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The colonization of the future: An alternative view of financialization and its portents

Photis Lysandrou

ABSTRACT

Financialization is generally interpreted by heterodox economists to be a dysfunctional and thus historically transient outgrowth of contemporary capitalism: dysfunctional because it is seen to be driven by attempts to escape production and profit realization constraints in the real economy, transient because these attempts are seen to be ultimately futile. This article proposes the contrary argument that financialization is a functionally useful feature of contemporary capitalism that is entirely in keeping with the latter's continuing development as a commodity system. Specifically, it will be argued that just as globalization represents the extension of the commodity principle along the axis of geographical space, financialization represents the extension of this same principle along the axis of time: the future is being colonized so as to make it take the overspill of the pressures on organizations operating in the present.

KEYWORDS

Colonization of the future; financialization

JEL CLASSIFICATIONS

G10; H10

Financialization is now generally, if not universally, accepted by heterodox economists to be the neologism that best captures the fact that the financial markets now occupy a far more prominent position in domestic economies than has usually been the case.¹ This consensus on semantics extends to the deeper issues regarding the content, cause, and future prospects of financialization. Starting from the premise that the observed changes in the financial markets can only be explained in terms of the growth of speculative trading and other self-serving financial activities, heterodox economists broadly agree that financialization is a dysfunctional and thus historically transient outgrowth of contemporary capitalism: dysfunctional because it is seen to be driven by attempts to escape production and profit realization constraints in the underlying real sector, and transient because these attempts are seen to be ultimately futile.

This article gives an alternative of view of financialization and its portents by taking as its cue the observation that this phenomenon essentially represents the extension of the commodity principle along the axis of time in the same way that globalization represents its extension along the axis of

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¹Among the few who reject the term financialization are Michell and Toporowski who argue that "the understanding of finance requires the abandonment of financialisation as a project of intellectual inquiry" (2013–14, p. 80).

geographical space. Given that financial securities, the stuff of the financial markets, are nothing other than tradable claims on the future income streams generated by corporations and governments, it follows that the continual expansion of the supplies of these securities stocks, on the one hand, and the continual expansion in the demand for these stocks, on the other, can mean nothing other than the systematic occupation of the future, its annexation as an additional space of economic activity. The spatialization of the future is certainly driven by constraints that exist in the gross domestic product (GDP) realm, but these constraints have less to do with those of production than with those of time: the future is being colonized so as to make it take the overspill of the pressures on the various organizations operating in the present.

An overview of the heterodox position on financialization

Although scholars from a variety of disciplines now use the term *financialization* to describe the structural shift from industrial to finance capitalism, the primary concern here is with its use in the economics discipline. For the heterodox wing of this discipline, the term “summarises a broad set of changes in the relation between the ‘financial’ and ‘real’ sector, which give greater weight to financial actors or motives” (Stockhammer, 2013, p. 121).² Of the changes that have given “greater weight” to finance, the three that stand out and have received most attention are (1) *size of the financial sector*: from being approximately equal in size to world GDP in the early 1980s, financial stocks have grown since then at a much faster rate such that they now completely dominate annual output flows (see Figure 1); (2) *status of the financial sector*: from playing a largely peripheral role in domestic economies, the financial markets have moved to a more central position as attested by their growing influence on the priorities of corporations and on the policy actions of governments and central banks; (3) *character of the financial sector*: from being largely passive in character, the financial markets have become far more active as shown by the large increases in daily trading volumes in the capital, money, and foreign exchange markets.³

Many of the heterodox discussions of financialization go on to focus on its wider economic and social implications such as those for the rates of industrial investment and output growth (Hein, 2010, 2012; Hein and Treck, 2010; Orhangazi, 2008; Stockhammer, 2004), the sectoral distribution of income (Epstein, 2013; Epstein and Jayadev, 2005), and the functional distribution of income and income inequality (Dunhaupt, 2012; Stockhammer, 2009,

²There are several variations of this definition of financialization, but the one that continues to be most frequently cited is that given by Epstein (2005, p. 3): “financialization means the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies.”.

³Fine (2011) and Sawyer (2013–14) suggest that there are eight features of financialization but these are essentially variations of the three key features involving size, status, and character of the financial sector.

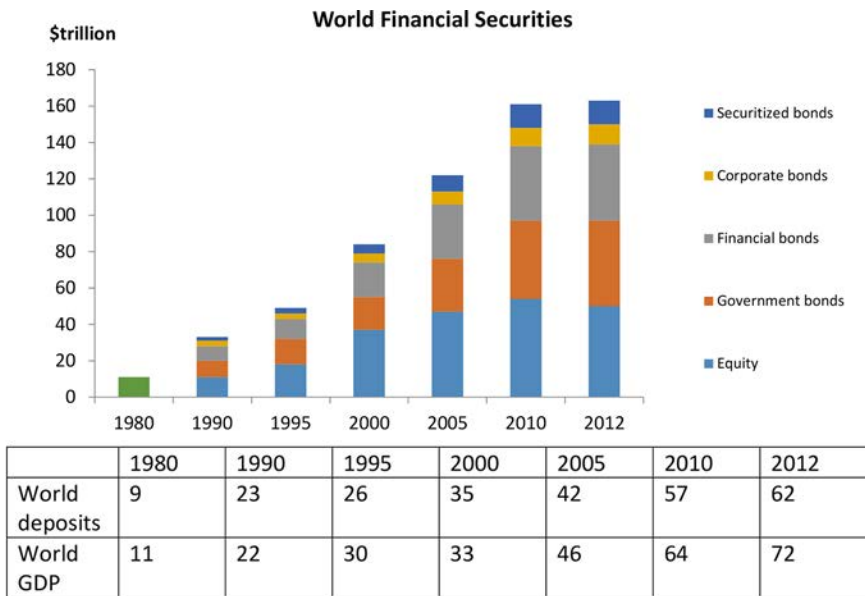


Figure 1. Financial deepening of the global economy. *Sources:* Mckinsey (2013), IMF (2013).

2013). For the purposes of the present study, we limit the discussion to the aforementioned changes in the size, status, and character of the financial sector, concentrating attention on what heterodox economists have to say about the content of these changes and about what is driving them.

Financialization as role reversal

The recent changes in the relation between the financial and real sectors have led some authors to assert that the former has in effect become “an increasingly autonomous realm” (van der Zwan, 2014, p. 99). This assertion cannot of course be valid if autonomy is interpreted in the sense of *separate existences*—because financial securities are nothing other than claims on the future income streams generated by corporations and governments, it follows that the financial markets cannot exist independently of the product markets.⁴ By contrast, the assertion does have validity if autonomy is interpreted in the sense of *separate motives*—the huge scale of activities taking place in today’s financial markets indicates that the majority of these activities are motivated by self-enclosed interests rather than by any underlying real sector interests. However, while this latter interpretation of financial sector

⁴Van Treeck (2009, p. 909) makes the same argument but from a different perspective. As he states: “the observation that financial profits have increased relative to non-financial profits has led many authors to conclude that there has been some sort of ‘decoupling’ of the financial sphere of the economy from the real sphere,” but as he also goes on to state, this decoupling is not possible because from a formal macroeconomic perspective, “aggregate profits ultimately rely on the production and trade of real goods and services and firms in the aggregate can by no means autonomously choose either between real investment (production) and profits at large or even between non-financial profits and financial profits.”

autonomy may be correct, its significance can be viewed in two very different ways. One position, which will be developed later in this study, is to view the increase in self-motivated financial market activity as a trend that is functionally useful to the operation of the capitalist system in the modern era. The diametrically opposite position, which is taken by just about every other heterodox economist who has written on financialization, is to view the emergence of an autonomously motivated financial realm as a historical aberration, a phenomenon that is not only parasitic on the continued development of the capitalist system but also one that threatens to undermine that development. As Vercelli has recently observed: “According to most streams of heterodox economics, the process of financialization is mainly a pathological process of evolution within capitalism that requires that capitalism be radically reformed or superseded” (2013–14, p. 41)

