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From liberal finance inconsistency to relevant systemic regulation: An institutionalist analysis

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ABSTRACT (112 words)

This article suggests an institutionalist analysis of monetary capitalism and points to the inconsistency of liberal regulation mechanisms. It leans on the characteristics of money in a capitalist economy, often ignored by the consensual wisdom but explicitly studied by institutionalist approaches as major concerns in economic evolution. The article then shows, in a Minskyian vein, the weaknesses and irrelevance of liberal financial structures with regard to the prerequisites of sustainable macroeconomic stability. The main implication is that macro-prudential regulatory reforms must be designed and implemented to tame speculative finance. Therefore, market-based self-regulation mechanisms must be replaced by public regulation processes that could be framed on two rules: preventive-constrained finance and preventive-binding funding.

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INTRODUCTION

Liberalized and opened financial markets are usually assumed to result in positive outcomes which would outweigh possible costs. Some ad hoc assumptions such as the free market efficiency, open markets self-equilibrium capacity, optimality of a decentralized markets based competitive economy, etc. are essential to such a theoretical (but also political and ideological) edifice. During the 1980s and 1990s, most economies –advanced as well as emerging countries- implemented the so-called financial development and integration policies and reformed national financial systems in order to reduce the scope of public supervision and to let private institutions and practices based micro-prudential models take the control over the process of financial supervision.

All this work converges toward the same assertion: free and open markets –including financial markets- do work in an optimal way without requiring structural public organization and management since they have –naturally and spontaneously- all mechanisms and means to self-adjust and self-regulate if necessary.

Most policy makers and eminent scholars (to begin with Alan Greenspan who have been the Chairman of the Federal Reserve from 1987 to 2006) implicitly or explicitly argued at that time that whatever the growing disequilibria and risks markets were able to self-adjust thanks to price-quantity changes according to rational agents' maximizing behavior. In this vein, even in the dawn of imminent crises, authorities let free markets do without any preventive intervention to correct their exuberances[1]. They all took a "mess-cleaner" stance more than preventive measures at the approach of turmoil. Moreover, numerous crises occurred since then were interpreted as crises of transition from State-repressed finance to free-markets-oriented financial systems.

The 2007-2008 financial crisis which got started in developed financial markets seems to point to the irrelevance of such assertions. However, in spite of the systemic characteristics of this worldwide catastrophe and related difficulties that several trillion "$/£/€/¥, etc". of public funds couldn't deal with, the economics profession is still singing the praises of the unregulated market system and the balanced budget since the reforms designed and implemented remain either very limited or not well fit with regard to the urgent needs of re-regulation of financial markets.

In opposition to the dominant theoretical and political wisdom that mainly rests on the assertion that free financial markets are more efficient than publicly organized financial systems, the purpose of this article is to prove that financial liberalization and related market-based regulation are irrelevant with regard to stability concerns of capitalist economies. Liberal finance logically leads to a general financialization of the economy and, accompanied by privatized supervision mechanisms, it repeatedly results in cumulated imbalances, systemic crises and increasing unemployment.

To elaborate an alternative relevant analysis of the working of financialized capitalism, a specific institutionalist framework is developed through Minskyian premise of endogenous financial instability. This analysis maintains that to cope with economic instabilities (national and international) public economic management is required as a consistent guidance for economic evolution. As it is stated by the institutionalist authors this constitutes "the essence of institutional economics"[2]. Those assertions are presented and supported through two sections.

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[1] Krugman states (2009: 144) that "(…) Greenspan warned about irrational exuberance, but he didn't do anything about it. And in fact, the Fed chairman holds what I believe is a unique record among central bankers: he presided over not one but two enormous asset bubbles, first in stocks, then in housing."

[2] Indeed, in a very institutional vein, Gruchy (1977) wisely maintains that in the face of the turmoil, the logic of economic reform points in the direction of some kind of national and international economic management that would provide guidance for national economic systems and that this matter constitutes the essence of institutional economics.

The first section states the inconsistency of the mainstream wisdom[3] (price-oriented free markets would lead to economic efficiency and efficient social outcome without tough public intervention) and develops the major characteristics of money and monetary capitalism. It then shows that monetary and financial rules, mechanisms and markets play a core role leading to a complex society that relies on the consistency of institutional patterns which shape actors' behavior and systemic stability. Hence, it is argued that liberal finance dominated capitalism is structurally crisis-prone and unsustainable.

The second section seeks therefore to suggest a consistent institutional framework for a relevant regulation. The social consistency rests on the institutional design which intends to make relations among people sustainable in order to let society evolve in a coherent way. The ingredients of such an approach can be found in the early institutionalism that puts the emphasis on the crucial importance of monetary/financial relations, of institutions and institutional change, and on the issues related to systemic stability through collective action.

