pointed again to the necessity to strengthen the already established logic of capital buffers sensitive to risks, risk management and better governance, through a broader capture of risks. But some new and supplementary elements were added, as the necessity of measures to contain excessive leverage and to stimulate banks to strengthen their liquidity buffers.<sup>10</sup> Regarding to liquidity, it is also expected by the BCBS that more solid capital buffers will mitigate banks exposures to liquidity risk,

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<sup>8</sup> Stress testing, off-balance sheet management and valuation practices, among others.

<sup>9</sup> The opinions of the Committee were presented on BCBS press release and member's speeches.

<sup>10</sup> They are: i) strengthening the risk capture of the Basel II framework, especially for trading book and off-balance sheet exposures; ii) building additional shock absorbers into the capital framework in order to dampen pro-cyclicality in periods of stress; iii) evaluating the need to supplement risk-based measures with simple gross measures of exposure in both prudential and risk management frameworks to help contain leverage in the banking system; iv) strengthening supervisory frameworks to assess funding liquidity, especially at cross-border banks; v) leveraging Basel II to strengthen risk management and governance practices at banks; vi) strengthening counterpart credit risk capital, risk management and disclosure at banks; and iv) promoting globally coordinated supervisory follow-up exercises to ensure implementation of supervisory and industry sound principles. (BCBS, 2008b, p. 1).

“While liquidity risk cannot be mitigated with capital, capital is itself a form of liquidity since, unlike other liabilities; it does not have to be repaid. Furthermore, a strong capital buffer enhances a bank’s creditworthiness and, from the market’s perspective, reduces its counterparty risk. This helps to ensure continued access to funding” (Wellink, 2008b)

One may notice that, even if there is no fundamental change of direction, the possible introduction of measures to contain leverage and to manage liquidity into Basel II framework is innovative. That is because Basel II logic is centered on assets portfolio, and liquidity risk is barely mentioned in the Basel II original document.

The announced necessity of prompt implementation of the Basel II regime can be better understood if we have in mind first the idea that, according to BCBS, this regulatory regime is suitable and efficient to ensure the financial systems soundness and stability and, second, if we are aware that Basel II is now been adopted by several banking systems, but with different implementation timing<sup>11</sup>.

According to Basel II regulatory regime supporters, differences on adoption and implementation schedule may have affected the designing of the current crisis. Although it is not clear how much difference Basel II would have made to the current crisis had it already been fully in force, the Committee presents some technical arguments. For instance, under Basel I banks are not required to keep capital to off-balance sheet vehicles exposures. Differently, Basel II requires capital to such exposures, which were fundamental to the creation of the current crises.<sup>12</sup>

The announcement of the intention to strengthen Basel II and to stimulate its prompt implementation is based on the analysis of central banks, represented by the BCBS. According to that, this regulatory regime, based on private-sector risk measurement and management through market prices, is appropriate and efficient in order to address financial markets fragilities and endorse a sound and stable financial banking system<sup>13</sup>. Thus, the recent crisis does not put at stake the core of the regulatory regime. What comes to the fore is only the necessity of improvements.

#### 4. Endogenous Financial Instability according to Minsky

In order to build its hypothesis regarding an economy that has a cyclical and unstable performance, Minsky typifies each economic unit by its portfolio. A distinctive feature of this portfolio is the introduction of a significant maintenance or carrying cost for all assets, understood as the payment commitment required for the liabilities that “carry” (i.e., funds) any asset. By introducing the liabilities in his theoretical structure, Minsky is laying the foundation for an endogenous theory of cycles and crises. In an economy where there is historical (instead of logical) time and the future is unknown, the uncertainty is pervasive,

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<sup>11</sup> In Europe, the adequacy to the Basel II regulatory regime has been under the responsibility of each of the national central bank or supervision agencies, and was marked by the adoption of the Capital Requirement Directives (CRD) in mid-2006 and its implementation at the beginning of 2007. The period for Basel II adoption in the United States of America (US) is quite different and longer, from April 2008 until April 2011. The adoption of Basel II in the US was delayed in regard to the results of one of BCBS Quantitative Study Impact (QIS4). The model of Basel II to be adopted in US is also quite different: the advanced approaches will be mandatory for some internationally active banks, and the other will be able to choose between Basel IA and a standardized approach.