The basic explanation for this latter position is that heterodox economists continue to hold to a fixed view as to what should be the proper role of the financial sector and as to the quantitative proportions that it needs to assume in order to carry out its role. As concerns the role of finance, the heterodox position essentially coincides with that of mainstream finance theory, namely, that it is “to facilitate the allocation and deployment of economic resources across time and space in an uncertain environment” (Merton and Brodie, 1995, p. 4).⁵ Where mainstream and heterodox theorists diverge is over the appropriate scale that finance needs to acquire to be able to facilitate the allocation and deployment of economic resources. Where the former generally argue that the larger is the financial sector the more cost effectively it can carry out its functions in support of resource allocation,⁶ the latter object to this argument on the grounds that while the financial sector has to reach a minimum scale to be able to operate effectively in this regard, its current scale is far in excess of that minimum. The financial sector is now just “too big” (Epstein and Crotty, 2013). “Overblown,” “bloated,” and “inflated” are some of the more colorful adjectives, and “ballooning,” “booming,” and “mushrooming” some of the more exotic verbal adjectives, used to characterize the financial sector’s growing size and weight relative to that of the real sector.

The bloated scale of the financial sector coupled with the fact, as already noted, that the latter cannot exist independently of the real sector are

⁵According to Merton and Brodie, the financial system facilitates resource allocation by providing “(i) ways of clearing and settling payments to facilitate trades, (ii) a mechanism for pooling resources, (iii) a mechanism to transfer resources across time and across borders and amongst industries, (iv) a way of managing risk, (v) price information in decentralised decision making and (iv) a means of dealing with incentive problems that make financial contracts difficult and costly” (1995, p. 4). Heterodox economists accept that the financial sector has to carry out each of these particular functions but, as we say, disagree over the quantitative proportions that the sector needs to acquire in order to execute these functions efficiently. Epstein (2013), for example, presented just such a step-by-step critique in a recent conference presentation.

⁶While most mainstream financial theorists do not consider the continuing growth in size of the financial sector in a negative light, which is one reason that they do not typically use the term *financialisation*, a minority are beginning to question whether there are in fact limits to that size beyond which the financial sector becomes a “drag” on economic growth and development (see, e.g., Beck et al., 2014 or Cecchetti and Kharroubi, 2012).

generally taken to indicate role reversal: rather than finance serving the interests of production, it is production serving the interests of finance. Nowhere is this apparent excess of financial scale and role reversal more pronounced than in the trading sphere. As already noted, trading volumes in all of the major financial markets have exploded over the past three decades at rates far above those for material outputs or industrial investments. Some of this trading may be linked to real sector activities, but the fact that such trading constitutes a vanishingly small fraction of total financial trading volumes coupled with the observation that the latter are overwhelmingly dominated by short horizon trades would appear to show that the key financial trading motive is speculation: trading solely in order to gain from trading. Mainstream theory generally takes a benign view of the unrestricted growth of financial speculation in that this is seen as something that usually adds to the liquidity and hence informational efficiency of the financial markets, outcomes which in turn can only add to the efficiency of production and resource allocation. However, the experience of recent decades, which have been replete with price bubbles, currency crises, and other severe financial disorders, all of which have had damaging repercussions on the real economy, has only served to confirm the negative but essentially correct opinion of speculative trading taken by heterodox theory. In this opinion, the growth of financial speculation has less to do with assisting the allocation of resources in the real sector for the benefit of society than with effecting the diversion of resources to the financial sector for the latter's own benefit.

Financialization as the outcome of production constraints

Just as financialization tends to be identified with speculative trading and other self-motivated activities because the scale of these activities cannot be explained in terms of the needs of the production process, so the root cause of financialization tends to be located in the constraints on that process. Industrial profit is the key variable in this regard. Firms under capitalism generally produce in order to generate profit, an aim that in turn can only be fully realized if household wage incomes and hence money-backed demand for consumption goods are maintained at a certain commensurate level. On the contrary, if wage incomes and hence the aggregate level of effective demand lag behind aggregate profits, thus placing constraints on the proportion of profits that can be realized in the normal way in the course of the production–consumption cycle, then it must follow that firms will need to seek supplementary outlets through which profits can be realized, outlets that can only be provided by the financial sector. The recent evidence appears to corroborate this conclusion in that corporations appear to be able to continue to realize large profits even while profit levels have consistently outpaced wage levels, on the one hand, and levels of industrial investment, on the other.

Heterodox theorists point to two major ways in which many of the large nonfinancial corporations have come to rely on the financial sector for profit generation and profit realization purposes. One is through their diversification into financial service provision. Indeed, some industrial corporations now generate more revenues from their provision of various financial services and products than through their traditional lines of production (Crotty, 2005; Epstein, 2005; Krippner, 2005). The other, more direct way, is through their provision of financial securities. Corporations have always been among the chief providers of financial securities but what is different today is that the top corporate managers now appear to have joined the ranks of rentiers and speculators in being as active on the demand side of the securities markets as on the supply side (Lazonick, 2010; Seccareccia, 2012). The fact that the remuneration packages of most of these managers are now dominated by stock options, thus giving the latter a huge incentive to find ways of boosting share prices, is generally taken to be the main explanation as to why an increasing proportion of profits are being diverted away from industrial investment and used instead to finance dividend payments, which have a direct positive impact on share prices, or share buybacks, which indirectly impact share prices by restricting the quantities of shares in circulation (Baud and Durand, 2012; Lazonick, 2013; Milberg, 2008). Finally, this same fact concerning equity-based managerial pay is also used to help explain why, in addition to uninvested profits, corporate managers increasingly resort to bond issuance as another means of raising cash to be returned to shareholders (Seccareccia, 2012).

In making the firms sector the main driver of financialisation, through its attempts to escape the production constraints on profit realization, the main driver of financialization, heterodox economists do not by any means ignore the part played by the other major economic sectors. Rather, all of these are shown as playing a significant role in one way or other. Thus banks, also eager to maintain the profits made from their links with large corporations, are increasingly moving away from their traditional, interest-charging corporate loan business toward fee-based sales of financial products and services (Seccareccia, 2012). Households are similarly important to the financialization process because their need to increasingly rely on bank credit to make good the income shortfalls caused by stagnant wage growth has furnished the banks with much of the raw material necessary for creating increasing amounts of asset-backed securities. Indeed, in some heterodox accounts of financialization the rise in various forms of household debt—mortgage loans, credit card loans, car loans, and so on—and the securitization of this debt are seen as a major driver of financialization (Lavoie, 2013; Palley, 2007). Finally, if banks are the main conduit through which securitization links with financialization, governments are the main conduit through which neoliberalism and globalization link with this same phenomenon. At the domestic level the

acceptance by governments of the neoliberal dogma that market efficiency is maximized when government intervention is minimized has helped spur the deregulation of financial markets thus enabling them to grow to proportions that were previously impossible (Kotz, 2010). Another, more direct boost to the growth of these markets has come from the rise in real interest rates that has accompanied the increasing prioritization of inflation targeting in macroeconomic policy (Duménil and Lévy, 2005). At the international level, the lifting of trade and capital controls has helped to promote closer integrations of the world's product and financial markets, the former process contributing to financialization, by helping to keep average wage levels low thus enabling more profits to be diverted to the financial sector, and the latter process contributing to financialization by adding to the competitive pressures forcing corporations to distribute any increased profits to the financial sector (Crotty, 2005).

