

# WEA Commentaries\*

A publication of the World Economics Association.  
To *plurality*. The Association will encourage the free exploration of economic reality from any perspective that adds to the sum of our understanding. To this end it advocates plurality of thought, method and philosophy.

\* Formerly the World Economics Association Newsletter

## Inside this issue:

<b>Studies on financialization in Latin America</b> <i>Esteban Pérez Caldentey</i>	<b><u>2</u></b>	<b><u><a href="#">html</a></u></b>
<b>Socialism, Economics and the Left</b> <i>David Ruccio</i>	<b><u>4</u></b>	<b><u><a href="#">html</a></u></b>
<b>Economics for an Information Age</b> <i>Patrick Spread</i>	<b><u>5</u></b>	<b><u><a href="#">html</a></u></b>
<b>Complexity in Economics</b> <i>Maria Alejandra Madi</i>	<b><u>7</u></b>	<b><u><a href="#">html</a></u></b>
<b>On Global Capitalism and the Survival of Democracy</b> <i>Maria Alejandra Madi</i>	<b><u>10</u></b>	<b><u><a href="#">html</a></u></b>
<b>Announcements and WEA contact details</b>	<b><u>12</u></b>	

**WEA young  
economists**

**Facebook group**  
(now 6000+ members)

**Past Commentaries available at:**

**<http://www.worldeconomicsassociation.org/newsletters/>**

**World Economics  
Association**

**Voluntary annual  
membership fees:**

**<http://www.worldeconomicsassociation.org/membership/annualfees>**

## **WEA Pedagogy Blog**

**...welcomes posts about your experiences and suggestions on teaching and learning economics, with a strong focus on methods leading to deep understanding of current real world economic issues.**

## Studies on Financialization in Latin America By [Esteban Pérez Caldentey](#)

***Studies on financialization in Latin America*** is a CEPAL publication in Spanish edited by Martín Abeles, Esteban Pérez Caldentey and Sebastián Valdecantos, [2018, Economic Commission for Latin America and the Caribbean (Santiago, Chile)]

It is a collection of ten chapters written by experts on economic development, macroeconomics and finance that analyze and explore the different dimensions of financialization and their economic, social and institutional implications for Latin American countries.

The various definitions of financialization highlight the prolonged decoupling between the real and financial sectors. These also emphasize the predominance and growing role of the financial sector, as well as the financial motives, and financial institutions and agents over the functioning of the real economy which is a key feature of developed economies since at least the 1980s and even the 1970s.

The divorce between finance and the real sector, among other factors, was facilitated by the emergence of large complex financial institutions in the 1990s and 2000s. These operate as a worldwide network of offices and subsidiaries, with centralized financing that is distributed within the financial group as part of a global strategic plan, and they dominate the global financial system.

Large complex financial institutions have grown substantially in the last decade. They account for the bulk of financial intermediation between countries and bring together services and institutions such as banking, insurance, securities and asset management.

These institutions and the systems they create have also proven to be highly fragile. At the same time, the disconnection between the financial and real sector has provided a solid justification for financial deregulation (since the former is assumed to be driven by forces other than those underpinning the latter) strengthening, in this way, the process of financialization.

Some authors see financialization as a recurrent process within capitalist development. In this sense, the novelty of the current process of financialization is not to be found in the phenomenon itself, but in the various dimensions in which it manifests, both in developed and developing economies, and in how it affects a broad range of actors and economic transactions in the real and/or financial spheres of economic activity.

Financialization is reflected in the high rate of growth



of the financial sector above that of the real sector; and in the prominent increase in the income share of the financial sector relative to total income. The improvement in the financial sector's profitability has led businesses to direct their activities towards financial activities, giving priority to increasing shareholder value and also to taking on higher levels of indebtedness. Moreover, indebtedness is a generalized phenomenon also involving the non-financial corporate and household sectors.

The trend towards financialization is not the result of market or financial imperfections, or frictions related to intermediation. On the contrary, it is

a direct consequence of the free play of market forces and unregulated and unfettered financial markets.

As a global phenomenon, financialization is not circumscribed to developed countries but also affects the developing world. The ten chapters that make up this volume discuss, in part, the similarities between financialization in developed and developing countries. It then directs the focus onto the specific modality that financialization adopts in the countries of Latin America beginning with the identification of the most relevant actors and the economic processes that arise from their interactions.

More to the point, the book addresses a series of issues that are relevant to financialization in Latin America including: How does the type of external insertion into the region and the extent and degree of external dependency influence the region's exposure to global financial cycles? Is financialization an obstacle or a bridge in the process of progressive structural change to which Latin American countries aspire? What is the best way to address the problems posed by financialization from the point of view of economic policy? In addressing some of these issues the book seeks to stimulate a wider discussion of how to think about social and economic development of the region within a global context, where the performance and evolution of economies seem to be over-determined by finance.

The different chapters of the book argue that financialization has increased the fragility of Latin American countries and, at the same time, created new forms of external vulnerability both in the monetary and real spheres of economic activity.

As in the case of other developing countries in the 1990's, most Latin American governments adopted the

Washington Consensus as the main guide to economic policy. Governments sought to stabilize nominal variables, liberalize trade and finance, and privatize the bulk of the productive apparatus. These policies were undertaken with the promise that they would lead to stable and sustainable growth and improved welfare.

