

SPECIAL ISSUE

Capitalism and crises: A comparative analysis of mainstream and heterodox perceptions and related ethical considerations

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Abstract

This paper analyses the main perceptions of capitalism and crises from a mainstream and heterodox perspective. Broadly defined within the neoclassical structure, the mainstream approaches support the idea of long-term stability of capitalism and describe crises as exogenous events. The heterodox perceptions, on the contrary, perceive crises as an internal feature of capitalism and propose to reframe the global economy within the limits of the socio-environmental systems. Despite the historical recurrence of crises, the neoclassic capitalist framework and the related mainstream perceptions are still dominating the international economic debate. Most of the crises have then been addressed with reforms oriented to adjust some elements of the system without changing the overall economic structure. On the contrary, limited numbers of initiatives have been implemented to reorganise the economy according to the heterodox perspectives. Within this context, further analysis would be needed to investigate the feasibility of the proposed heterodox solutions. By discussing the main perceptions of capitalism and crises and by considering the ethical implications of the mainstream and the heterodox approaches, the present paper contributes to the existing debate around stability of capitalism and provides a starting point for analysis oriented to investigate the feasibility of alternative economic structures.

KEYWORDS

capitalism, crises, ethics, neoclassical, Post-Keynesianism, socio-environmental constraints

1 | INTRODUCTION

Extensive analyses have been focused on international economic crises and malfunction of the capitalist structures. The objective is to understand the drivers of collapses and to prevent crises of a certain magnitude (Melvin & Taylor, 2009). Despite the wide range of academic and policy debates, conflicting opinions still exist, and after more than a decade since the global financial crash of 2008, the role of capitalism is analysed from a wide range of perspectives. The recent instabilities of the COVID-19 pandemic and the

related recovery strategies have also reopened the debates around the socio-economic and environmental impacts of the existing economic structures and the ethical implications of overexploitation and continuous growth. Within this context, the aim of this paper is to discuss capitalism and crises from a 'mainstream' and 'heterodox' perspective. The objective is to analyse the drivers of collapse, the proposed solutions and the ethical elements that have been used to describe the instability of the capitalist structure.

Broadly speaking, there are two fundamentally different approaches to how capitalist economies and crises are understood and

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explained. Within neoclassical (also called mainstream or orthodox) approaches, crisis episodes (such as depressions, financial crashes and economic bubbles) are usually viewed as exogenously created events. Due to the underlying theoretical and methodological assumption of economic stability (signalled by a general equilibrium setting of the economy), economic crises of a certain size are understood to be extraordinary, random and single events, where large economic fluctuations take place outside the initial equilibrium state (Friedman & Schwartz, 1963; Friedman, 1968; Lucas, 1976; Lucas & Sargent, 1979; Romer, 1993; Snowdon et al., 1994; Gordon, 1997; Visco, 2005; Shiller, 2005; Akerlof & Shiller, 2009; Mankiw, 2018). Since the economy is believed to be efficient and self-equilibrating, outside events are needed to disrupt this equilibrium setting and generate such exceptional fluctuations. The responsible external disturbances, causing the stable economic system to slip off the initial equilibrium, can, for example, range from sudden changes in the money supply (Friedman & Schwartz, 1963), imperfect information (Romer, 1993; Shiller, 2005), behavioural biases (Akerlof & Shiller, 2009; Shiller, 2005) or, most recently, to externally created threats related to health in the form of COVID-19 (Juergensen et al., 2020; Venetoklis, 2021). In any case, external shocks must be large, powerful and convincing enough to be able to disturb the otherwise well-behaved economy (Kindleberger & Aliber, 2005). Despite theoretical differences existing between the mainstream schools of thought, all of them share the idea that the capitalist structure is not the cause of crises, falling outside the usual ups and downs of a business cycle. The proposed solutions are then oriented to reform some elements of the system without changing the overall economic framework and the underlying economic paradigm surrounding the equilibrium setting. Within this context, mainstream economic theory considers the market structure as the main setting for the redistribution and efficient allocation of resources. The possibility to eliminate the environmental and the social externalities with market-based instruments oriented to quantify the value of non-monetary elements (such as pollution, ecological degradation or social inequalities) has then been used to explain and justify the ethical structure of the capitalist system (Demsetz, 1967; Landell-Mills & Porras, 2002; Muradian et al., 2010).