Antireductionism

Given the massive contradiction at the heart of financialization as theorized by heterodox economists—namely, that its continued development depends on the repression of wages and rates of industrial investment that, by lowering growth and employment, have the converse effect of undermining the material foundations of its continued development—one can see why few if any of these economists are prepared to bet on its survival prospects over the longer term. Thus, Palley states that “there are serious reservations about the sustainability of the financialisation process” (2007, p. 2), while Stockhammer ends his recent review of the literature on financialization with a flurry of questions, the last of which is: “And, finally, will it [i.e., financialization] last or will it go down in the thunder of further financial crises?” (2013, p. 125). Other heterodox economists go further and predict that just as the previous era of financialization came to an abrupt end with the stock market crash of 1929 and the ensuing Great Depression, the current phase of financialization will most likely suffer a similar fate due to the huge damage done to the global real economy by the financial crisis of 2007–8. For example, Lavoie states: “Just as the Great Depression called an end to finance capitalism, the current financial crisis should bring about the end of financialisation” (2013, p. 232). Vercelli similarly argues that, as with the first financialization in the early part of the past century, the second financialization of our own time is not sustainable over the longer term because its “alleged advantages” are far exceeded by its “pathological aspects” (2013–14, p. 43).

If the very idea that financialization will collapse at some point indicates a belief that this phenomenon is not functionally useful to contemporary capitalism, this belief can in turn be traced back to a methodological feature that unites all heterodox discussions of financialization, namely, the resistance to any form of methodological reductionism. In the understandable concern

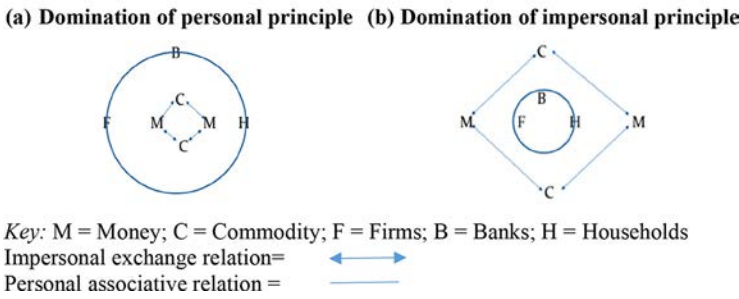


Figure 2. The ordering of economic principles.

to maintain the realism of their theories or models, heterodox economists generally take the sector rather than the individual as their analytical unit. What results from this highly aggregative approach is the assumption, illustrated in Figure 2a, that it is the associative principle (the personal, one-to-one relation between counterparties) that is the dominant economic principle under capitalism while the arm’s-length principle (the impersonal exchange relation) has a subordinate role. This ordering of economic principles is exemplified in the heterodox interpretation of the income–expenditure relation: while it is recognized that household expenditures on consumption goods conform to the arm’s-length exchange principle, what comes first in heterodox macroeconomic models is the fact that incomes are financed by the wages that are paid to households by firms on an associative basis. From this position, it follows that the bank-based form of finance is most ideally suited to maintaining the stability and continuity of macroeconomic relations.⁷

The crux of the matter is the quantitative relation between finance and material output. As can be seen in Figure 1, the quantity of bank deposit money can never deviate significantly from the quantity of material output over any significant length of time because this form of finance represents exactly the same type of one-to-one relation in the financial sphere as exists in the production sphere. Indeed, the whole point of classifying bank deposits as “endogenous” money is to bring out the fact that its quantity is always ultimately determined by the needs of firms and households engaged in production and consumption, respectively. By contrast, and as can also be seen in Figure 1, the quantity of capital market instruments can deviate significantly and for significant lengths of time from underlying output quantities because, once issued, the subsequent trading of these instruments need have no connection with the initial conditions of issuance. In other words, capital market forms of finance can assume quantitative proportions such as can

⁷Monetary “circuit” theory, as the very name of this branch of heterodox economics implies, makes absolutely explicit the primacy of associative economic relations in general and of the bank-based credit relation in particular. See Lysandrou (2014) for a critique of this theory.

potentially pose a threat to macroeconomic stability and continuity because these forms are representative of the impersonal exchange principle. If this potential threat is to be nullified, the capital markets have to be constrained in ways that can maintain the impersonal principle in a subordinate position relative to the associative principle, as illustrated in [Figure 2a](#); on the contrary, if the capital markets are allowed to grow to a size such that the impersonal exchange relation becomes the dominant economic relation that subsumes all other personal relations, as is illustrated in [Figure 2b](#), the potential threat to macroeconomic stability can become a very real one.

In view of the fact that orthodox Marxists similarly adhere to antireductionism, albeit that “class” rather than “sector” is their preferred analytical unit, it should come as no surprise that their analysis of financialization is fundamentally the same as that of other heterodox theorists. Strip aside the different terminology and conceptual categories that are used and one finds the same basic interpretation of financialization as a dysfunctional outgrowth of contemporary capitalism, a pathological symptom of its current phase of stagnation and decline. John Bellamy Foster, for example, echoing Paul Sweezy’s earlier views on the “financialisation of capital accumulation” (1997), argues that the current phase of “monopoly-finance capital” in which “financialization has become a permanent structural necessity of the stagnation-prone economy” is marked by “three crucial aspects:

- (1) The stagnation of the underlying economy meant that capitalists were increasingly dependent on the growth of finance to preserve and enlarge their money capital.
- (2) The financial superstructure of the capitalist economy could not expand entirely independently of its base in the underlying productive economy—hence the bursting of speculative bubbles was a recurrent and growing problem.
- (3) Financialisation, no matter how far it extended, could never overcome stagnation within production. (Foster, 2007, pp. 1–2)

Costas Lapavistas is another orthodox Marxist who has linked financialization, characterized as a “booming financial sector,” to “poorly performing real accumulation” (2010, p. 1). Lapavistas appears to differ from other heterodox economists in his specification of the “mediations through which the malaise in production has been associated with booming finance,” but the difference is rather more semantic than substantive in that these mediations are essentially those as also outlined by others, insofar as they involve the same loosening of corporate financial ties with banks, the same trend shift on the part of banks away from their traditional deposit taking and loan business toward fee-based transactions in the capital markets, and the same increasing involvement of households in the operations of finance. A final example of how the orthodox Marxist interpretation of financialization essentially coincides with that of other heterodox economists was recently given by Ben Fine, who defines financialization “as the expansion of interest bearing capital in intensive and extensive forms,” where the first signifies “the growth and proliferation of financial assets

themselves with increasingly distant attachments to production and exchange of commodities themselves and the second involves the extension of interest bearing capital to new areas of economic and social life in hybrid forms with types of capital (Fine, 2013–14 p. 47). That Fine goes on to identify these intensive and extensive expansions of interest bearing capital as ultimately being nothing other than dysfunctional phenomena of modern capitalism is shown by the causal connections he makes between these phenomena and the financial crisis and the ensuing recession. According to him:

this crisis was preceded by relatively slow growth by comparison to the post war boom (and current productive potential)... The reason for this is to be located precisely in the ways in which financialisation has governed economic and social restructuring, reducing levels and efficacy of investment (other than the fictitious) as well as undermining the broader social conditions within which such accumulation has taken place. (Fine, 2013–14, p. 59)

The cardinal question arising out of the above discussion is whether the ordering of economic principles implicit in heterodox and orthodox Marxist economic theories and as is illustrated in [Figure 2a](#) is indeed an accurate description of the fundamental nature of capitalism. If it is, then financialization can only be construed as a pathological phenomenon, in which case doubts about its sustainability are entirely plausible as are the predictions of its possible demise. However, if the opposite ordering of economic principles as illustrated in [Figure 2b](#) is the more accurate description of capitalism's unfolding development, it must then follow that financialization is indeed an organic part of this development, in which case the above doubts and predictions turn out to be completely wrong. In what follows we shall make this latter line of argument, taking as our starting point Marx's own point of departure in his analysis of capitalism.