Economic evolution depends upon institutions, usages, and policies and closely related to the impact of alternative institutional specifications. The analysis reveals that the recent institutional evolution led to the money manager capitalism of Minsky such that economic development is entrusted to short-term financial gains producing speculation industry. Implications for a system-consistent regulation are then drawn from. It is advocated that the alternative rests on the key role of public institutions in economic development. To support long-term productive engagements which should be designed according to some societal long-term targets (employment, environment-friendly, societally sustainable, etc.), private-interest based incentives must be removed through two rules: *preventive-constrained financial structure* (severely limited speculative engagements) and *preventive-binding funding* (involving directly banks/speculators into crisis-prevention and crisis losses financing). Therefore, macro-prudential and speculation-preventing principles must replace micro/self-regulation schemas in order to sharply distinguish between finance-to-speculate and finance-to-produce.

1. FREE MARKETS, FLAWED REGULATION AND MONETARY CAPITALIST ECONOMY: AN EXPLOSIVE COCKTAIL

Financial liberalization finds theoretical support in the mainstream economics whose core assumption is the efficiency of market-price mechanisms. Furthermore, this approach usually rests on the assumption of neutral money and studies finance as a mere question of equilibrium between savings and investment in loanable funds market[4]. Even though it is recognized that financial liberalization might have some disequilibrium effects on the economy at short-run (Kaminsky and Schmukler, 2003), it is widely asserted that it would have a quality effect in the long-run since it should improve credit market's allocative efficiency (Abiad et al., 2005).

This led in the last four decades to the implementation of economy-wide liberalization-(de)regulation policies that modified the structure of financial markets. However, several crises, more or less systemic and long-lasting, occurred and, with the extent of the last 20007-08 crisis, called into question the relevance of financial liberalism. So in order to understand and then to deal with systemic instabilities in a relevant way, an alternative theoretical stance can be developed through a specific and accurate analysis of monetary/financial characteristics of modern capitalism in an institutionalist-regulationist vein. Such an alternative points to the explosive and unsustainable nature of financialized capitalism since the regime of accumulation liberal finance results in seems to provoke serious time-inconsistency.

[3] Described hereafter as mainstream wisdom, mainstream economics or standard economic theory the neoclassical theory, the neo-Walrasian approach, the monetarism, the New Classical economics, etc. which assert that coordination is supposed to be provided by prices when individual supply and demand are confronted in the market. On this topic, see Ülgen (2013).

[4] Market-price mechanisms (interest rate changes according to supply and demand from market actors) would let demand for investment meet supply of savings and result in steady-state equilibrium without public intervention. For a critical presentation of the loanable funds theory, see Bertocco (2013).

1. 1. LIBERALIZATION AS A SYSTEM-WIDE DEREGULATION OF FINANCIAL MARKETS

Although there might exist significant variations in theoretical sensibilities of different market-equilibrium or efficient-market approaches, they all assert the superiority of market mechanisms over public organization and intervention in the economy to lead society to an efficient outcome. This theoretical stance is the cornerstone in the evolution of capitalism through a liberalized and financialized economic structure and it remains the main reference in researches and political choices, even in period of economic and social turbulences.

Boyer (2007: 4) remarks that "The adoption of the notion of market economy implies that markets are the dominant, if not totally exclusive, mechanisms for coordinating economic activity. States, communities, and civil society are a priori excluded and this might be perceived as evidence for the limited ambition and, modesty of the economist. But as soon as actual observations contradict the hypothesis of self-equilibrating markets, the neoclassical economists are prone to attribute the related malfunction to an imperfection with respect to the ideal of a "pure" market. Why are such imperfections so widely present, for example for labor and credit? Because these markets are embedded into social, political relations that distort the mere pursuit of self (economic) interest and the convergence towards an equilibrium. Hence General-Equilibrium Theory (GET) is the implicit – and frequently explicit – benchmark in many empirical analyses by conventional economists."

The mainstream conventional economics indeed maintains that price-oriented free market mechanisms would lead to an efficient economic equilibrium and assigns to the state a specific role usually limited to some market-friendly economic policies such as conservative monetary policies, budget-equilibrium based public expenditures, private enterprises supporting fiscal and technological measures, wage-oppressing but rent-enhancing incentives, etc. The *Annual Report* of the Council of Economic Advisers of 1991 states: "Market forces in the financial sector channel savings into growth-enhancing investment opportunities; these forces both reward and encourage entrepreneurship- the economy's sparkplug. The flexibility of the market-based U.S. economy both increases its resilience in the face of disturbances and enhances its ability to make the most of new opportunities" (Economic Report, 1991: 22). In the last decades this became a scientific mantra: "economics got the right answer: free market policies, supported but not encumbered by the government, deliver growth and prosperity" (Schleifer, 2009: 135). This "New Consensus Macroeconomics" (Arestis, 2009) that advocates financial liberalization is a kind of synthesis among different models mainly related to neoclassical and new classical efficient markets assertion, developed in modern terms in the work of E. Fama, among others. It is worth noting that this paradigm is fundamentally non-monetary since money and financial variables do not play any core role in economic evolution (Ülgen, 2014a).