In opposition to mainstream perceptions and explanations of capitalist economies exists a large and diverse body of literature consisting of multiple schools of economic thought, generally referred to as heterodox economics. Within these approaches, crisis episodes emerge endogenously (Alves & Kvangraven, 2020), underscoring that heterodox approaches have a different understanding of capitalist economies and crises. For example, Minsky, a Post-Keynesian, sees the economy as an evolutionary complex system which is embedded within a greater socio-political and ecological structure (Minsky, 1970, 1982, 1992, 2008a). Crisis episodes are then understood to be one of many system states that are defined through varying levels of stability emerging endogenously over time. It is important to note that no external disturbances or shocks are needed to create such system behaviour. Instead, the inner workings of capitalist economies themselves lead to instabilities and

crises. Within the more integrated heterodox approach, economies are not analysed in isolation. Instead, the structural set-up of such human-made socio-economic and historical systems is important (Alves & Kvangraven, 2020; Dymski, 2014; Dymski & Shabani, 2017; Fine, 2019; Lawson, 2006; Mearman, 2011). Similarly, the understanding of uncertainty (Dequech, 2012), the underlying socio-environmental system and the interrelations of power structures (Lawson, 2006; Mearman, 2011) are fundamental elements in explaining capitalist economies and the related crises. Within this context, the recent instabilities brought about by COVID-19 are understood to have been caused by the set-up of capitalism itself and by its constant need for expansion at the cost of the natural systems (Alves & Kvangraven, 2020). In addition, the inability to perfectly account for the wide range of externalities generated by the existing capitalist framework and the operational impossibility to reduce multidimensional values, including ethical, into a single monetary unit, highlight the failure of the market efficient hypothesis. The proposed heterodox solutions are then oriented to establish an economic structure based on a systemic integration between socio-economic and environmental elements where human and ecological values are considered in line with the ethical requirements of the existing, and possibly future generation, as recently highlighted by the 2030 Agenda and the related Sustainable Development Goals. Ecological and Biophysical Economics, together with Feminist, Evolutionary and Complexity Economics, are just some examples of alternative systems developed as a critique to the existing capitalist framework. Despite the differences existing between the above-mentioned heterodox approaches, they all share the idea that the mainstream approach fails to consider the economy as a subsystem of the socio-environmental structure. As a consequence, unsustainable levels of exploitations are generated both in the human and in the natural context. The models of society that the heterodox approaches have in mind imply changes involving the overall structure of the system to fit within the limits of the socio-environmental constraints.

The existing difference across these perceptions of capitalism also translates into two distinct allocations of ethical analyses of crises. While not explicitly mentioned in the literature, the underlying assumptions of the mainstream and heterodox frameworks give reason to argue that ethical considerations must be exogenous and endogenous, respectively. That is because the inherent hypothesis of the mainstream approach considers markets to be efficient and fair, and able to generate the greatest benefit for the greatest number of people. Therefore, ethical considerations are limited to moral rules governing fiduciary duties, fairness in contracts and compliance with the law. The wider impacts on common goods and socio-environmental effects are then relegated to the ethical implications of the external forces interfering with the market, such as government interventions and welfare policies (Friedman, 1962, 1970). On the other hand, the heterodox analysis considers market as a source of exploitation and ethical considerations need then to be applied within the elements of the market structure. This framework will be further discussed in Section 4 where the ethical

implications of the mainstream and the heterodox perceptions will be considered.

With this framework, the objective of this paper is to compare and discuss the perceptions of capitalism and crises, both from a mainstream and heterodox perspective. In addition, by outlining the related ethical implications of the different narratives of capitalism, this paper also discusses the challenge of ethical judgement. By providing a critical overview of two different schools of thought, the present paper contributes to the existing debate around stability of global capitalism and provides a starting point for analysis investigating the feasibility of alternative economic structures. The paper is structured as follows: Section 2 focuses on the mainstream perceptions of capitalism and related crises. Section 3 discusses how the heterodox economic perspectives have explained the failure of capitalism and the emergence of crises. Section 4 provides ethical considerations under the mainstream and the heterodox perspectives. Section 5 concludes.