<sup>12</sup> One could point out the current model “originate and distribute” was stimulated by Basel I regime, as within this framework risks were assumed as transferred, which implied less capital requirements.

<sup>13</sup> It is also important to highlight that, at least since the beginning of the discussion of this regulation framework, in 1999, a lot of resources, efforts and time have been spent.

characterizing the portfolios as speculative – only the future will validate, or not, the positions that were taken.

According to Minsky, when one agent is deciding to buy an asset – that is not any asset, but one that is long lasting and whose value is expressive – and other is deciding to finance this acquisition, both, borrower and lender are speculating regarding the future cash flow of the buyer – needless to say that the cash flow is the primary source for the debt fulfillment.<sup>14</sup> The agents are speculating also regarding the future of the asset prices that are now being financed and the future behavior of the financial market, because they may have to refinance their debts.

“When a financial contract is created, both the buyer (lender) and the seller (borrower) have scenarios in mind by which the seller acquires the cash needed to fulfill the terms of the contract. In a typical situation there is a primary and some secondary or fallback sources of cash. For example, in an ordinary home mortgage the primary source of cash needed to fulfill the contract is the income of the homeowner. The secondary or fallback source of cash is the market value of the mortgaged property.” (Minsky, 1982b, p.19-20)

According to Minsky, the economic units can have three different behaviors regarding the relation between expected income and financial commitments. A unit is hedge-financing when its income<sup>15</sup> is more than sufficient to cover all its financial commitments and in all periods in which they have to be met, with no mismatches in terms or in the amounts of assets and liabilities.

When financial commitments are larger than the expected income for certain periods, this unit is speculative-financing. Speculative structures are generated when the maturity of the asset exceeds that of the liability, requiring a refunding of the latter – and the agents are speculating regarding this possibility - as well as when the funding profile is such that implies variations in the value of the commitments.

In an extreme situation, when it becomes necessary to increase indebtedness in order to face already undertaken financial commitments, since the expected income is insufficient even to serve the debt, the economic unit is said to have a very speculative structure – that the author called Ponzi<sup>16</sup>. Borrower and lender are both speculating that it will be possible to refinance the debt in the future. They are also speculating – and this is a situation that applies only to certain kinds of assets – with the possibility of an appreciation in the asset price so that the income that can be made selling the asset will allow fulfillment of the debt.

In the case of being the asset, for example, a capital asset, the capitalist is expecting that the future cash flow generated by its acquisition will be higher than the total cost of acquisition – including financial costs. In the case of being the asset acquired by households – like real state – the *rationale* is slightly different because the asset does not generate a cash flow. So the point is that either the agents will have ordinary income – like wages – that will allow them to fulfill the commitments or they will be able to refinance the debt in the future or even will be able to sell the asset for a higher price. But in the context of a growing economy, these

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<sup>14</sup> “The primary source of cash for households is wages, for business firms it is gross profits, for government units it is taxes, and for financial institutions it is the cash flow from owned contracts.” (Minsky, 1982b, p.21-22)

<sup>15</sup> In the original formulation, the author used the notion of quasi-income. This concept of quasi-income, or gross income, lies close to a concept of expected gross profits after taxes, a profit needed to face the payment commitments on contracted financial debts and dividends.