Financialization has important effects at the macroeconomic level. Financial sector growth has become a source of instability with medium- and long-run consequences for investment, as shown by the growing number of financial crises in the developed world since the 1970s and their negative impact on growth and investment. Between 1973 and 2005 there were 41 crisis episodes in developed countries in which GDP and investment shrank by over 10% (McKinsey, 2012). To these must be added the global financial crisis (2007-2009) and the euro crisis (2009-2013).

Similarly, as a result, of increased financial liberalization and opening of the capital account, developing countries and, more specifically Latin American economies have since the 1980s, been confronted with a series of financial crises including the Mexican (1995), Asian (1997-1998), Russian-Brazilian (1997-1999), and Argentinian (2001-2002) crises with high costs in terms of output. Financial inflows, especially portfolio, debt and loan investment, have not led to increases of investment in host economies. In fact, these factors have exacerbated uncertainty and compromised the growth and sustainability of investment.

Also, the reliance on external flows has not induced a more efficient allocation of resources from a dynamic perspective, since the sectors that benefitted from the influx of foreign capital have usually been the primary sectors and services, mainly financial and real estate.

Foreign direct investment has traditionally been portrayed as an ideal external financing source for the developing countries, for various reasons, including its greater stability (compared with portfolio investment) and its potential to develop greenfield investment. According to *Studies on financialization in Latin America*, the growing importance of the portfolio investments by subsidiaries of transnational corporations tends to overshadow the positive attributes of foreign direct investment as a source of more stable external financing. In addition, the behavior of foreign direct investment has become more volatile and similar to that of quicksilver capital flows.

Furthermore, capital inflows are usually associated with policy regimes intended to liberalize the labor and goods markets, giving more flexible employment regulation and reduced trade union bargaining power. This is because financial liberalization processes tend to be accompanied by a decline in the relative size of the wage

bill.

In this sense, the growing importance of the financial sector has also been associated with the rise in inequality. In the developed economies and some developing ones, including some of those in Latin America, inequality is at its highest in three decades as indicated by the rise in the Gini coefficient and wealth indicators. Moreover, financialization has not only been accompanied with a greater thrust towards the inequality of personal incomes but also of the functional distribution of income, favoring profits over wages. The commodity super-cycle has contributed to increased inequality through higher capital gains that remain concentrated in few hands.

Turning to the domestic conditions, in particular, within the monetary sphere, the book shows that central banks' efforts to neutralize excess liquidity derived from incoming capital flows during the boom cycle lead to a change of behavior in local banks and households that replicate on a smaller scale the pattern of growth and debt (debt-led growth) observed in advanced countries.

Also, the fact that a high proportion of debt denominated in domestic currency, by far the largest component of total debt, is held by foreigners makes the countries of the region subject to potential and sudden outflows of capital with disruptive effects on credit and real activity. This shows that increased international financial integration can have a detrimental impact on the behaviour of the most relevant actors of the system, not just of commercial banks but also firms and even households.

At the firm level, the book underscores the increasing indebtedness of the non-financial corporate sector in the larger economies of the region which is another facet of the external vulnerability of Latin America. The increase in leverage has weakened the nexus between finance and investment through different channels including the tendency of firms to redistribute profits to shareholders rather than use it to expand fixed capital formation.

More importantly some of the evidence presented in the book reflects the fact that, beyond a certain threshold, leverage and investment are negatively correlated. Similarly, the evidence shows a stronger and positive association between foreign direct investment flows and the stock of financial assets. In turn the increase in the proportion of financial assets in firms' total assets which reflects precautionary but also speculative strategies is also linked to carry-trade operations.

The impact of financialization in Latin America is not confined to the effects derived from the free flow of external capital and the restrictions imposed upon the domestic financial system and the reduction in policy space. It also involves the deepening of a historical problem of the region: its high exposure to shocks in the

terms of trade. The volatility of international prices of raw materials, which has grown in recent decades, *pari passu* with the financialization process, directly impacts on the outcome of the current account of the countries of Latin America.

The wide fluctuations in the prices of raw materials reflects their increasing role as financial assets in the sense that prices respond to changes in expectations about future demand conditions rather than to actual supply and demand market conditions. Some of the manifestations of the growing role of commodities as financial assets include the growth in activity in commodity future markets including commodity derivatives, the strengthening of the co-movement among different commodity prices and between commodities and stock markets, and the use of commodities as collateral for loans and credit. In this way, financialization affects Latin

America not only through capital revenues but also through its impact on the dynamics of the prices of raw materials.

The book propounds, among other things, rethinking financial regulation, both external and internal, to tame the process of financialization and protect Latin American countries from the wide variations in the global economic cycle. Confronting financialization also requires institutional changes within the financial system. Moreover, it also asserts that controlling financialization is not a purely monetary or real phenomenon but also involves changing the productive structure of the countries through conscious and guided industrial policies. The effective implementation of industrial policies requires in turn regulating the financial system to serve the interests of the 'real' economy.

## Socialism, Economics and the Left

By [David Ruccio](#)

Last month, Alexander Beunder, the editor of [Socialist Economist](#), asked a handful of “expert economists from around the world”—including Johanna Bockman, Prabhat Patnaik, Andrew Kliman, and myself—two key questions concerning the problems and prospects for socialism, economics, and the Left in the world today. Beunder requested that we keep our answers to two hundred words.