2 | MAINSTREAM PERCEPTIONS OF GLOBAL CAPITALISM AND CRISES

The mainstream approach is based on the classical (often pre-Keynes) understanding of capitalist economies and has seen many variations since the late 1940s. From the Neoclassical Synthesis (NCS) during the 1950s and 1960s, to Monetarism in the 1970s, to New Classical Macroeconomics (NCM) spanning from the late 1970s to the mid-1990s to the most current incarnation in the form of the New Keynesian school of thought (NKM). While all these schools of thought differ in one or more aspects with some of them having subschools of their own, they all share the same neoclassical paradigmatic elements.

The core of neoclassical economics, that all its different schools of thought share, is the assumption that, similar to systems found in the natural sciences, a stable state (or region) exists. Moreover, it is not only maintained that an equilibrium (or multiple equilibria) within the economy exists (exist), but it is also assumed that this (these) equilibrium(s) is (are) attainable (Ingrao & Israel, 1990). And, while classical economists recognised that economies can deviate from the equilibrium, the belief was pertained that these deviations were only temporary and mostly short-lived (Snowdon et al., 1994). Market forces (often in the form of prices) would ensure a swift return to the steady state. This view of an overall stable and self-regulating general equilibrium (GE)¹ system that is the economy is mostly shared by modern mainstream theory – uncritically at least until the 2008 crisis.

Similar to the equilibrium assumption, mainstream approaches share strong microeconomic foundations² (Lawson, 2006). With underlying microeconomic concepts, modern capitalist economies are looked at through the lens of methodological individualism (Arnsperger & Varoufakis, 2006; Milonakis, 2017), where the actions of individuals (agents) in the form of utility or profit maximisation ensure that a pre-defined equilibrium is attained. Since the behaviour

of all these agents (consumers and producers) is, at least from an economic standpoint, the same (maximising through optimisation), it is legitimate within the theory to solely focus on a single agent that is representative of all other agents in the system. Hence, the microeconomic behaviour of a representative consumer or firm can explain aggregate economic phenomena. In recent years, and especially after the Great Recession, there have been methodological developments where mainstream mathematical models attempt to employ the complexity approach to account for suddenly occurring crisis episodes caused by tipping points within such systems (see for example projects within Rebuilding Macroeconomics³). This, of course, is a methodological move away from the individualistic approach at least for these types of models. However, not only does the equilibrium assumption have to be maintained (albeit in a different form) for those models to work, but when looking at mainstream economic theory, these methodological developments have mostly been ignored.

Tied to the microeconomic, individualistic approach to GE economies is the conviction that capitalist economies do not have to be placed within the wider structure of social, political or natural systems. It is not only sufficient to look at the economy in isolation from existing structures, real time and space (Dymski, 2014; Dymski & Shabani, 2017), but also generally accepted practice to divide the economy into two separate sectors, the real and financial sector (Arnsperger & Varoufakis, 2006; Snowdon et al., 1994) and then analyse both sectors in isolation from one another (classical dichotomy). Intricate and important interrelations between those two spheres such as changing debt levels (tied to investment), the importance of money or more recently, increasing overall economic fragility due to socio-economic developments occurring in real time such as financialisation, are mostly ignored.

While it was generally acknowledged that in the run-up to the 2008 crisis mainstream theory and the accompanying models had failed to anticipate and retrospectively even explain what had happened, the underlying neoclassical paradigm was never truly questioned. Hence, only minor ad hoc changes to the existing paradigm were made. A replacement of the neoclassical approach attempting to explain capitalist economies did not take place. Before moving on to heterodox approaches, the following section will pick up on the points made above from a more critical angle while connecting the analysis to the understanding of crises within capitalist economies.