<sup>16</sup> The expression *Ponzi finance* relates to the behavior of a speculator, Charles Ponzi, who became famous in the U.S. in the 1940’s for having set up a sort of “pyramid scheme”. These pyramids are based on the notion that by offering larger revenues to the depositors (members of the pyramid), one can obtain a significant amount of deposits and thus pursue an endless growth. It is evident that this kind of enterprise will only remain standing for as long as the deposits it receives grow at a faster rate than the income it is committed to pay.



expectations, more and more optimistic, those borrowers and lenders shares are rational because they have been fulfilled. According to Minsky: “The performance of our economy at any date is closely related to the current success of debtors in fulfilling their commitments and to current view of the ability of today’s borrowers to fulfill commitments.” (Minsky, 1982b, p.17)

It must be pointed that the decisions of the borrowers – non financial agents – of undertaken debt will only be effective if, on the other side, the lenders – financial agents – agree with. In fact, the financial agents themselves, looking for greater profits, will also undertake more risky decisions as much as the stability and prosperity goes on. So it is necessary to underline that in Minsky’s view, the decisions of buying assets, as well as the decisions to finance its acquisitions, become more speculative as stability and prosperity unfolds and are, in a very deep sense, economically rational. Kregel (2008b) points to that:

“An endogenous evolutionary process leading to a reduction in the safety margins must be based on something more than euphoria or excessively optimistic expectations. Since bankers can have no better knowledge of future conditions than anyone else, the basic decision is based on the... rule of ‘trust’ and the creditworthiness of the borrower... Further, since the bank is an ongoing enterprise, the banker not only wants to know how the borrower will repay the loan but also, more importantly, whether the bank can lend to this client again. The decision will be based on the client’s history as much as on expectations of future cash flows” (Kregel, 2008b, p.1)

To a large extent, it is the mix between the several financial structures within the entire system that will determine its degree of fragility and, thus, its potential instability. An economy in which speculative and Ponzi units predominate, and this is about to happen as much as we have a long lasting upturn, will have a high degree of fragility.

The sanctioning of the additional funding required to take over positions of growing indebtedness is, in turn, determined by the portfolio decisions of the financial market agents. They will fund new positions in assets and will be able to do so – within certain limits, but under pressure from competitors – whenever seems profitable, thus reevaluating their expectations and accepting a higher level of indebtedness of debtors. In order to “back” this situation, new instruments, new financial practices, new institutions and new arrangements between such institutions are generated. Indeed, for Minsky, financial innovation is one of the features of the expansionist stages of modern capitalist economies. Thus, during the upturn, a significant change in the portfolio of the economic agents will occur, tending to become more speculative.

“In contrast to the orthodox Quantity Theory of Money, the financial instability hypothesis takes banking seriously as a profit-seeking activity. Banks seek profits by financing activity and bankers. Like all entrepreneurs in a capitalist economy, bankers are aware that innovation assures profits. Thus, bankers (using the term generically for all intermediaries in finance), whether they be brokers or dealers, are merchants of debt who strive to innovate in the assets they acquire and the liabilities they market (Minsky, 1992b, p. 7)

As a consequence of these developments in the financial markets, a new macroeconomic financial framework is set up, with a higher degree of fragility. This is so because debtors and creditors, by adopting more “aggressive” – but rational – structures, reduced the previously adopted safety margins, allowing for a progressive deterioration of the liabilities of non-financial agents as well as of the assets of the financial agents. This growing financial fragility casts the seeds of the next downturn. Minsky notes, however, that the process that converts a solid financial standard into a fragile financial structure is not carried out overnight and in an “uncontrolled” fashion. The limitations on the speed and on the virulence of this process, which represents nothing but the search for growing valuation opportunities, are determined by the intensity and speed whereby creditors and debtors undertake more fragile approaches.

An important question to discuss is in which way some aspects of the new accumulation regime, specifically those related to the new features of banking activity, may influence the speed and deepness of this process that tends to a progressively fragile economic – and financial – system. We point here to the widespread process of securitization, which is being appointed by some analysts (Guttman 2008, Kregel 2008a e 2008b, Wray 2008) as one of the key changes in contemporary finance.