**Our answers are now posted on-line, which can be read by clicking on the links below.** Here are mine:

### [What economic obstacles is the Left facing in the 21st Century?](#)

The spectacular failures of capitalism in the United States have provided fertile ground for a renewed interest in socialism. These include the punishments meted out by the Second Great Depression, the lopsided nature of the current recovery, and a decades-old trend of obscene and still-rising inequality. In addition, the increasing indebtedness associated with higher education, the high cost and limited access to healthcare, and the growing precariousness of the workplace have left working-class Americans, especially young workers, with gnawing financial insecurity — and growing support for socialism. However, the U.S. Left currently faces two main economic obstacles: the decline in labor unions and an attempt to regulate capitalism. During the postwar Golden Age, union representation peaked at almost 35%. Now, it is down to 11.1% — and only 6.6% in the private sector. At least in part as a result, the Left has shifted its focus more to regulating capitalism, often by invoking a nostalgia for manufacturing and using the theoretical lens of Keynesian economics, and moving away from criticizing capitalism, especially its class dimensions (particularly the way the surplus is appropriated and distributed, as Marxists and other socialists understand them).

### [How can the Left use economics as a tool in the 21st Century?](#)

Socialist economists can help identify the ways the current problems of American capitalism are not just a matter of economic “imperfections,” but deeply embedded in capitalism itself. Moreover, the Left has the opportunity to propose changes that benefit workers in the short term *and* empower the working-class to make additional changes over time. Socialist economists can play a key role in the ongoing debates within economic theory (regarding stagnant wages, growing inequality, the one-sided nature of the recovery, and so on) and national politics (concerning universal healthcare, student debt, precarious jobs, and the like)—and to engage the rehabilitation of socialism as a legitimate position within American politics. For example, socialist economists can change the debate about inequality and explain how it is a product not of a lack of skills, but of rising exploitation and the distribution of the growing surplus to the top 10 percent. Similarly, they can change the limits of the possible by showing how movement in the direction of universal healthcare can improve the lives of working-class Americans and, at the same time, create the space for other ways of organizing healthcare itself—by expanding worker cooperatives and other community-oriented ways of providing health services.

## Economics for an Information Age By Patrick Spread

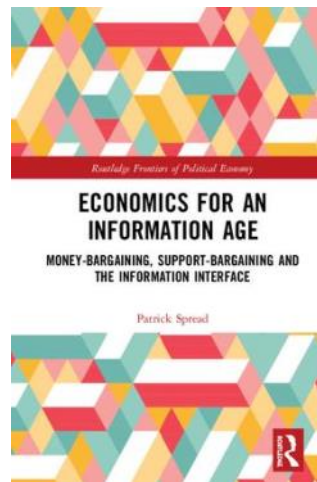
When humans are asked a question they often answer a different question which they can answer more easily. Psychologists identify this trait as 'substitution'. Daniel Kahneman, in *Thinking, Fast and Slow*, devotes a whole chapter to 'substitution', titled 'Answering an Easier Question'.<sup>1</sup>

Neoclassical economic theory provides a good illustration of substitution. Instead of responding to the question to which everyone wants an answer – How does economic exchange work? – neoclassical economists have chosen to answer the question: What does a system look like in which the pursuit of private interest produces public advantage, with optimal allocation of resources?

The neoclassical model is the answer to their question. Furthermore, the mathematical skills possessed by the formulators of the neoclassical model were essential to the answer. It might almost be said that, finding themselves possessed of such skills, neoclassical economists formulated a question that would exercise them. It was not so much an easier question as a question suited to the mathematical interests of the questioners.

If a model is conceived in mathematical terms, then everything used in the model has to be given mathematical codification. This immediately limits the range of the model. To be given mathematical codification, phenomena have to be discrete, countable and uniform. Or at least, in a spirit of tolerance, have near enough those characteristics. Potatoes and nails may be near enough. Even cars might be regarded as near enough. Health services and financial services are more difficult to codify mathematically. The neoclassical model is conceived largely in material terms, with an implication that services are subject to much the same dynamic.

The 'material' understanding itself has severe limitations. Kelvin Lancaster has noted that product differentiation involves knowledge about the qualities and characteristics of things, as well as just knowledge of their existence.<sup>2</sup> The neoclassical understanding of things only applies in so far as we are concerned with things as they are, rather than things as they answer to human interests. Product differentiation arises from the adaptation of products to human interests. Once the requirement is not just for 'nails', but nails of a particular size, made of a material that will not rust, and suited to use on chipboard, we are interested in information about the nails which goes beyond the mere being of 'nails'. We buy on the basis of information about nails, according to their fit to our requirements. If further, we require that the nails



are available on credit at a shop down the road at ten o'clock on a Sunday morning, then there is a lot more information on which the sale of nails will depend. Mark Casson draws attention to the limitations of the material understanding of the neoclassical model with specific reference to the requirement for information: 'The conventional view of the real economy is highly materialistic, and the legacy of this view is still reflected in the theory of the firm. It emphasises the flow of tangible resources such as physical products, rather than intangible resources such as information'.<sup>3</sup>

In *Phishing for Phools* George Akerlof and Robert Shiller, and their researchers, describe the many ways in which information is presented to attract buyers. Much of it is presented in highly deceptive form. Companies distort and manipulate information in order to convince buyers that what the company is offering is just what the buyer wants, and better than any other company can offer. Companies are 'phishing' for 'phools' who will buy their products. Akerlof and Shiller do not see this as incompatible with the neoclassical model to any significant extent. They argue simply that the 'optimal allocation of resources' arising from the model has to be understood as an optimal allocation based on the assessments made by buyers in receipt of the manipulated information. That it is an optimal allocation of fools is of no account.