This paradigm maintains that free markets do self-adjust when they are submitted to various shocks[5] as they are assumed to contain efficient self-regulatory mechanisms[6]. The corollary is that there is no need for public regulation in markets. Hence, new financial reforms and policies evolve, from the late 1970s, toward the deregulation of financial markets in favor of micro-prudential supervision mechanisms. Therefore banks and other market actors such as rating agencies are let provide their own models and mechanisms of evaluation of their own market activities. The state and its agencies are less involved in market supervision and intervene at the end of the process, if necessary, in order to save the day and calm down systemic panics without any preventive framework and constrained regulation.

As it is maintained that financial liberalization would enhance the opportunities for smoothing out the effects of real shocks and promote competition and efficiency in the financial

[5] Those shocks are usually studied as external shocks since it is assumed that (competitive and not State-disturbed) markets do work at equilibrium.

[6] In the pure general equilibrium model, this can be reduced to the standard flexible price mechanism under the arbitraging process of decentralized individuals' supply and demand.

sector, most economies (advanced as well as emerging economies) opened up and liberalized their financial markets in the 1990s and 2000s to get more integrated into international capital circuits. But they also experienced monetary and financial crises. The dominant wisdom interpreted those crises as some problems of transition and bad public management. However, with the worldwide systemic crisis of 2007-2008, this assertion revealed erroneous since even financially developed market economies failed to be efficient self-equilibrating systems (Ülgen, 2015). Instead of stability, economies experienced cumulative imbalances and recurrent crises. Instead of growth, economies continue to suffer recession periods. More than six years after the beginning of the crisis, unemployment is increasing and persistent, recovery policies fail to give economies a sustainable growth path, public debts and deficits are increasing and most economies implement conservative-austerity policies which prevent "animal spirits" from setting out to conquer the future.

The crucial error lies in a theoretical but also political will that leave no room for specific analysis of insolvency and illiquidity concerns in financialized capitalism and it is still advocated that the relevant institutional framework should rest on market-friendly institutions and related incentives: "The economic theory behind this stance is powerless to suggest a relevant alternative to its own futile beliefs because there is no room, in real economic equilibrium theory, for specific analysis of sophisticated financial structures and related insolvency concerns that a capitalist economy can generate in its own evolution. So, such a theoretical and political direction is irrelevant with regard to the characteristics of capitalism which is a monetary economy where real equilibrium has no meaning and where treating money as a secondary variable (a mere veil) without any long-term influence over real variables results in poor and weak understanding of capitalism that prevents any relevant attempt to improve its working." (Ülgen, 2014a: 16).

1. 2. CAPITALISM AS A MONETARY ECONOMY AND ENDOGENOUS FINANCIAL INSTABILITY

The identification of the characteristics of systemic crises is of paramount importance in order to design crisis-preventing policies and consistent market organization. This requires a relevant identification of the characteristics of capitalist economies, how do they function, what are the core variables that determine the range of individuals and markets behavior, what are the viability conditions and sustainability limits of societies, how do collective/public institutions intervene in order to support those conditions and limits, how might markets be regulated to reach a globally stable situation, what could consistent accumulation regimes be and how could they be regulated to improve the systemic resiliency of economies, etc. With regard to these concerns, it is possible to develop an institutionalist-regulationist approach which maintains that capitalism is a monetary economy in which monetary and financial structures (rules, regulatory design, related policies, incentives, etc.) are essential systemic constituents and must be studied and framed more thoroughly than it is usually done in the mainstream economics. Hence two major pitfalls of the mainstream economics appear to be crucial obstacles that prevent the economics profession and the policy makers (that the profession advises) from taking relevant decisions and implementing sustainable economic policies that would be consistent with the needs and characteristics of our modern societies. The first is that although capitalism is fundamentally a monetary economy where money, monetary rules and relations, financial markets and regulatory devices do matter more than any other economic concern, the mainstream economics does not (cannot) take into account this aspect of capitalism and then, it cannot deal with the economic problems of our societies. Second pitfall, corollary to the first, is that capitalist economy is not a (real) equilibrium economy. Its decentralized (private and separate individuals decisions based and no centrally planned) and monetary nature makes it evolve on uncertain, real-time related and continuously changing development path. In such an economy, markets do not have any spontaneous self-adjustment mechanism. Consequently, as Keen (2011:358) wisely states: "We have to start with foundations from which the phenomena of reality emerge naturally by constructing monetary models of capitalism built on the melded visions of Marx, Schumpeter, Keynes and Minsky."