An alternative view of the content of financialization

Although class exploitation is absolutely central to Marx's analysis of capitalism, he does not take the aggregative category of class to be his foundational analytical unit. Rather, the opening part of *Capital* begins with a disaggregated category, a single element taken as the unit of analysis, the "commodity."⁸ In beginning with the commodity, Marx begins with the individual, albeit the individual viewed not subjectively but objectively, not as a preference maximizer but as a commodity seller. As individuals operate in a division of labor system, their commodities have to conform to social standards of provision—unlike "products" that need only conform to privately established criteria—a constraint that immediately presupposes an essential role for money. In a neoclassical world populated by rational agents, there is no need for money because the subjective preferences and choices of agents can be reconciled both with each

⁸For further discussion of the microfoundations of Marx's economic theory, see Lysandrou (1996, 2000).

other and with technological and resource constraints by some central market force or authority (e.g., Walras's "auctioneer") that sets exchange ratios accordingly. In Marx's commodity world where there is no central price-setting and market-clearing authority, money is the medium through which social standards of pricing are set and enforced: it is through money's function as a measure of value that each individual can assign a price to the commodity put on offer, while it is through money's function as medium of exchange that privately assigned prices are either sanctioned (offers of money by buyers inform the seller that the commodity conforms to social standards of provision and pricing) or falsified (the nonoffers of money by prospective buyers inform the seller that the entity put on offer does not conform to social standards and thus does not qualify as a commodity).

While Marx's commodity-based analytical approach distinguishes itself from methodological individualism in that it can provide a realistic insight into the workings of decentralized, money-using economies, it distinguishes itself from heterodox macroeconomics in that it can provide this realistic insight in a way that respects the principle of logical generality, on the one hand, and the principle of historical evolution, on the other. Take the first of these two distinctions. In focusing from the outset on the relations linking the firm, household, and bank sectors, heterodox theorists in effect begin not with what all these sectors have in common, but with what differentiates them, namely, that they all fulfill different economic functions: firms a production function, households a consumption role, and banks a financing function. This opening focus on functional differences inevitably leads to a preoccupation with the associative relations that are necessary to the performance of the different functions—the wage relation in production, the credit relation in finance—a preoccupation that then reinforces the assumption that the associative relation is the dominant economic relation in the capitalist system. With Marx's commodity approach it is different. The point here is to establish not only a realistic but also a generalizing insight into the economic system: to begin with a single representative unit of the system is to see across the system and identify what all its constituent parts have in common. What is general to a modern economy is not the production relation or the credit relation, or indeed any other type of associative relation, but the impersonal commodity exchange relation. Only having first established this generality of commodity exchange relations as the all-encompassing framework of capitalism does Marx then proceed to discuss particular types of associative relations within this framework, beginning with the capital–wage relation in production, and subsequently the credit relation.

Now take the second distinction regarding historical evolution. An aggregative methodological approach that takes the sector as the analytical unit hinders the analysis of change in the capitalist system. The point is that the distinguishing characteristics of households, firms and banks in the nineteenth or twentieth centuries are not all that different from the characteristics

that these sectors have in the present century, which means that to keep attention constantly focused on these sectors and on the distinct functions that they perform runs the risk of missing out on the emergence of any new economic phenomena. It is different with a disaggregated commodity-based approach because another of its advantages is that it enables one not only to see across space (to identify the generality of the commodity principle) but also across time (to track the unfolding development of the commodity principle). The key point is that the “commodity” form is a historically conditioned category: any entity that has a use value has the potential to become commoditized, that is, to have its exchange value determined against socially established standards rather than set by private negotiation, but it is only under certain historical circumstances that this potential is realized. This is the case for example with material products. Elements of commodity exchange exist in most precapitalist economic formations, but it is only under capitalism that the commodity principle is stretched to the point where it covers most products traded within a given locality or region, for it is only then that the labor power capacity itself becomes a commodity as large numbers of individuals are transformed into propertyless workers who are forced to rely on the market for their subsistence needs.⁹

The contention here is that what happened to material products in capitalism’s opening phase of development is now happening to financial securities in its current phase. The governments and corporations issuing securities never see them as commodities but only as a means of financing the production of commodities. Similarly, the small household investors who have traditionally dominated the demand side of the securities markets have never had cause to take a different view of securities as they have never had to rely on them as investables: a household can put its savings into securities but as it does not have to market a wealth portfolio to the public there is also nothing to stop it from putting all of its savings into other assets such as bank deposits or real estate. It is different with today’s large institutional investors such as the pension and mutual funds and insurance companies that are now the dominant types of security holders.¹⁰ Previously a small cottage industry catering to a few wealthy clients, institutional asset management has become a mass industry catering to retirement and other welfare needs of large sections of the population. With this growth in the scale of asset management has come a corresponding growth in the scale of demand for assets whose use values are to serve as stores of value into which clients’ money can be

⁹For further discussion of the historical development of the commodity principle along “stretching” and “deepening” lines, see Lysandrou (2005).

¹⁰For data charting the recent growth of institutional asset management on a global level, see, for example, The City UK (2013) or Boston Consulting Group (2014). The U.S. experience illustrates the degree to which institutional investors now dominate the demand side of the capital markets. Where small household investors held 95 percent of U.S. equity in 1945, that ratio had fallen to 23 percent by 2012. As regards U.S. bonds, the ratio held by households is considerably smaller at between 9 percent and 10 percent (Goldman Sachs, 2013).

poured and from which money can be withdrawn to repay clients. In principle, other assets such as real estate, gold, and other natural commodities can also be used as value containers. However, the physical constraints on the supplies of these assets, combined with certain disadvantageous attributes, most notably a lack of liquidity, mean that institutional investors have to depend on financial securities as the major type of investable asset. It is this dependence that explains why institutional investors now tend to see governments and corporations as “dual commodity providers,” organizations whose function is to supply the debt and equity securities that are required for asset management needs as well as to supply the material goods and services required for consumption or production needs.¹¹

If the growth in the scale of professional asset management has led to the increased demand for securities to serve as portable stores of value, it is the accompanying change in the way that the asset management function is exercised that explains: (a) why institutional investors have pushed for the imposition of tighter transparency and information disclosure rules on security-issuing organizations, thus making it easier for them to cross-compare the risk characteristics of securities and to price them accordingly, and (b) why these investors have also pushed for the establishment of uniform governance standards against which the behavior of governments and corporations, and hence the risk characteristics of their securities, can be monitored and controlled. It is the general rule that whenever an industry grows in scale there is a corresponding shift toward more standardized forms of provision so as to accommodate the increased demands made on it. Professional asset management is no exception. In place of the broad-based, discretionally managed portfolio that was previously the norm, what is typical today is the narrow, rule-governed portfolio managed to a specified combination of risk and return as advertised in a fund prospectus or as laid down in an investment mandate. Given that the overall risk–return profile of a portfolio depends on the risk–return characteristics of the individual constituent securities, one can see, first, why institutional investors need to make systematic comparisons of securities to determine their respective suitability for inclusion in a particular portfolio, and second, why these investors need to constantly monitor the characteristics of the selected securities (which means a constant monitoring of the organizations that have issued these securities) in order to ensure the continuity of their contribution to a portfolio.¹²

¹¹For further discussion of firms as “dual commodity providers,” see Lysandrou (2013).