Akerlof and Shiller affirm their commitment to neoclassical 'markets' as the dependable benefactors of societies by commandeering Adam Smith's idea of an 'invisible hand'. They remark: 'Adam Smith wrote that, with free markets, as if "by an invisible hand...[each person] pursuing his own interest" also promotes the general good'.<sup>4</sup> But readers of the WEA Commentary No. 7.6 (p. 9) will know that Smith's reference to the 'invisible hand' in *The Wealth of Nations* refers to the hand that prefers 'the support of domestic to that of foreign industry'.<sup>5</sup> Elsewhere Smith makes very plain that he sees the 'merchants and master manufacturers' as a third order of those engaged in economic activity which is not concerned with the interests of society as a whole:

*To widen the market, and to narrow the competition, is always the interest of the dealers. To widen the market may frequently be agreeable enough to the interest of the public; but to narrow the competition must always be against it, and can only serve to enable the dealers, by raising their profits above what they naturally*

*would be, to levy, for their own benefit, an absurd tax upon the rest of their fellow-citizens.*<sup>6</sup>

Smith the moral philosopher was attracted to the idea that the pursuit of private interest could result in public advantage, but Smith the economist saw plainly that he could not sustain the case. It was only resurrected through manipulative selection from Smith's work by the economists who formulated the neoclassical mathematical model in the late nineteenth century. The model is a mathematical illustration of a conjecture of moral philosophy rather than an explanation of how economic exchange works. It uses mathematical codification, with necessary assumptions, to substantiate a conception of how private interest might advance public interest. The exercise would have been of little interest were it not for its ideological implications. It appeared to affirm the desirability of pursuit of private interest at a time of surging communal interest, and against a common social sentiment that condemned 'selfishness'. Some saw it would be advantageous if the exercise were actually taken as an explanation of the workings of economic exchange. This group assembled such support in academia that the exercise became institutionalised as 'mainstream economic theory'. The theory group enlisted the 'Great Man' as a supporter, though he clearly was not. The 'invisible hand' is bait for fools.

The approach of Akerlof and Shiller is consistent with the general approach of economists to issues of information. They treat problems of information as an overlay to the neoclassical model of exchange, rather than incompatible with it. The model remains 'near enough to be useful'. Problems of 'bounded rationality' arising from information overload and 'asymmetries' of information that can impede exchange are awkward but within the neoclassical tolerance. An exception is Louis Philips, who concludes: 'Rather than trying to save the concept of a perfectly competitive market and the 'law of supply and demand' which is supposed to clear this market, a lot of energy is saved if one simply admits that this law is inadequate'.<sup>7</sup> Joseph Stiglitz acknowledges that 'asymmetric information' is incompatible with the neoclassical model, but opts to stick with it simply because it is not worth the effort involved to pursue paradigm change.<sup>8</sup> He has so little faith in the capacity of his colleagues to adopt better theory that he prefers to tolerate false theory and enjoy the advantages of being part of a mainstream theory group. All group members probably make a similar calculation, since it is plain that the paradigm is false, even as 'near enough'. After all, it was not formulated to explain how economic exchange functions, but to demonstrate mathematically how private interest accords with public interest. Mathematical codification is so limiting that the model inevitably lacks empirical consistency. Societies all suffer the consequences. Our psy-

chology has evolved to protect our interests, rather than for the pursuit of truth.

The information issues identified by Akerlof and Shiller confirm the dysfunction of the neoclassical model. The fools who are buying on the basis of information manipulated to attract their interest are all buying different 'products'. They are buying different bundles of information. There is no uniformity in what they buy. Rational behaviour provides a degree of uniformity and predictability in human choice. But fools all make different choices. It is no longer possible to conceive of or draw the supply and demand curves that are so fundamental to the neoclassical model. There is no longer a 'market price'. The 'products' lack the characteristics required for mathematical codification.

The introduction of the idea of support-bargaining and money-bargaining makes possible a new approach to these questions of information. Support-bargaining conceives politics, and social intercourse in general, as a transactional process. People act and communicate in such a way as to gain the group support that is essential to their psychological well-being. In politics political parties disseminate information that is likely to assemble support. Such support, expressed through formal support-bargaining structures, will potentially give them 'power', or place them in positions of 'government'. In politics the bargaining is very largely over abstract policies and programmes. These are codified linguistically and transmitted in the form of information. That they are composed of information means they offer even greater scope for manipulation than is experienced by Akerlof and Shiller's 'phools' in money-bargaining.

The use of information in support-bargaining makes plain the role of information in money-bargaining. The congruity is the more apparent when it is recognised that, although there is that material element in the products of money-bargaining which gives an impression of access to the things themselves, they are known only by information. Our senses provide us with information about things like potatoes and nails, and we are accustomed to assuming that our senses enable us to understand and know the things themselves. But we know them only by the information about shape, size, colour, texture, taste, odour and sound derived from the exercise of our senses. We deduce that we know the things 'as they are', independent of our perception of them, but there is much more to things than is revealed by this perceptual information. Human minds deal only with information. We are necessarily confined to information. We disseminate information advantageous to our interests as part of the process of support-bargaining and money-bargaining, and create thereby an information interface through which transactions of all kinds can be conducted.