Capitalism is indeed a complex society that requires specific institutions such that its evolution relies on the consistency of institutional patterns that shape private as well as public actors' behavior and determine systemic stability. In this institutionalist-regulationist vein, Becker et al. (2010) argue that regulationist approach seeks to explain how endogenous contradictions of capitalism can be stabilized through specific structural regimes of accumulation. This issue is obviously related to the monetary nature of capitalism and makes that a given regime of accumulation evolves through a specific institutional environment where financial relations (rules, mechanisms and markets) play a central role to let private agents take decentralized strategic decisions.

Actually, in capitalist economy economic activities rest on private and decentralized decisions of separate individuals or groups. These decisions determine entrepreneurial activities and need to be financed to become effective. Consequently, the realization of market activities is closely related to the possibility of financing entrepreneurs' expectations. This is what Ülgen (2013) calls "prime relationships" established on debt contracts between two private agents, bank and entrepreneur/enterprise which imply creation of credit money resulting from the constraint of financing (access to money) for any economic activity. Hence various debt relations involve bank credit and financial intermediation between enterprises and financial sector. In a private-ownership based society, the debt-financing process obviously relies on private units' will and expectations about uncertain future profits. At this level of analysis, a very crucial aspect of this schema must be noted: "However, one of the characteristics of a monetary economy is that private debts circulate throughout the economy like money without the agents receiving it being able to distinguish the issuer. These agents consider it as a sign conveying framework rules for their economic community" (Ülgen, 2013: 181).

From this perspective, it appears that money has a peculiar twofold nature in a capitalist economy: it is *transversal* and *ambivalent*. This twofold nature continuously generates tensions between the private sphere and the public sphere. At the same time, the *raison d'être* and the viability domain of money/monetary system rest on its capacity to manage such tensions. Aglietta (2003: 11) then argues that in a monetary capitalist economy: "monetary organization should contain a tension caused by the uncoordinated decentralization of private initiatives. Money is both the support for private wealth and the social link that gives coherence to exchanges by *a posteriori* constraint of settlement."

Money is *transversal* since all economic transactions rely on monetary relations: **"**Monetary and financial problems do structurally matter to all other sectors through the changes of strategies of the credit-money providers (banks) and financial intermediaries. Hence, changes in money/financial markets affect the whole economy irrespective of decision units which are or are not involved in debt relations" (Ülgen, 2014b: 263). Money is also *ambivalent* as it is related both to private decisions and public rules. Its creation lies in private decisions of banks and entrepreneurs that rest on their own profit expectations. At the same time, its general use and validity as a means of payment and general settlement depends on non-individual, public rules[7].

This peculiar perspective lead us to maintain that even in a decentralized and private decisions based capitalist economy, money is a social institution, a set of social rules that allow private economic units to undertake free, decentralized and debt-based activities. Such debts circulate as money -means of financing and means of payment- through the entire economy and thus involve the entire society. At the same time, the viability[8] of the capitalist accumulation process lies in the systemic possibility to validate the debt structure by the realization of expected profits since credit money is granted to individuals under a specific debt-contract for a determined period of time, mainly between a borrower and a bank. This debt must be reimbursed according to the terms of the contract. Although enterprises can borrow credit-money from

[7] For a general presentation of a monetary system called payments system in capitalist market economies, see Ülgen (2013).

[8] Viability can be defined as the capacity/ability of an economic system to deal with systemic crisis situations without calling its major principles, rules and values into question.

banks to finance their private-expectations-based activities they cannot repay their debts by issuing new debts on themselves. The reimbursement of debts through the respect of common/objective constraints gives debt-money-relations eminently social/constrained character. However, in such a non-ergodic economy there is no guarantee to validate the societal compatibility of separate decisions/actions to reach a socially efficient equilibrium. Hence, the working of the economy requires some collective rules and mechanisms to organize and guide private actors' strategies with respect to systemic rules that should be able to let money play its twofold nature. All this makes that stability relies on strongly interconnected decisions and behavior of separate actors and markets. Stability is thus a systemic (macroeconomic) concern and must be thought of as such.