¹²The shift toward more standardized forms of asset management entails not only the tightening of transparency and governance constraints on security-issuing organizations but also a certain parallel tightening of the behavioral constraints on asset managers themselves. There will be always be some scope for fraudulent activities—overcharging of fees, misrepresentation of products, manipulation of accounts, and so on—but this scope will most likely be reduced in line with the ongoing standardization of the asset-managing industry, as has been shown by the experience of other industries. The point is that with the growth and standardization of an industry come benchmarks against which the behavior of the member firms is compared. With these benchmarks it becomes more difficult, if not impossible, to conceal deviant behavior. For further discussion, see Lysandrou and Stoyanova (2007) and Lysandrou and Parker (2012).

Just as the growth of the securities markets and the tightening of the constraints imposed by them on security-issuing governments and corporations can be largely attributed to the structural changes in the asset management industry, this is also true of the recent explosion of financial trading volumes. In the case of the securities markets themselves, much of the increase in trading comes down to the fact that the standardization of asset management has brought about a change in the very status of trading. Where trading was previously an exogenous activity, in that while needed to set up a portfolio, it was not subsequently essential to its maintenance, it has now become an endogenous activity, in that frequent trading is vital to keeping a portfolio to its specified risk–return target.¹³ As for the growth of trading in the money and foreign exchange markets, a large part of this growth can be attributed to the widening disparity (again, see [Figure 1](#)) between the size of securities stocks, on the one hand, and the size of bank deposits, the major component of the money supply, on the other. Securities, as with material commodities, need money to serve as a medium of exchange to facilitate their circulation and they need money as a store of value to temporarily bridge the gaps in their circulation. Faced with this increasing demand for money’s services from institutional investors, but at the same time constrained by various factors, including government monetary policy, and by regulatory rules from creating deposits above certain limits, banks resolve the dilemma by passing around any spare cash among themselves. These cash-recycling operations in the interbank and money markets take various forms, but it is generally the case that unsecured trades dominate the overnight markets where credit risk is negligible, while the preference at longer maturities is for collateralized transactions that minimize credit risk and thus lower the cost of obtaining liquidity. This same point also helps to explain the growth in daily foreign exchange (FX) turnover that is fast approaching the \$6 trillion mark. Approximately half of this turnover comprises FX swaps, transactions that combine a spot transaction between two currencies and a forward reverse transaction between the same two currencies. While some FX swaps are indeed motivated by currency demand and exchange rate considerations, the majority proportion of these instruments are in fact motivated by money market-type borrowing considerations in that they represent an alternative type of repo, the difference merely being that in place of government bonds, a key currency such as the dollar serves as the collateral.¹⁴

Although the trades described above typically have short time horizons, they are not speculative trades. In fact, they are the antithesis of speculation because where speculators trade to exploit any price movements, asset managers who trade for portfolio-balancing reasons or banks who trade for cash borrowing

¹³In addition to portfolio-balancing trading, there can of course also be trading by institutional investors that may serve no useful purpose in asset management, for example, “churning”—trading simply to appear to be doing something so as to justify fees. For a fuller discussion of churning and other fraudulent activities that institutional investors can engage in, see Grahl and Lysandrou (2006).

¹⁴For more discussion of the growth of trading in the money and FX markets, see Grahl and Lysandrou (2003).

or lending purposes try to do so in ways that avoid causing price movements. This is why institutional asset managers tend to deploy trading methods and to use trading venues that ensure that their large orders cause minimal price changes, thereby reducing the potential costs of trading. This is also why banks that engage in repo and FX swap trades tend to execute these trades in the deepest and most liquid money and FX markets, and thus where their price impact is minimized. However, while speculative trading is antithetical to portfolio-balancing trading or to cash-recycling trading between banks, it is also parasitic on the latter. The highly concentrated nature of trading in all the major financial markets gives clear proof of this parasitism. If speculative trading was indeed a genuinely independent, self-enclosed activity, we should expect to find a much wider dispersion of speculative trades across different securities or currencies where there is greater scope for divergences of opinion or information. However, the opposite is the case insofar as most speculative trading is concentrated on a very few securities or currencies, those with the most liquid markets and hence those most used by institutional asset managers and banks.¹⁵ Try as they might to avoid causing price disturbances through their trade orders, institutional investors and commercial banks will always cause such disturbances, which will in turn always give hedge funds and other speculators the opportunity to profit from them. Such disturbances are likely to be very small because of the measures taken to minimize them, but it is precisely for this reason that the hedge funds and other speculative institutions have to resort to sophisticated, computer-based techniques (high-frequency trading is a notable example) to trade the same securities or the same currencies many times over, sometimes as much as forty or fifty times a day, in order to extract any profit from these trades.¹⁶

Thus, the present-day scale of nonspeculative and functionally important short-term trading in the major financial markets possibly begets an even greater scale of speculative and potentially dysfunctional short-term trading in the same markets. That said, there is no reason to take the speculative component of short-term financial trading as the defining content of financialization. Rather, that content is the commoditization of financial securities because institutional investors are required not only to hold increasing volumes of securities to meet their asset management needs but also to price and trade securities against uniform standards to meet these same needs. Strip out financial market trading that is connected in one way or another with institutional asset management, and speculative trading collapses to a fraction of its current scale. However, strip out speculative trading and you would still find an enormous amount of short-term trading that is necessary for asset management and, consequently, for much of the money market operations that support the liquidity needs of asset managers. Only if the growth of institutional asset

¹⁵For further discussion on the concentrated nature of trading, see Grahl and Lysandrou (2006) and Lysandrou and Stoyanova (2007).

¹⁶For further detail on this point, see Grahl and Lysandrou (2014).

management was considered to be an unimportant feature of modern-day capitalism could the volumes of trading triggered by that growth also be considered unimportant. However, if the continued growth of this industry is in some way important, then so must be many of the accompanying manifestations of this growth that go under the collective label of financialization.

This proposition of course raises the question as to whether the continued growth of asset management is indeed a key contributory feature of contemporary capitalism. The commoditization of securities that has been triggered by this growth may be entirely compatible with capitalism's unfolding development as a commodity system but an explanation showing logical compatibility is not enough. What is also required is an explanation showing the functional usefulness of this commoditization, for only with such an explanation can we gain a clearer understanding of the fundamental cause of financialization and, in so doing, extrapolate forward and give a different prediction of its future fate. The next section addresses these issues.

An alternative view of the cause of financialization

Functional explanation in the natural and social sciences can be interpreted in different ways. In some versions, the point is to show how the components of a containing system relate to the goal state of the system (see, e.g., Nagel, 1961). In other versions, which seek to erase any trace of teleology, the point of functional explanation is merely to show how the component parts of a containing system contribute to its operation (see, e.g., Cummins, 1975, 2003). It is this latter, nonteleological version of functional explanation that we have in mind when referring to the functional usefulness of institutional asset management and, by extension, of financialization. That said, it seems impossible to demonstrate this usefulness regardless of the way in which functional explanation is understood. On the one hand, it has to be shown that the recent structural changes in the asset management industry and their various manifestations in the securities markets are necessary to the ability of the financial sector to serve the real sector; on the other hand, the discussion in the earlier part of this article would suggest that such a task cannot be achieved because there are simply too many financial securities, too many conditions attaching to these securities, and more short-term trading of them than can be explained in terms of the needs of the real sector. However, there is a way of resolving this conundrum and that is to go back to Marx and to the crucial distinction he draws between the *capacity* for labor and the *activity* of labor as such. If this distinction can be applied to workers then it can also be applied to government and corporate organizations; that is, a distinction can be drawn between these organizations' capacities for producing goods and services and the streams of material goods and services that actually flow from the use of these capacities (as shown in Figure 3). In regard to these material outputs, the financial sector need not grow beyond a certain scale or

Category	Capacity	Activity	Income
Workers	Labor Power	Labor	Wage
Firms	Capital	Production	Profit
Governments	Government	Service Provision	Taxation

Figure 3. Capacities and Activities.

assume any of the other characterizing features of financialization in order to facilitate the efficiency with which these outputs are produced or allocated. Mainstream theorists may try to propose the opposite view, but their arguments in support of this view are simply not convincing. By contrast, the position in regard to organizations' capacities for production is very different. To the extent that the demands on these capacities grow in line with the continuing growth in the size and complexity of domestic capitalist economies, there must also be a corresponding growth of the financial sector if it is to assist organizations in carrying the financial burden of these growing societal demands. To illustrate the point, let us begin with the government capacity.