The issues surrounding the use and manipulation of information are perhaps more pressing than ever before, because we live, by common consent, in an information age. Many transactions are now concluded on the basis of information received electronically. Giant companies assemble data about individuals and sell it to other companies, who use the data to disseminate information manipulated to make it relevant to the precise circumstances of the people they are contacting. There is immensely expanded scope for fooling. An information age needs for its protection a theory that explains the function of information in human societies.

These and other issues are the subject of *Economics for an Information Age*.<sup>9</sup> The discussion is mainly concerned with economic issues – that is, with money-bargaining. But money and money-bargaining are outcomes of support-bargaining. Social theories are outcomes of intellectual support-bargaining. Consequently the problems encountered with information in money-bargaining cannot be entirely understood within the normal confines of that field. The analysis extends into behavioural theory, sociology and philosophical approaches to information. It even extends to cartography. While linguistic codification is overwhelmingly the main form in which information is transmitted, and neoclassical economists use mathematical codification, it is instructive to identify the distortions that arise when information is codified in the form of maps. It helps to answer that question to which everyone wants an answer: How does economic exchange work? It helps also to answer the

question that is both more specific and more general: What is the function of information in human societies?

1. Kahneman, Daniel, 2012, *Thinking, Fast and Slow*, Penguin, Chapter 9.
2. Lancaster, Kelvin J., 1981, 'Information and Product Differentiation', in Galatin, Malcolm and Leiter, Robert D., 1981, *The Economics of Information*, Boston, The Hague, London: Martinus Nijhoff Publishing.
3. Casson, Mark, 2000, 'An Entrepreneurial Theory of the Firm', in Foss, Nicolai and Mahuke, Volker (eds.), 2000, *Competence, Governance and Entrepreneurship*, Oxford: Oxford University Press, p. 116.
4. Akerlof, George and Shiller, Robert, 2015, *Phishing for Phools*, Princeton: Princeton University Press, Emphasis added by Akerlof and Shiller.
5. Smith, Adam, 2009, *An Inquiry into the Nature and Causes of the Wealth of Nations*, Project Gutenberg Ebook, Adobe Digital Editions, p. 325. First published 1776.
6. Smith, 2009, p. 191.
7. Philips, Louis, 1988, *The Economics of Imperfect Information*, Cambridge: Cambridge University Press, p. 6.
8. Stiglitz, Joseph E., 2002, 'Information and the Change in the Paradigm in Economics', *American Economic Review*, Vol. 92, No. 3, pp. 460-501, p. 486.
9. Spread, Patrick, 2019, *Economics for an Information Age: Money-Bargaining, Support-Bargaining and the Information Interface*, Abingdon: Routledge. (publication October 2018)

## Complexity in Economics

By [Maria Alejandra Madi](#)

### The need for an epistemological change in economics

Traditional epistemological theories have fostered an endless debate on dichotomies characterized by forms of objectivism, on the one hand, and forms of relativism/skepticism on the other. Currently, among the deep global social and cultural challenges, the crisis in epistemology is characterized by a radical questioning of the whole matrix within which such dichotomies have been drawn.

Taking into account the evolution of Economics as a science, the need for a deep epistemological change has already been pointed out by outstanding economists. Joseph Schumpeter, for example, rejected the kind of economic thought that mainly favours deductive methods of inquiry – based on mathematical reasoning – because this habit generates analytically unrealistic results that are irrelevant for solving real-world economic problems. Also John Maynard Keynes warned that the understanding of economic phenomena demands not only purely deductive reasoning, but also other methods of inquiry along with the study of other fields of knowledge such as History and Philosophy. Today,

Schumpeter's and Keynes' criticisms could certainly be levelled at those economists whose beliefs ultimately privilege the adoption of a nominalist bias. This is because, in that approach, the dialogue between the economic theories the economic reality turns out to be abandoned not only in academic research but also in the policy making process.

Considering this background, the shift to Complexity in economic thinking can contribute to substantive epistemological insights in order both to face the contemporary theoretical and methodological challenges and to reject the Cartesian theorization of knowledge under an anthropocentric foundational model of rationality, complete order and truth.

### The disembedded human subject of Neoclassical economics

As Edward Fullbrook highlights in his recent book *Narrative Fixation in Economics*, the Cartesian view of human reality has deeply shaped the way Neoclassical Economics theorizes about the economic and social exist-

ence (2016, p. 45). Indeed, while emphasizing the relevance of the pure thought of a disembedded human subject, Neoclassical Economics has reinforced the relevance of the Cartesian method of inquiry that moved the so called scientific (true) knowledge out of the general flux of experience.

Descartes reinforced the analytical-synthetic process of reasoning. Following the deductive method of pure inquiry, human knowledge grows through a rigorous chain of ideas. As a consequence, new thoughts arise while the human subject applies deductive reasoning so as to create a chain of ideas that links the most simple to the most complex ones. In this attempt, true knowledge can be obtained. The Cartesian method represents an attempt to extend the mathematical method of inquiry to all of human knowledge in the form of the *mathesis universalis*.

In the second part of the *Discourse of Method*, Descartes presented some principles that should be followed in order to acquire knowledge: 1) human beings cannot admit any ideas that are not absolutely clear; 2) human beings must divide each problem in so many parts as appropriate for its best resolution; 3) human beings should apply deductive reasoning to organize their thoughts from the simplest to the most complex ones 4) the analytical-synthetic process of reasoning leads to true knowledge.