2. AN INSTITUTIONALIST APPROACH TO FINANCIAL INSTABILITY AND REGULATION

A very specific characteristic of institutionalism lies in its basic assumption about the meaning of the economics. Institutionalists define the economics as the study of the nature of the social process -beyond the ad hoc neoclassical market equilibrium assumptions- with focus on institutions in the working of capitalist economy. That is the institutional consistency –the social organization that frame individual decisions and actions- which determines the capacity of the economy to evolve on a stable path. Market-based micro-regulation schemas are not assumed to be sustainable in time because of the systemic contradictions they result in. Those contradictions are related to the monetary characteristics of capitalist market economies and make that relevant regulation -required for systemic stability- does rely on macro-prudence directed framework. Therefore, a fruitful research agenda with regard to capitalist finance instability seems to be an alternative institutional analysis of the capitalist economy in a Minskyian vein.

Minsky (1992) relates financial instability to the monetary characteristics of capitalism as he states that financial instability and the characterization of the economy as a capitalist economy with expensive capital and sophisticated financial system go together. Minsky (1982: 66) then documents: "The tendency to transform doing well into a speculative investment boom is the basic instability in a capitalist economy". Put into an institutionalist perspective, Minskyian analysis might offer a relevant analytical guide to characterize the major weaknesses of financialized capitalism and to point to some basic principles for consistent regulatory reforms that could prevent systemic financial exuberances and subsequent painful adjustment processes.

2. 1. ROAD TO ENDOGENOUS INSTABILITY

Consensual wisdom argues that private-initiative-limiting restrictive regulation cannot enhance financial soundness and maintains that supervision mechanisms must rely on private monitoring of banks through sound contract enforcement systems. From the 1980s, a specific institutional environment -financially deregulated-liberalized capitalism- involves actors in new market strategies. Banks are incited to enter into more speculative engagements and develop securitization products and processes (the transactional banking). Such an evolution feeds a new regime of accumulation which is based on speculative financial gains and transforms financing relations into Ponzi schemes à la Minsky (Minsky 1986). In the aftermath of the dotcom burst, from 2003 till 2007/2008 crisis, especially the US economy but also most developed banking and financial systems contribute to develop a bubble environment based on real-estate-related debt leveraging in search of capital gains (Hudson, 2010). Then the money manager capitalism (Wray, 2011) enters the picture and determines the society's economic horizon. In such an economy, some particular elements, partly related to the regulatory changes implemented in the last decades, point to endogenous instability of deregulated/liberalized financial markets and to the irrelevance of market-based financial supervision.

First, the liberal regulation fuels the decline of financial stability especially through the privatization of the process of banking and financial supervision. From the 1990s onwards and in spite of recurrent financial turmoil in advanced and emerging economies, the role played by private rating agencies in the evaluation of the soundness of banks and financial intermediaries gained strength and became the main/dominant way of "social assessment process" of financial markets. Parallel to this, the "internal ratings-based" self-evaluation procedures let banks use their own risk estimations to calculate regulatory capital they should hold. In a specific document the Basel Committee (2001) offers its proposals for an internal ratings based approach (the IRB approach) to capital requirements for credit risk.

Those assessment methods do leave the social checking process of monetary and related financial activities of private agents to agents' (banks and rating agencies) own discretion and logically create a kind of structural conflict of interest. On the one hand, internal self-evaluation amounts to give a candidate also the role of assessor. Two opposed and separate positions, the role of the judge and the position of the judged are confused and any objective prerequisite/constraint -necessary to validate the social character of such a judgement process- isn't imposed. On the other hand, as rating agencies intervene in a twofold way, first as specialists and advisors which work hand in hand with banks to elaborate and commercialize different financial products and processes in markets (financial innovation); and second as social assessors that should remain external to banking engagements and completely separate from banks. Obviously those market-based self-regulation models provoke *de facto* confusion between the business of advice and the mission of assessor. Furthermore, this sort of (necessarily self-interests-related) self-regulation is unable to counterbalance crisis-prone behavior of markets since it does usually generate pro-cyclical movements as it fuels financial engagements during the periods of euphoria and abruptly stops asset price increase during the periods of turmoil (Sy, 2009). Such a pyromaniac tendency rests on the logic of individual rational and conservative strategies.

Second, there is no bridge between individually rational decisions and macroeconomically consistent coordination in a capitalist economy. This means that the sum of the so-called individual rational strategies does not result in a socially consistent macroeconomic situation. This problem is called the fallacy of composition and can be used to argue that market-prices based decentralized coordination systems are not able to ensure a globally stable economic situation and may (do) often result in systemic crises that cast doubt about the ability of a capitalist market economy to survive its endogenous instabilities. Systemic macro situation cannot be observed but *a posteriori* such that individually rational/efficient decisions do not obviously lead to an optimal economic system. With regard to this argument, Minsky (1991) points to the fragile posture of micro-rationality and subjective probabilistic risk calculations that ignore the true nature of the world. Such a decision mechanism contributes to increase fragilities and to prepare the roots of future instability. In this sense, even if micro behavior can subjectively transform uncertainty into risk in the private decision process this does not reduce potential systemic instability at a macroeconomic level. Rational micro decision units cannot deal with system-wide macro concerns that are generated by the addition of separate and uncoordinated actions.