Kregel (2008b) states that:

“This system has produced a new form of bank operation now known as ‘originate and distribute’, in which the bank seeks to maximize its fee and commission income from originating assets, managing those assets in off-balance-sheet affiliate structures, underwriting the primary distribution of securities collateralized with those assets, and servicing them.” (Kregel, 2008b, pp.2-3)

The model “originate and distribute”, according to Kregel (2008b), represents a radical change in the banking activity because the traditional assets of the banks – loans – are not to be hold in their books anymore<sup>17</sup>. They become securities to be sold in the market. Under this system the banker has no interest – or, at least, is less interested than used to be – in credit evaluation since the interest and principal will be repaid to the buyers of the assets that are, in general, the so called institutional investors (Kregel, 2008b). Credit evaluation for the institutional investors is often made by credit rating agencies.

Since the 1990’s, credit evaluation by credit rating agencies has partially replaced the evaluation formerly undertaken by banks, which used to be more conservative because their own balance sheets, very illiquid, were at stake. The credit rating agencies, instead, are not evaluating assets that are going to be held for them but for the investors whose portfolios, very liquid<sup>18</sup> in principle, and diversified, could allow more risky assets.

Vidotto (2008) also points to the acute change regarding the credit evaluation in this new financial system:

“In principle, the ‘foundations’ of debts become more distant regarding the intermediate and final buyers, making more difficult for them to accurately evaluate risks... As securitization unfolds in new and successive rounds the final investor has each time a more opaque notion of this chain” (Vidotto, 2008, p.60)

As a consequence of this endogenous process that unfolds in a new accumulation regime, which allows riskier decisions, we have now, relatively to the process that Minsky used to analyze, a more fragile system at the end of the upturn. This economy so tends to be still more prone to financial instability.

##### 5. Basel Regulation in a context of endogenous financial fragility: concluding remarks

The Basel Accords are based on the system of minimum capital requirements and more and more dependent upon the idea that the market is efficient in measuring and managing its risks. This idea was gradually absorbed. Basel places at the center of the regulatory regime the minimum requirements for capital adequacy, the calculation of capital rates being made by a system of fixed risk-weights defined by the regulator. As previously stated, the idea behind

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<sup>17</sup> Guttman (2008) states that the switch from loans to securities as major form of credit is paralleled by the shift from bank deposits to funds as principal savings outlets. This process tended to benefit the investment banks and their traditional activities of brokerage, dealership and underwriting. Facing this situation of potentially declining activities and profits the commercial banks reacted by getting also into this fund business.

<sup>18</sup> Guttman (2008) says that suppliers of funds prefer securities instead of loans for many reasons and one is that these instruments give them exit options while loans do not.

this mechanism is that banks should adapt their capital to the risks they take on or, to say it differently, take on risks based on their ability to maintain capital.

By accepting and stimulating the use of risk assessments performed by market institutions, either external credit rating agencies, which has been more frequent since the nineties, or the banks themselves, the arrangement proposed by the New Accord integrated the logic of the market agents into the regulatory structure. In this way, the model proposed by Basel II is based on trust in the adequacy of the behavior of banks, which are the relevant market agents. They would be more qualified to evaluate and to manage their risks and to decide how much capital ought to be maintained given the risk they take on.

This new format of banking regulation was well suited for both the interests of financial institutions, which naturally seek greater freedom to act, and the preferences of the regulatory authorities. These preferences were based on the perception that the imposition of rules that would limit the action of institutions tends to stimulate the implementation of innovations that in turn render the rules inoperative.<sup>19</sup> They are also based on the perception that market agents would be, so to speak, apt and willing to measure risks accurately.

Basel I innovated by bringing the behavior of banks to the center of the regulatory regime and by enabling the harmonization of rules at an international level. The New Accord's proposal also innovates by drawing regulation closer to market practice, thus seeking to enable the construction of a system of rules which is actually viable in the face of the always present possibilities of financial innovation and arbitration on the part of the agents. In this sense, Basel II would present more accurate mechanisms than those of its 1988 predecessor.