While the government expenditure to GDP ratio averaged approximately 10 percent throughout the nineteenth century and into the early twentieth century, that ratio began to rise during the Great Depression and did so even more significantly after World War II. By 1980 it averaged about 45 percent, where it has more or less remained (Di Matteo, 2013; Tanzi and Shucknecht, 2000). Despite all the neoliberal talk of downsizing the role of the state, that size is likely to remain stubbornly high, given the mounting pressures on contemporary domestic economies, not least of which are those stemming from demographic, technological, and environmental changes, which require corresponding flows of government services to cope with those pressures. Faced with increasing demands on their capacity to govern but at the same time faced with limits on the amounts of tax revenues that can be generated, governments have increasingly resorted to bond issuance as a means of bridging the gap. If inflation targeting became the overriding macroeconomic priority for Western governments after 1980, and remained so until at least the outbreak of the financial crisis of 2007–8, this was a reflection not only of the neoliberal ideological influences

on these governments but also of their more urgent and more material concern to contain borrowing costs in the face of expanding borrowing volumes.

While the control of inflation and hence of borrowing costs is a necessary condition enabling governments to increase their borrowing levels, it is not a sufficient condition. On the demand side of the government bond market there must exist an investor body large enough to accommodate the increased scale of government borrowing. The reality is that such a body does now exist, courtesy of the very same pressures that have forced governments into continually increasing their supply of bonds in the first place. While other factors have played a role in transforming asset management into a mass industry, by far the most important is the move away from universal government provision of social and welfare services toward more selective forms of provision that prioritize the needs of the poorest and most vulnerable sections of the population. As mid- to high-income households have been made to take more responsibility for their retirement and other welfare arrangements, they have had to take a keener interest in the returns on their assets, a development that helps to explain the ongoing shift in the composition of household assets away from bank deposits toward capital market securities.¹⁷ At the same time, the fact that most individuals continue to have a limited appetite for risk even while they become more yield-oriented helps to explain the trend toward delegating asset management to professional investors. As already noted, with the growth of asset management comes a corresponding growth in the scale of demand for investable securities, including government bonds. In addition to the increase in the issuance of bonds of given maturities, another important element in the expansion of the government bond markets is the lengthening of maturities. Bonds with a twenty- or thirty-year, or even longer, maturity are now being issued alongside shorter dated bonds as governments take advantage of a low-inflation environment to spread out their debt repayments over longer periods of time. Only institutional investors, and particularly insurance companies and pension funds, have liabilities on a scale and of a maturity structure that make their demand for bonds dovetail with the interests of their issuers.¹⁸

¹⁷For further details on recent trends in household savings and asset allocation, see BIS (2007).

¹⁸While insurance companies tend to concentrate asset holdings on bonds rather than equities because of their greater safety—they pay interest by law as well as having a known maturity date—they also need to hold a substantial proportion of their bond portfolios in the form of government bonds. This is because the latter generally represent the safest and most information-insensitive type of bond, given that they are backed by the power of taxation and because they generally represent the most liquid type of security, given the depth of the government bond market. Proponents of modern monetary theory tend to underestimate the importance of these points. An example of this underestimation is Nersisyan and Wray's (2010) critique of Reinhart and Rogoff. In that critique they are right to say that "government debt is financial wealth for the private sector," but in our view wrong to say that for a government of a country that operates on sovereign currency "issuing bonds is a voluntary operation that gives the public the opportunity to substitute their non-interest-earning government liabilities—currency and reserves at the central bank—into interest-earning government liabilities, such as treasury bills and bonds, which are credit balances in securities accounts at the same central bank" (2010, pp 13–15). Who, exactly, are the "public"? The distinction that must be made, but that is not made, is between household and institutional investors. As stated earlier, households that do not market portfolios to the public may be able to switch all of their savings from government fiat money to government bonds and back again according to economic conditions, but institutional investors that do market portfolios have no such choice. They can keep a portion of their assets in cash form, but their very function as financial intermediaries means that they must at all times keep the bulk of their assets in the form of yield-bearing securities.

The fact that the overwhelming bulk of household demand for investable assets is channeled through institutional investors rather than exercised directly has a crucial bearing on the depth and liquidity not only of government bond markets but also of markets for bank and nonbank corporate securities. Commercial banks have always tapped the capital markets for extra funding resources, but as their core lending business has grown so also has the importance of their contribution to the supply of securities (as can be seen in [Figure 1](#)) for three sets of reasons: (1) increased lending to small businesses and households by banks on the asset side of their balance sheets, coupled with increasing gaps on the liability side caused by changes in household savings behavior, explains the increase in the need to bridge these financing gaps with the issuance of bonds and short-term paper; (2) the same household and small business pressures on banks explains their pivotal role in the securitization process as they attempt to accommodate the expanding demands for credit while at the same time containing the costs of this accommodation by off-loading loans in the form of asset-backed securities; (3) the constraints on banks to maintain ever tightening capital adequacy requirements explains the increase in their issuance of equity. Turning to the large nonbank corporations, those in the United States and United Kingdom have always relied on the capital markets to supplement their longer-term external funding requirements and, when doing so, have always tended to issue a mix of debt and equity securities in order to avoid an excessive concentration of risk, on the one hand, and an excessive dilution of the benefits of ownership and control, on the other. What has happened in these countries in recent decades is that while the ratio of debt to equity forms of external funds raised by corporations has remained fairly stable, the ratio of bank borrowing to capital market forms of funding has not. As the costs of the latter have fallen in line with the deepening and closer integration of the capital markets, American and British corporations have also increasingly come to rely on these markets for all but very short-period borrowing requirements. The reason that corporations in other regions such as continental Europe and Asia, which have historically looked to banks for virtually all of their external funding needs, are now moving closer to the Anglo-Saxon model of financing is partly because they themselves see the cost advantages of a more differentiated approach to external funding, and partly because the commercial banks in these regions—in their attempt to free up space in their balance sheets for more profitable lines of business—are encouraging their corporate clients to look to the capital markets for their long-term financing requirements.¹⁹

While governments and corporations have reaped benefits from the dominant presence of large institutional investors in the securities markets, these benefits have not come without certain constraints, namely, the increased

¹⁹See, for example, Lysandrou (2009) for a discussion of recent changes in the continental European corporate landscape.

pressures on all security-issuing organizations to comply not only with demands for greater transparency and information disclosure but also with demands that they tailor their behavior in accordance with prevailing governance norms. These new investor constraints have come under heavy criticism on the grounds that they can potentially undermine the efficiency with which governments and corporations carry out their production or service provision functions.²⁰ However, these criticisms miss the points that (a) the new investor constraints are all about protecting the efficiency of asset management, and (b) the protection of this efficiency has less to do with *facilitating the efficiency of production* in the underlying real economy than with *financing the capacities for production* deployed in that economy. The crux of the matter here comes down to the recent changes in the scale and duration of governmental and corporate dependence on the capital markets. When in the past governments and private corporations would typically issue small amounts of securities or, if issuing large amounts, would do so only as a temporary measure to confront a particular emergency or to fund a particular project, it was enough for them to have small household investors as the dominant type of investor on the demand side of the securities markets, a type that had no need to enforce strict conditions on security issuers given that the holding or trading of securities was not indispensable to their function as households. Today when governments and corporations have a large and permanent need of capital market forms of funding, they require a very different type of investor to be dominant on the demand side of these markets, namely, institutional investors with liabilities on a scale and of a maturity structure that match the assets issued by the borrowing organizations. But this type of investor, precisely because the holding and trading of securities is indispensable to their portfolio management function, do need to enforce strict conditions on security issuers to ensure the “tangibility” of securities that can reliably serve as portable stores of value. Thus, governments and corporations today face a trade-off: they can either retain a certain freedom of action when issuing securities but then accept tight limits on the amounts of securities that can be issued, or they can seek to lift the limits on the amounts of securities issued but then accept tight constraints on their freedom of action. What security-issuing organizations cannot do is have it both ways: retain complete freedom of action while continually increasing the amounts of securities issued.