According to Descartes, the first principle of his method focuses the importance of “*never accepting something as true that I clearly don’t know as such*” (*Discourse of Method*, Part II). Indeed, Descartes was inspired by Geometry as a model of Science. As a result, he considered the postulates of Geometry not only as universal and necessary but also as clear and distinctive ideas related to intellectual intuition. Only these clear and distinctive ideas are considered to be the pillars of true knowledge.

Based on the second principle, Descartes builds his research method of analysis that isolates the clear and distinctive ideas from the most complex ones. His emphasis on the order of thoughts strengthens the role of Mathematics in the Cartesian method of pure inquiry. Moreover, the third principle of his method leads to a special kind of organization of thoughts. In his own words, the organization of thought should start “*with the simplest and easier to gradually rise, as if by means of steps, to the knowledge of the more composed, and assuming an order between the ones that don’t precede naturally each other*” (*Discourse of Method*, Part II).

Departing from the mathematical method of reasoning, Descartes arrives at the notion of order in scientific thought, that is to say, once the human subject knows the simple elements of a problem, he can assume all the

consequences that derive from those first ideas considered as absolutely certain. Those first ideas have the characteristics of clarity and distinction. Besides, they are known intuitively and constitute the pillars on which true knowledge is based.

Finally, Descartes reinforced the analytical-synthetic process of reasoning. Following the deductive method of pure inquiry, human knowledge grows throughout a rigorous chain of ideas. As a consequence, new thoughts arise while the human subject applies deductive reasoning so as to create a chain of ideas that links the most simple to the most complex ones. In this attempt, true knowledge can be obtained.

Moreover, clarity, distinction and order overwhelmed the *mathesis universalis* that turned out to be considered as the pinnacle of the epistemo-ontological construction of Cartesian thinking. The *mathesis universalis* is, according to the Cartesian epistemology, a general method of pure inquiry able to explain everything, regardless of the nature of the objects to be studied.

As E. Gilson (1945) highlighted, the Cartesian method represents an attempt to extend the mathematical method of inquiry to all of human knowledge in the form of the *mathesis universalis*. Indeed, this extension is at the center of the *a priori* foundations of scientific knowledge in Neoclassical Economics. And as a consequence, the challenge is that the dialogue between economic theories and the economic reality turns out to be abandoned not only in academic research but also in the policy making process.

### **Complexity science and the Santa Fe Institute**

Complex systems are self-organized systems in which elements spontaneously organize themselves as the result of a living process of adaptation, reaction, and innovation. Thus, complexity is the science that seeks to understand, in an evolutionary perspective, the characteristics of the process of interaction that occurs between independent agents. According to Waldrop (1992), from the Santa Fe Institute, such complex systems somehow find a way to balance order and chaos. The “edge of order and chaos” sets itself up as the locus of permanent tension between stability and change. Brian Arthur, one of the leaders of chaos science applied to economics research in the Santa Fe Institute, has adopted the hypothesis of increasing returns to technological change and has identified that new technologies promote new interconnections in new dynamic networks that allow us to think of complex economic systems as self-organized systems. Thus, as a result of innovations, economic systems can diversify and increase its complexity.

Thus, Waldrop’s analysis shows that evolution, as a key issue in complex systems, is more than random mutation and natural selection, since it also involves emergence

and self-organization. In short, based on non-linear and multidisciplinary thinking, the scientist claims that complexity in life (and in a variety of systems, including artificial life) is due to spontaneous self-organization. In this sense, besides their emergence, it is necessary to observe the power that systems have to create connections. Scientists of complexity point to the existence of interactions that manifest order (repetitive patterns) and random interactions. In between, on the edge of chaos, there is a set of potentially "creative" interactions. Thus, one of the contributions of complexity theory is the concept of complex systems positioned on the "edge of chaos", in a zone between rigid stability and chaotic turbulence, with high power to create new connections.

In complexity theory, both the natural world and human societies are understood as complex adaptive systems that share certain crucial properties. First, the natural world and human societies are a network of many "agents" acting in parallel. Each agent finds himself in an environment produced by his interaction with other agents in which there is competition and cooperation. In addition, a complex adaptive system has many levels of organization that are constantly learning, adapting and evolving. Indeed, collective behaviour and self-organization define patterns of behaviour. Third, all complex adaptive systems anticipate the future. From the methodological point of view, Waldrop (1992:142) emphasizes the importance of the use of computational systems in the research of complexity theory. The challenge is to build realistic models in order to make complex adaptive systems simulations that do not converge to equilibrium. In effect, different successful generations of elements, organisms and agents tend to modify and rearrange the characteristics of internal models of behaviour in an evolutionary process. In this perspective, learning, evolution and adaptation are part of the same process whose predictive character is based on implicit or explicit hypotheses about the collective behaviour of the elements of the system. In mathematical and computational models, such hypotheses feed simulation practices with the objective of testing the potentialities of complex systems that incorporate random variables, as well as the multiple elements of internal behaviour models and building blocks. This methodology turns out to be crucial to developing not only artificial intelligence (models related to thought processes), but also artificial life (models related to the biological mechanisms of evolution). In both cases, the study of complexity involves the definition of comprehensive and ambitious algorithms and classification systems (Waldrop 1992: 198).

From an epistemological point of view, it should be emphasized that the scientific conception of the Santa Fe Institute emphasizes that the essence of science is its

capacity for understanding and explanation (Waldrop 1992: 255). On the other hand, the theory of complexity points out to a conception of science that advances in the direction of convergence between the human, physical, and biological sciences. Research in molecular biology and cognitive science are relevant examples of this attempt. Besides, Waldrop highlights the reformulation of behavioural theories by rejecting the rationality of economic agents as *a priori* norm and the equilibrium trend as an inherent principle in markets.