According to Kregel (2006), however, the major principle of the New Accord must be questioned, "since it is based upon the presupposition that the market mechanism can offer a common restriction to the activity of banks – something that financial markets are still to produce." (Kregel, 2006, p. 36) Griffith-Jones and Persaud (2006) argue in the same way and state that risk assessments made by banks are inherently pro-cyclical and that good banking regulation should therefore do exactly the opposite of Basel II. Wray (2006), adopting a marked minskyan approach, makes a similar point. For him, "it is the force of the market that induces participants to reduce the risk they assess at the moment of greatest danger – those that attempt to resist the speculative trend not only face smaller return rates, but also doubts concerning their administrative abilities and their capacity to generate profit." (2006, p. 152)

The analysis we have conducted based on Minsky's discussion of the agent's behavior in a capitalist economy, including the participants of the financial market, leads us to disagree with such hypothesis. The behavior of market agents concerning risks is inexorably cyclical and tends to ever greater risks. And this is so because the perception that the agents themselves have of the risks they assume – and, thus, the decisions they make – is strongly influenced by the state of confidence, which feeds back the new decisions and conditions the evaluation of the assets and the interpretation of its risks. If we go further to consider some specific characteristics of the finance-led regime, like a financial system characterized by securitization of assets, which allows a less conservative evaluation of risks either by banks or credit rating agencies, it becomes clear that the system has become endogenously more fragile and prone to instability – crises.

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<sup>19</sup> Another hypothesis that has already been put forward by the literature (see, for example, Freitas 1997 and 2005 and Griffith-Jones & Persaud 2006) is that of a "capture" of the regulator by the regulated, i.e. that the "pro-market" format in the New Accord would also reflect the large political influence wielded by the financial sector.

When the market is flourishing, the growing fragility which is inherent to the process itself, as presented by Minsky, is not captured by the process of risk-weighting in Basel I and tends not to be detected by the internal risk evaluation models of the financial institutions, nor by the agencies specialized in credit risk evaluation. In this way, the growing fragility is not reflected on the capital requirements demanded, which is the key to ensure soundness in the regime discussed above. Besides, the pro-cyclical nature inherent to the behavior of market agents in relation to risks is strengthened by the risk evaluation performed according to the rules of the market because risk goes down when the market is doing well, and goes up when market becomes more volatile. Under Basel II, so does capital and, as a consequence, the banks' asset portfolio. In one hand, when markets are doing well the banks' asset portfolio, especially loans, can raise rapidly. During the down turn the opposite can occur, as new capital required may force banks to cut their lending. If we go further and consider some characteristics of the finance-led capitalism, new financial markets instruments and mechanisms may have reinforced the cyclical tendency. In this sense, regulatory regimes based on risks, especially on the current financial environment, reinforce the pro cyclical feature that is inherent to financial markets.

That said, one might ask if the Basel regulatory regime may have stroked the balance, "... a framework that would further strengthen the soundness and stability of the international banking system". The obvious answer is no. In defense of Basel II, it could be argued that the crisis was created in an environment marked by Basel I and that Basel II, still in process of adoption and implementation, would be more adequate to face some of the current financial environment characteristics, as for instance capital charges to off-balance exposures and treatment to securitization. However, one could not deny being the fundamental foundation of Basel II, the market-risk measurement and adequacy based on credit rating agencies and risk internal models, broadly disseminated. So it has sustained the decisions and strategies of financial relevant agents, including non-banking institutions and has not softened the conditions that drove to the crisis. Instead, may have added to them.

Regarding to this perception, it is necessary to point that the current evaluation of the adequacy of "Basel-type" regulation conducted by BCBS takes another direction, maintaining its own fundamentals. It was announced the intention not only to strengthen Basel II but also to stimulate its prompt implementation – added by a proposed treatment of leverage and liquidity. This proposal is supported by the diagnose of central banks - represented by the BCBS - that this regulatory regime is suitable and efficient in order to address financial markets fragilities and endorse a sound and stable financial banking system. Contrary to this diagnosis, we have argued in our analysis that such a measure is not going to enhance the solidity of the system. To the contrary, it can even worsen it once increasingly introduces the market evaluation of risks as a keystone of the regulation regime. Basel II, in this way, is much more pro-cyclical than Basel I. And, in this sense, much more prone to stimulate crisis.

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