The upshot of the above is that the disproportionate size of the financial sector relative to the real sector signifies not role reversal so much as *role reciprocity*. If organizations are viewed from the standpoint of the economic activities that they perform, then it does appear that there is more finance than is needed to assist with the efficient conduct and coordination of these

²⁰See, for example, Lazonick and O'Sullivan (2000) or Lazonick (2013), for a particularly critical view of the negative impact of these constraints on private corporations.

activities, and thus that the real sector is effectively being made to serve the financial sector rather than the other way round. On the contrary, if organizations are viewed from the standpoint of their capacities for activity, it then becomes clear that the relentless growth of the financial sector is an integral part of the process through which real and financial sector interests are mutually reconciled, in that governments and corporations, on the one hand, need to issue increasing amounts of securities to maintain their capacities for production or service provision, and in that large institutional investors, on the other hand, need to absorb increasing amounts of these securities to maintain their capacity for asset management. Once this point concerning role reciprocity is understood, it then becomes possible to throw new light on the root cause of financialization and thus also on its longer-term survival prospects. In regard to the question of cause, recall that most heterodox economists trace this to production and profit realization constraints in the underlying real economy. The position here is different. While it is indeed the attempts to escape constraints in the real economy that are the driving force behind financialization, these constraints have less to do with those of production than with those of time: the future is being colonized in order to escape the constraints of the present. Securities are tradable claims on the future income streams of governments and corporations, but the fact that in order to maintain their tangibility as stores of value, the major buyers of securities require that the issuers comply with transparency and governance standards combined with the fact that most issuers accept these requirements, in effect mean that the future is being transformed into a parallel space of permanent habitation alongside the present.

This notion of the spatialization of the future is alien to all current streams of economic thinking. The general equilibrium assumptions underpinning mainstream macroeconomic theory act to eliminate the future as a distinct time frame altogether: if there is a central market authority that not only sets prices for every good and for every contingency but also for every delivery date, it must then follow that there can be no need for securities to serve as stores of value to be carried over time. Although the future does have a meaningful existence in mainstream finance theory it does so merely as an intermediary medium through which equilibrium is achieved, the logic being that it is through continuous trading between agents who make predictions about the future that prices can converge to market clearing levels. For finance theory to envisage the future as an inhabitable space, it has to make provision for certain types of investors who need to hold securities to fulfill their asset management function and who thus need to focus on the “quantity” dimension of securities, their value storage capacities, as much on their “price” dimension, the ratios at which they exchange. However, as this theory draws no distinction between groups of agents except as regards the different information that they possess, it sees only the price dimension of securities as a

topic of importance. In this regard, the fact that the theory dispenses with auctioneer-type assumptions explains why it treats price formation less as an instantaneous event than as a sequential process and thus why it recognizes the future as a time frame in its own right. The point bears repeating, however, that while the future is recognized in finance theory, it is not as a space of permanent habitation.

The same criticism applies to heterodox economists. They do not collapse the future into the present because they dispense with the idea of a central price-setting authority and thus take seriously the problem of uncertainty. However, although a fundamental divide separates heterodox economics from mainstream macroeconomics, the same is not true in regard to mainstream finance theory, which has as many points of similarity as of difference. The key difference is that heterodox economists see market adjustments in the goods and labor markets as typically involving quantities rather than prices and thus see these adjustments not only as decentralized, sequential processes but also as processes that do not necessarily, or even usually, result in market clearing solutions. The key similarity is that heterodox economic models also do not separate out large institutional investors from other types of investors and thus also make no provision for a class of agents as much preoccupied with the quantity dimension of securities (defined above) as with their price dimension. This is why in these models the financial securities markets are the one group of markets that follow a price adjustment rather than quantity adjustment rule and thus the one group of markets that can reach equilibrium.²¹ As in finance theory, the future exists merely as a time frame that helps both to influence and shape the decisions made by firms and households in the present. Firms form expectations about the future when deciding how much to invest and produce just as households form expectations about the future when deciding how much to save or spend. However, while these agents visit the future insofar as they form such expectations, they do not occupy it on any permanent basis because the dangers and pitfalls attaching to uncertainty prohibit any such occupancy. In heterodox economics the only time frame that is both potentially inhabitable and perfectly safe is the present, which is sandwiched between an unrecoverable past and an unknowable future.

While once valid, this view of the future has become an anachronism. To drive home the point consider the analogy of the European colonization of the American continent. The first European people to arrive on this continent were explorers, pirates, and adventurers. Only later did permanent settlement of the land begin, with the arrival of large numbers of European families, most of whom were escaping home pressures of one type or other. Just so with the

²¹According to Godley and Lavoie: "market clearing through prices does not usually occur except in financial markets" (2012, p. 18)), and quoting from an earlier publication by the same authors, "with trivial exceptions, there are no equilibria (or disequilibria) outside financial markets" (2006, p. 2).

colonization of the future: where its first regular visitors were typically speculators, fortune hunters, and cheats, it is only now being permanently settled by pension funds and insurance companies and other large institutional investors. In saying that the future is being turned into a structured space suitable for permanent habitation, we are not suggesting that uncertainty has disappeared and risk thereby eliminated, but rather that, in contrast to what was previously available, there now exists a wider and more sophisticated array of financial instruments (e.g., derivatives),²² and financial techniques (e.g., the narrowing and tiering of portfolios to a core-satellite pattern) for managing the risk on asset portfolios.²³ More important, the major development that facilitates greater risk management is the imposition of the new types of constraints on security-issuing organizations. As already noted, these new constraints differ from previous ones not only in degree but also in kind in that their purpose now has to do not merely with the *monitoring and measurement of the risk* on securities but also with the *control* of that risk. The spatialization of the future is the direct result of these new transparency and governance constraints by means of which institutional investors attempt to hold firm the value storage capacities of securities over long stretches of time. To again use an analogy, just as the buildings, transportation systems, communications networks, and so on constitute the necessary physical infrastructure that makes possible the production and trading of material outputs, so the new transparency requirements and governance rules and regulations constitute the infrastructure of time, the beams and pillars, the walls and floors that help to give body and shape to the future as an auxiliary economic space.²⁴

Turning finally to the question concerning the long-term prospects of financialization, we have seen that heterodox economists are generally skeptical of these prospects, some going so far as to doubt that financialization will

²²Derivatives are financial instruments that are used by a wide array of financial institutions to either hedge against, or alternatively speculate on, risk. Over-the-counter (OTC) interest rate derivatives such as forward rate agreements (FRAs) and swaps are by far the most important component of the OTC market, a fact that partly ties in with the exigencies of institutional asset management. Long-dated liabilities resulting from pension and annuity products have very large interest rate exposures that can prove costly in the face of even the smallest changes in interest rates, a problem that is compounded by the fact that on the asset side of their balance sheets, insurance companies and pension funds typically hold securities that have a different return–risk profile to their liabilities. In order to reduce this mismatch, interest rate derivatives are used by insurance companies and pension funds to hedge their liabilities by providing them with products whose values move in the opposite direction of those associated with any interest rate changes.