### **A shift to Complexity in economic thinking**

An ongoing dialogue between economic theories and the economic reality should be considered in any attempt to build realistic economic theories in a complexity framework. Recalling Brian Arthur's words, "*we are finally beginning to recover from Newton's ideas.*" (Waldrop 1992: 335) Such an epistemological shift from a non-reductionist perspective opens up new perspectives to re-think human behaviour, the boundaries of evolution and the dynamics of institutions embedded in society.

The understanding of the evolution of real-world markets through time - that is irreversible - requires a shift to Complexity in economic thinking that might favour the adoption of

- A non-anthropocentric approach to economics
- A social ontology that is rooted in actual experience in the markets
- A new approach to the rationality of economic agents
- An evolutionary approach based on the coexistence of laws and change
- An ontological indeterminism that rejects a necessitarian approach to real-world economies
- An epistemological fallibilism that rejects absolute truths
- An endogenous approach to norms and ethics

Considering the relevance of this topic in economics education, students should be aware of the philosophical backgrounds and practical consequences of different epistemological approaches. Complexity in Economics is not just a new label, but represents a way of rethinking economics as a science.

### **References**

- DESCARTES, René. *Discurso do Método*. São Paulo: Abril Cultural, 1973.
- FULLBROOK, E. *Narrative Fixation in Economics*, WEA Books, 2016.
- WALDROP, M. *Complexity: the Emerging Science at the Edge of Order and Chaos*, USA: Simon & Schuster, 1992.
- WILLIAMS, Bernard. *Descartes: The Project Of Pure Enquiry*. UK: Penguin, 1978

## On global capitalism and the survival of democracy By [Maria Alejandra Madi](#)

### Setting the scene

Throughout the last forty years, most governments around the world supported the long-run process of neo-liberal reforms that turned out to be characterised by the financialisation of the capitalist economy. In this historical scenario, monopoly-finance capital became increasingly dependent on bubbles that, both in credit and capital markets, proved to be globally the sources of endogenous financial fragility. This process was reinforced, in a vicious circle, by a concentration of income, wealth and power. By negatively influencing labour and working conditions, it became increasingly difficult for effective demand to reach (or even approach) the level of full employment. In response to this situation, banking and credit policies, also supported by governments and supranational institutions, were inducing consumers to expand their spending through increasing debt. While public spending on social and infrastructural objectives was severely restricted, it expanded in other areas, sustaining the income and the demand of powerful groups.

As a result, in the new millennium, the proliferation of financial assets, with unstable economic growth, has given way to widespread precarious jobs, income gaps and weaker welfare programs. The same policies that have obliterated social services and kept labour cheap have supported the expansion of short-termism and new global business models in the context of deregulated capitalism.

Besides, the onset of the 21st century represents a new political age overwhelmed by the violation of democratic ideals of political equality and social peace. Indeed, democracy has been allowing for election to office but not to power (Madi, 2015). And, as a consequence, policy makers might give priority to their sponsors instead of the needs of citizens – decent work and income equality.

### Capital and Labor: Global trends

In truth, global trends in capital accumulation and competition have shaped a scenario where practices in corporate finance favoured mergers and acquisitions aimed to increase the shareholder value by means of a “clash of rationalization”. In this context, competitiveness and productivity have been put together in the attempt to promote higher business performance. In fact, the centralization of capital, through waves of mergers and acquisitions, created new challenges to business stability. As a result of these business strategies, investments that are fixed for society turn out to be liquid for investors. Today, the dominance of a culture based on short-term profits has major implications that go far beyond the narrow confines of the financial markets. The costs

of this business model fall disproportionately on society because of the commitment to *liquidity*. As Keynes warned,

*“Thus the professional investor is forced to concern himself with the anticipation of impending changes, in the news or in the atmosphere, of the kind by which experience shows that the mass psychology of the market is most influenced. This is the inevitable result of investment markets organized with a view to so-called ‘liquidity’. Of the maxims of orthodox finance none, surely, is more anti-social than the fetish of liquidity, the doctrine that it is a positive virtue on the part of investment institutions to concentrate their resources upon the holding of ‘liquid’ securities. It forgets that there is no such thing as liquidity of investment for the community as a whole”* (Keynes, *General Theory*, 12, V).

Indeed, corporate decision making has been increasingly subordinated to speculative financial commitments. A financial conception of investment gained ground in the context where financial innovations aimed to achieve short-term profits with lower capital requirements. Managers and owners of firms focused on financial gains often based on speculative shifts of shareholder values. Changes in corporate ownership, through waves of mergers and acquisitions, created new business models where companies, while highly powerful and concentrated, turned out to be simply bundles of financial assets and liabilities to be traded. Hence, current corporate governance came to have the privilege of mobility, liquidity and short-term profits based on high levels of debt.

Moreover, accordingly the OCDE, the current investment chain is complex due to cross-investments among institutional investors, increased complexity in equity market structure and trade practices, and an increase in outsourcing of ownership and asset management functions. In this scenario, the economic and social outcomes have involved a trend to ‘downsize and distribute’, that is to say, a trend to restructure, reduce costs and focus on short-term gains. In practice this has meant plant displacement and closures, changing employment and labour conditions, outsourcing of jobs, besides the pressure on supply chain producers in the global markets.