The crucial difference between what it seems to be efficient at individual level (the micro-rationality) and what would be efficient at the society's level comes from –at least- two characteristics of decentralized economies. First, the micro-rationality is based on private information and expectations and given the complexity of the world around them, separate and private individuals or groups are not able to continuously collect, process and use all the required information and corresponding relevant behavior in real time. They then take decisions in an uncertain (non-ergodic) world and can only worry about their micro-environment. Even if they would think of macro concerns, they could do it only in a micro-rational way (if one supposes that they are able to be micro-rational at any time). Second, from an individual perspective, nobody has interest to contribute to macro-stability by disciplining her/his opportunistic strategies when there is no social constraints centralizing, managing and supervising individual profit-seeking private decisions. Clark (1919) notes that social and individual valuations cannot be the same because the range of alternatives open to society is different from that open to individuals: "The individual may escape from costs that society has to bear, or vice versa; the individual may choose under the pinch of want or under bad bargaining conditions, when it is not socially necessary that he should be confined to such a stern choice of evils" (Clark, 1919: 287-288). In a similar vein, Olson (1965: 2) states that "If the members of a large group rationally seek to maximize their personal welfare, they will not act to advance their common or group objectives unless there is coercion to force them to do so (…) These points hold true even when there is unanimous agreement in a group about the common good and the methods of achieving it."

From this point of view some implications may be drawn for systemic stability. There is obviously an overwhelming (logical) opposition between self-interest and self-assessment based micro-regulation and system-wide organized and globally consistent macro-regulation. The latter is naturally in a prudential purpose and takes individual constituents as different parts to be arranged in order to give the whole system sustainable consistency while the former does aim, by definition (given above), at determining and evaluating the factors that could affect individual situations (financial institutions, banks, enterprises, etc.) [9] . Micro-regulation dominated supervision systems mainly rest on self-monitoring and legal incentives to ensure regular disclosure and accountability. Whatever the supervision mechanisms implemented by public authorities over micro decision units, in a micro-prudential schema the incentives fail to prevent short-sighted individual behavior that evolves within a very limited horizon of decentralized private expectations. So macro-stability is a systemic concern resting on sustainability/viability issues of the whole system which are beyond the individual knowledge and processing capacity.

2.2. RELEVANT REGULATION

From an institutionalist perspective it seems to be relevant to give public institutions (such as government, central bank, supervision agencies, etc.) a crucial role in the design and implementation of sound financial systems and related regulatory structures since the cornerstone of capitalist economies -monetary/financial framework- cannot be built up and consistently managed through private-interests based market relations. The major characteristics of capitalist market economies require the organization and implementation of a system-consistent environment to be framed through collective objectives and constraints. Institutional economics precisely appears to be an appropriate approach to deal with today's major economic issues since it assumes that in capitalist economies monetary/financial rules, mechanisms and markets play a central role. Veblen (1919: 89) notes the dominant role of money and finance in the economy by stating that the discretionary control over the real economy came to vest in the captains of finance, the masters of financial intrigue "who are highly skilled in the haggling of the market".

The consistency of the monetary/financial system's organization and related institutional patterns shapes actors' behavior and determine systemic stability (Commons, 1931). Institutions, as "systems of established and prevalent social rules that structure social interactions" (Hodgson, 2006), frame human activities and then "make up the economic order" (Hamilton, 1919). The rationale for sanctioning institutions and constrained rules does rest on their role to enforce outcomes that maximize group welfare in social dilemma situations (Kosfeld, Okada and Riedl, 2009). Their durability also matters as they allow actors to have stable expectations of the behavior of the others by offering a continuum of choices and social relations (North, 2003). Rutherford (2010: 50) argues that "what institutionalism offered was an invitation to detailed study and participation in the intelligent direction of social change". Gruchy (1989: 860) notes that the question of economic reform plays a central role in institutionalism that mainly focuses on the problem of "the kind of economic system that may be more serviceable to the community than is present day capitalism".