²³The point about a core-satellite framework is that risk is diversified not merely within a single portfolio but across portfolios; core portfolios track market indexes either closely (“core-passive”) or with small departures from indexes (“core-active” and “enhanced index”), whereas satellite portfolios take subsections of market indexes as their benchmarks (e.g., “value” versus “growth” stocks or “small cap” securities versus “large cap” securities).

²⁴To make this argument is not to suggest that the ongoing structuring of the future will be a seamless, conflict-free process. On the contrary, as with any development under capitalism that has unfolded without any blueprint or conscious design, the process will face problems, of which some may cause it to slow down and others may even temporarily force it into reverse gear. The point, rather, is that as with other past developments under capitalism that have eventually overcome the barriers in their way because of their functional usefulness, so will the structuring of the future continue because there will continue to be a need for it to serve as an auxiliary economic space.

survive even in the short term because of its alleged causal role in the recent financial crisis. We believe this allegation to be incorrect in that while financialization was certainly implicated in the crisis, it was not its primary cause. Rather, that role belonged to the structural imbalances in the global capitalist economy, the most notable of which was the huge growth in income and wealth inequality.²⁵ Financialization could still be said to have had causal primacy in the crisis if it had been the main driver behind the huge growth of economic inequality in the period prior to the outbreak of the crisis, but in our view this also was not the case. Financialization undoubtedly helped both to accelerate inequality, for example, through helping to make securities-related inducements a major component of corporate and banking remuneration packages, and to accommodate the growth of inequality, for example, through helping to provide the accumulating quantities of private wealth a convenient means of storage. That said, the fundamental cause of inequality in the current era of capitalism, as in every previous era, is exploitation: the continual suppression of wages toward subsistence and other minimal levels thus giving maximum space to the extraction and distribution of profits. Until this process of surplus extraction from the world's majority and its distribution among the world's minority is reversed, economic crises will continue to break out in the future as they have done in the past, even though each successive crisis may possibly differ in its locus of origin, in its outward manifestation, or in the scale and reach of its consequences. Through all of these crises, however, financialization will most likely continue to develop and it will do so for the following two reasons.

The first concerns the advanced market economies that currently account for the overwhelming majority of the world's securities stocks. Predictions that the financial crisis will bring about the end of financialization in these economies could not have been more wrong because the crisis is, if anything, bringing about the exact opposite result. Consider the supply side of the capital markets in the advanced economies. Already needing to issue increasing amounts of bonds to bridge the widening gaps between their expenditures and tax revenues before the outbreak of the financial crisis in 2007–8, the

²⁵The crisis involved neither the mass of government and corporate securities nor the mass of repos and other money market instruments that used these securities as collateral. Nor did the crisis involve the mass of asset-backed securities issued by special purpose entities (SPEs) and other shadow bank entities where conforming loans were used as the backing collateral ("prime" asset-backed securities). The reasons for this were that all of these securities complied with the standard rules of market exchange (transparency, ease of calculating and pricing risk, etc.). The financial products at the epicenter of the crisis were those that had broken all the rules of market exchange, namely, collateralized debt obligations (CDOs), the money market instruments that used CDOs as collateral, and the derivatives such as credit default swaps that used CDOs as their underlying reference entities. Certainly, the banking sector had the opportunity (the exploitation of weak regulation) and the incentive (the maximization of fee incomes) to create these toxic CDOs. However, the timing of events, the fact that the CDO market, which had been in existence since the early 1980s, only registered a twelvefold increase in size between 2003 and 2007, that is, exactly at the time when yields were falling in all of the major U.S. bond markets due to the global pressure of demand for safe stores of value, would indicate that imbalances outside of the banking sector had more to do with causing the crisis than the failures inside that sector. For further information on these points, see, for example, Caballero (2010), Goda and Lysandrou (2014), Lysandrou (2011) and Lysandrou and Shabani (2015).

governments of these economies have since been forced to depend even more on bond issuance as a means of financing the policies needed to contain the economic and social fallout of the crisis. Similarly, the financial crisis will likely see a greater, not lesser, boost to financialization coming from the banking sector as banks are forced to issue more equity to adhere to tightening capital adequacy requirements, to issue more bonds to fund the widening gaps between their asset side lending to households and businesses and their liability side shortfalls in households deposits, and finally, to securitize more loans as a further means of conserving capital. Now consider the demand side of the advanced economy capital markets. Given that one of the likely major consequences of the financial crisis is to accelerate the ongoing government policy shift away from universal forms of social and welfare provision toward more selective forms, and given that a postcrisis low interest rate environment is likely to persist for some time, thus placing tight constraints on how much interest banks can pay on household savings deposits, we are likely to see more households place their savings with institutional asset managers, thus requiring the latter to increase their demand for investable securities.

The second reason that financialization will not only continue to survive but also likely to continue to scale new heights concerns the world's emerging market economies. Globalization may not be a reality from a "location" standpoint, in that most economic activities continue to be conducted within national or regional borders, but it is a reality from the "constraint" standpoint, in that globally harmonized pricing standards now exist for most material goods and services produced in the world today (see Lysandrou, 2005). Following the complete collapse of colonialism in the middle of the past century and the near complete collapse of communism toward the end of that century, the emerging market economies (EMEs) have come to play an integral part in the globalization of commodity relations as attested by their growing share of world GDP (37 percent in 2012 as compared with about 20 percent in 2000) (IMF, 2013). By contrast, their role in the financialization process remains negligible as shown by their low share of world equity stocks (15 percent in 2012) and even lower share of world bond stocks (just 9 percent in 2012) (Grahl and Lysandrou, 2014; IMF, 2013). Part of the explanation for this state of affairs is that policymakers in the EMEs have deliberately promoted bank-based forms of finance over capital market forms because the former fit more easily into government-coordinated plans for promoting rapid economic growth and development. Another part of the explanation may be that the kind of transparency, governance, and other such standards that are required to develop deep and liquid capital markets are orders of magnitude more difficult to establish and maintain than are the production standards covering material goods and services. However, whatever the obstacles that have previously stood in the way of capital market development in the larger EMEs, at least, these obstacles will sooner or later have to

be overcome because the various organizations operating in these economies will need at some point or other to increase the amounts of securities that they issue. They will need to do so because as their economies continue to grow and mature and, therefore, as the corresponding pressures on their major organizations' capacities for activity continue to mount, these organizations will also need to increasingly colonize the future so as to make it share the burden of these pressures.

Conclusion

It may be that the financialization process that unfolded toward the end of the past century need not have occurred had the major organizations operating in many of the advanced market economies found an alternative means of easing the financial pressures on them. However, this is conjecture. The reality is that financialization has become an entrenched feature of the contemporary global economic system and set to remain so as long as this system continues to be organized according to the commodity principle. This is not to say that there are no dysfunctional and potentially destabilizing aspects of financialization. On the contrary, it is recognized that several such aspects are serious enough to require urgent attention. The huge growth of speculative trading conducted by the hedge funds and other parasitic institutions is a case in point. Another is the huge concentration of wealth in the hands of a tiny number of super-rich individuals who are the main clients of the hedge funds. However, these and other serious disorders will not be resolved through the use of strategies that are more broadly aimed at challenging the whole financialization process. Such strategies to contain or reverse what is presently uncontrollable and irreversible will achieve nothing and will get in the way of those strategies that can achieve something. If the dysfunctional aspects of financialization are to be successfully targeted and eliminated they must first be isolated and separated out from the functionally useful aspects. The present study has sought to contribute to the kind of understanding that is needed to make this separation.

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