Therefore, in this setting, there has been an increase in precarious jobs, technological unemployment and informality, in addition to fragile conditions of social protection (Stiglitz, 2011). First, labour-saving technologies have reduced the demand for many middle-class and blue-collar jobs. Second, globalization has created a global marketplace, confronting expensive unskilled workers with cheap unskilled workers overseas and fa-

vouring outsourcing practices. Third, social changes have also played a role in the labour market changes, such as the decline of unions. Four, political decisions are influenced by the top 1% who favour policies that increase income inequality.

#### **Power, politics and economics**

All these trends reveal issues of current power, politics and economics in a social context where democratic institutions are being threatened.

Taking into account the overall economic, social and political evidence in Western countries, Robert Kuttner, in his recent book *Can Democracy Survive Global Capitalism?* (2018, WW Norton), highlights that since the 1970s the globalization of capital has affected the very foundation of a healthy democracy. While analysing the consequences of this trend, he warns:

*"If democracy cannot harness capitalism, it runs the risk of subverting itself and giving way to neo-fascist regimes that will pretend to manage the market but more often ally themselves with corporations and substitute ultra-nationalist symbols and scapegoats for reform."*

Indeed, this book calls for a deep examination of current power, politics and economics in a social context where democratic institutions are being threatened. Among other issues, its reading suggests some questions:

- Do current trends of social inequality and economic instability stimulate disillusioned voters to support populism?
- Is the alliance of global finance and far-right parties inevitable?
- Is it possible to build new conventions to make capitalism serve democracy?

Answering these questions not only involves critical thinking on the failures of economic policies in the light of current political challenges, but also calls for a reflection on the alternatives to the reversal of the decline of democracy in the West.

#### **References**

- Çelik, S. and Isaksson, M. (2013) "Institutional Investors as Owners: Who Are They and What Do They Do?", *OECD Corporate Governance Working Papers*, No. 11, France: OECD Publishing. <http://dx.doi.org/10.1787/5k3v1dvmfk42-en> (accessed 10 October 2015)
- Fligstein, N. (2001) *The architecture of markets*, New Jersey: Princeton University Press.
- Keynes, J. M. [1936 (1964)] *The General Theory of Employment, Interest, and Money*. New York: Harcourt Brace.
- Robert Kuttner, *Can Democracy Survive Global Capitalism?*, WW Norton, 2018.
- Lima, G. & Madi, M.A. , *Capital and Justice*, WEA Books, 2016.
- Madi, M. A., "2016: Promises and Problems", WEA Pedagogy Blog, December 29, 2015  
<https://weapedagogy.wordpress.com/2015/12/29/2016-promises-and-problems>
- Lazonick, W. (2013) "From Innovation to Financialization: How Shareholder Value Ideology is Destroying the US Economy" , in Martin H. Wolfson and Gerald Epstein, eds., *The Handbook of Political Economy of Financial Crises*, Oxford University Press.
- Lazonick, W. and O'Sullivan, M. (2000) "Maximizing shareholder value: a new ideology for corporate governance", *Economy and Society*, 29 (1).
- Stiglitz, J., "Of the 1%, by the 1%, for the 1%". *Vanity Fair Magazine*, April 30, 2011.  
<http://www.vanityfair.com/news/2011/05/top-one-percent-201105>.

## **A few pieces of interest**

**Amazon and Apple: Wall Street's Trillion Dollar Babies** Dean Baker

**The real problem with free trade**, Jayati Ghosh

**Did developing countries really recover from the global financial crisis?**

C. P. Chandrasekhar and Jayati Ghosh

**The rise and fall of US middle-class wealth**

## real-world economics review

issue no. 85

### [download whole issue](#)

Globalization checkmated?

Thomas Palley

[download pdf](#)

*Post-crisis, next crisis*

Capital and class: Inequality after the crash

David Ruccio and Jamie Morgan

[download pdf](#)

Post-crisis perspective: sorting out money and credit and why they matter!

John M. Balder

[download pdf](#)

With their back to the future, will past earnings trigger the next crisis?

Shimshon Bichler and Jonathan Nitzan

[download pdf](#)

*Changing economics*

Radical paradigm shifts

Asad Zaman

[download pdf](#)

How to transform economics and systems of power?

Deniz Kellecioglu

[download pdf](#)

Economics and normativity in four sections

Jamie Morgan

[download pdf](#)

From Pareto economics, to Pareto politics, to fascism

Jorge Buzaglo

[download pdf](#)

Trump politics towards Mexico:

Alicia Puyana

[download pdf](#)

Note: The structure of “crowding out” is reappearing

Leon Podkaminer

[download pdf](#)

## Contact the Association

### Journal editors:

RWER: Edward Fullbrook [fullbrook@worldeconomicsassociation.org](mailto:fullbrook@worldeconomicsassociation.org)

Economic Thought: [ETEditor@worldeconomicsassociation.org](mailto:ETEditor@worldeconomicsassociation.org)

World Economic Review: [wereitor@worldeconomicsassociation.org](mailto:wereitor@worldeconomicsassociation.org)

### Conferences: Chair of Conference Organizing Committee:

[conferences@worldeconomicsassociation.org](mailto:conferences@worldeconomicsassociation.org)

WEA Commentaries editor: Stuart Birks [kstuartbirks@gmail.com](mailto:kstuartbirks@gmail.com)

### WEA Commentaries

(formerly The World Economics Association Newsletter)

is published in the UK

by the

World Economics

Association.