[9] The dominant regulation and forecasting models mainly rely on equilibrium hypotheses through the use of partial equilibrium models (ceteris paribus -everything else remaining constant- statement) or dynamic stochastic general equilibrium models, derived from microeconomic principles and assuming that agents do maximize their utility/profit functions at their individual level and prices do adjust until markets clear. It is worth noting that these models basically rest on nonmonetary neoclassical real equilibrium hypotheses. Money and financial variables are added to these hypotheses as supplementary (and secondary) parameters.

However, even in the aftermath of the 2007-2008 worldwide catastrophe, the recovery policies have not been accompanied by sound regulatory reforms to change incentives and rules in financial markets in order to strength institutions and reduce crisis-provoking and crisis-prone market activities. As Boyer (2013: 136) states: "the strong resurgence of liberal orthodoxy played a decisive role in blocking the reforms that are needed to restore the viability of financial systems and their contribution to a return to growth. Reference to Keynesian interventionism was therefore short-lived, and far from marking the beginning of a new era."

For instance, even though Financial Stability Board (2010) advocates that regulation should be designed to reduce market reliance on ratings, it also maintains that private sector risk management practices should involve appropriate internal expertise for credit assessment. This consensual wisdom focuses on slightly removing market reliance on rating agencies and strengthening information disclosures without calling into question the "flawed principle" of market-friendly micro-regulation. Epstein, Plihon, Giannola and Weller (2009: 142-143) note that despite the economically and socially terrible consequences of the current crisis "most governments in the Europe and the United States have chosen to return, for the most part, to the status quo ante. This consensus appears to be forming among the G-20 governments along the following lines. First, governments should exert relatively little formal control over the financial institutions that they have heavily invested in. Second, governments should develop an "exit strategy", which effectively means they should clean up the balance sheets of these banks and then re-privatize them as quickly as possible. Third, financial regulation should be strengthened somewhat, so that privately owned financial institutions do not expose the world's largest economies to the risk of major financial crises. At the same time, though, these regulations should not be so strong that they create inefficiencies and stifle "financial innovation" "[10]. Consequently current regulatory reforms do not seem to be able to prevent the next systemic crisis, and yet several researches exist on the topic and point to different experiences and possible alternatives. I cite below only a few of the many important contributions to the analysis of financialized capitalism crises and required regulatory reform.

Brunnermeier et al. (2009: vi) argue that the prevention of crises in the banking system is more important than in the case of other industries (because of the aforementioned monetary nature of the economy) and document that: "The current approach to systemic regulation implicitly assumes that we can make the system as a whole safe by simply trying to make sure that individual banks are safe. This sounds like a truism, but in practice it represents a fallacy of composition. In trying to make themselves safer, banks, and other highly leveraged financial intermediaries, can behave in a way that collectively undermines the system."

Ugeux (2014) remarks that in the last decades the financial system became source of macro instabilities and as the global market expands, the need for international regulation becomes urgent. Bresser-Fereira *et al.* (2014) maintain that in the aftermath of the 2007-08 crisis, developing countries suffered less thanks to some tighter financial and regulation policies they implemented after several decades of crises they lived. Arestis and de Paula (2008) show that there is little relationship between financial liberalization and economic growth, even in emerging countries.

The impressive (and comprehensive) volumes edited by Dymski, Epstein and Pollin (1993), Epstein (2005), Wolfson and Epstein (2013), and Hein, Detzer and Dodig (2015), among others, thoroughly study -in the case of advanced as well as emerging economies- the process of transformation of capitalism into a finance-dominated system. Those works document that the liberalization process undermines growth through its distorting effects on economic structures and everyday life of people. Logical implications point to necessary alternative regulatory reforms in order to lead financial markets to finance productive long-term activities and then put economies on more economically and socially sustainable and positive development path.

[10] It is worth noting that in this "process of liberal finance recovery", losses are socialized through the privatization of public funds. This obviously poses the very embarrassing question of the meaning of our today's democracies.

Whatever the core arguments developed in different analyses, lessons converge toward modifications in the institutional structure of financial markets and tougher macro-prudential regulation is advocated in order to supervise and control the working of markets.

To cope with crises and their destructive consequences and give markets a positive role in economic evolution, redesigning financial regulation is indeed a systemic prerequisite. Central banks and related public supervision agencies must act as social organizers of financial markets and frame markets through the visible hand of the public power in order to design financial regulation at the systemic and global level in coherence with the core characteristics of monetary capitalist economies.

In this aim, macro-prudential regulation principles must be substituted to micro-regulation schemas as they are related to factors that affect financial system's stability as a whole. A relevant regulatory framework must take into account different facets to the process of regulation such as structural/economic regulation (about the financial market's structure and competition), conduct regulation (concerning private actors' behavior), social regulation (consumer and labor protection) and societal regulation (collective objectives, development issues, etc.) to tame speculative short-sighted finance (Ülgen, 2014c). However, this would result in abandoning the ongoing market-friendly regulatory reforms and the belief that self-regulation might lead agents to system-consistent behavior.

The ultimate challenge for regulatory policies is to implement societal efficiency-seeking public interventions and then make decentralized individual decisions and actions socially consistent according to collective objectives. More precisely, societal consistency of a financial system rests on its capacity to prevent speculative banking/finance and to serve job-creating productive needs. An alternative societal efficiency paradigm should be substituted to the consensual market (economic) efficiency criterion, and lead to reshape alternative rules, policies and incentives according to society's common objectives that should aim at improving the wellbeing of citizens in the entire society. From this perspective, financial stability must rest on a broader concept of societal stability including macroeconomic stability, political stability as well as cohesive and inclusive stability. This requires a kind of "finance without financiers" (Epstein, Plihon, Giannola and Weller, 2009). The design and implementation of such an environment obviously require transparent and democratic governance, as open and supra individuals as possible beyond local and group interests[11]. In this case, regulation will not appear as a restrictive external constraint over free individuals but as a means to strengthen society's foundations and cohesion among citizens with respect to common objectives, rights and duties that aim at preventing harmful out of control strategies of financial institutions.

Alternative regulatory principles might consist of separating securitization and productive sphere financing activities. Even if banks can create branches in these two sectors, their engagements should be clearly separated with regard to their balance-sheet positions such that when a securities market specialized branch has difficulties, the productive sphere financing branch would not have balance-sheet links with her and would not be directly impacted by such disequilibria. Parallel to this proposition tougher capital and liquidity requirements and severely limited speculative engagements could be implemented. That is the *rule of preventive-constrained financial structure* which would be not conducive to systemic interconnectedness among individuals and institutions able to lead to financial degeneration. To create strong incentives to direct banks' decisions through less fragile and less unproductive engagements, it could be judicious to increase charges and commitments for banks' activities as zero or punishment bonus-minus system and unlimited liability partnership. That is the *rule of preventive-binding funding* to directly involve banks and speculators into preventive funding and crisis losses financing.

[11] Although beyond the scope of this article, it is worth noting that the organization of a suitable legal and regulatory environment must not necessarily rely on a kind of omniscient technocratic staff à la Galbraith or Veblen. For an in-depth analysis of this issue, see Baker and Widmaier (2014).

Obviously, those regulatory measures must be accompanied by regular public evaluation of banks' activities (for instance, every two years) with respect to their contribution to the realization of societal objectives. Market-based assessment systems must then be replaced by objective public oversight mechanisms in order to prevent conflict of interest and to enhance the impartial character of the rating and supervisory processes in the name of society. From this perspective, the organization, supervision and assessment of banking activities would be related to the objective of realization of societal long-term targets even though banks would remain private and capitalist enterprises. The regulation would concern the social utility of banks and societal incentives would replace private-interest based hazardous incentives.

CONCLUSION

This article argues that to cope with crises and their destructive consequences and to give markets a positive role in economic evolution redesigning financial regulation is a *sine qua non*. However, it shows that alternative financial reforms must take into account the core characteristics of monetary capitalist economies where money displays a twofold nature; it is ambivalent and transversal. Therefore money and related financial relations (rules, institutions, markets) reveal to be in a cornerstone position in market economies. Since the working and the sustainability of economic relations deeply depend on the monetary and financial framework in force, the organization and the supervision of monetary and financial markets cannot be built up and consistently managed through private-interests-based market mechanisms. It seems to be relevant to give non-market public institutions a core role in the design and implementation of sound financial systems and related regulatory structures. Such a framework requires the organization of a system-consistent environment that must be thought according to collective objectives and constraints. This approach finds a fruitful analytical anchorage in institutionalist-Minskyian theory which maintains that the consistency of monetary and financial organization and related institutional patterns does shape actors' behavior and determine systemic stability.

Therefore, this article maintains that the social consistency of the financial system rests on its capacity to favor growth-enhancing operations and to prevent speculative banking/finance. This requires tighter macro-prudential regulation in order to supervise and control the working of markets. A relevant regulatory framework must take into account different facets to the process of regulation such as structural/economic regulation, conduct regulation, social regulation and societal regulation. The main implication of such an analysis is that financial stability is a systemic and collective concern which must be produced and managed through macro-regulatory frameworks. Consequently, the survival of capitalism depends on the abandon of the belief that self-regulation might lead markets to system-consistent behavior, and on the implementation of two basic rules: preventive-constrained finance and preventive-binding funding. Those conditions require tough reforms to sharply distinguish between finance-to-speculate and finance-to-produce.

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