2.1 | Exogenously created crises within mainstream economic theory

2.1.1 | The equilibrium belief and the need for exogenous shocks

Within neoclassical approaches, the equilibrium belief is at the core of theoretical and most methodological elaborations concerned with the analysis of capitalist economies. In fact, the hypothetical equilibrium is the starting point for any investigation within the orthodox

paradigm (Dymski, 2014). The specific type of equilibrium has in line with adjustments made to the underlying theory changed over time from a static long-run equilibrium that allows for short-run fluctuations (for example, within the NCS and monetarism), to a stochastic process representing an equilibrium path on which the economy moves through notional time, whereas multiple equilibria are possible (within NCM), towards the most recent representation in the form of dynamic equilibrium economies (within NKM) represented by dynamic stochastic general equilibrium (DSGE) models. However, the assumption that the respective equilibrium or equilibrium path governs the economic system in such a way that economies will always (naturally) tend towards or move around such an equilibrium, equilibrium path or region has been retained. This self-regulated adjustment of economies towards a balanced state of course also implies that the overall economic system is stable (balanced).

However, within a generally stable system, large fluctuations in system variables observable during crisis episodes such as, for example, during the Japanese Asset Price Bubble of the late 1980s early 1990s cannot be accounted for (Kuehnlenz, 2018). Due to the general stability assumption, such systems are incapable of generating endogenous fluctuations and with that crisis behaviour. Hence, only unpredictable outside shocks could cause the system to deviate from its naturally stable state. It becomes hard to see how empirically observable extended periods of instability and the build-up to larger crisis episodes could be explained under such assumptions. And, even if such an external shock could cause specific crisis behaviour, the assumption is that the economic system automatically adjusts towards its optimal equilibrium level in time. This implies that crisis episodes are only short-lived and correct themselves. Again, empirically, this has not been observed. Within a Minskian analysis and within the complex system approach for example, instabilities and crises emerge endogenously and are only one of many possible system states. However, the overbearing importance of the equilibrium belief in mainstream approaches makes it unnecessary to consider those different system states and accompanying varying levels of instability in detail. Yet, when ignoring different system states of capitalist economies, crises within them cannot be meaningfully explained. Extraordinarily large crisis episodes such as, for example, the dot-com bubble during the late 1990s early 2000s or more recently the subprime crises then represent not only abnormal system behaviour, but those episodes are also believed to be rare and somewhat isolated events caused by unpredictable outside shocks. With such theories at hand, structures underlying each crisis scenario cannot be identified. Real-world economic crises will remain undetectable and appear random all while the sources of such crises will seem uncontrollable.

2.1.2 | The neglect of the importance of money and endogenous money creation in explaining financial and economic crises

In capitalist economies, credit is needed to finance investment and innovations which, in turn, lead to economic growth (Keen, 2013;

Minsky, 2008a; Schumpeter, 1928). Within mainstream schools of thought, it is implicitly assumed that investment may be financed by loans through the dependence of investment on the interest rate (for example, within the Keynesian multiplier model⁴). However, due to the pertaining classical dichotomy explicitly, this connection is not made. And, due to the overall stability belief under which the economic system is a balanced one, the assumption is made that investment must equal savings ($I = S$). The hypothesis that credit can only be generated through existing savings enforces this notion. For commercial banks theoretically, this means, they can and will only lend out as much as customer savings allow. Only the central bank has the power to create money and therefore increase the money supply within economies. Money is, therefore, given exogenously. The creation of additional purchasing power through the creation of loans within the economy is ignored. In fact, according to underlying orthodox models, financial and economic crisis episodes can emerge even without the availability of loans and the accompanying increase in purchasing power (Martin & Ventura, 2012).

Yet, when looking at how commercial banks within capitalist economies actually operate, it becomes clear that only a fraction of a bank's deposits are backed by actual cash at hand (savings) (Leijonhufvud, 2009). This implies that banks give out loans and look for the needed reserves later. For the explanation of economic and financial crises, it is important to note that, as soon as new loans are generated with the additional funds being transferred to the borrower (households and firms), new money (purchasing power) is created (Keen, 2013, 2017; Leijonhufvud, 2009) endogenously. The process of endogenous money creation is independent of the money supply by central banks and can hence not really be controlled (at least not in liberalised financial markets). The fractional reserve banking (Leijonhufvud, 2009) mentioned above is not limited by the availability of a certain underlying monetary reserve. Similarly, investment (both productive and speculative) is not restricted by the level of savings in the economic system but by the availability of loans and the willingness of commercial banks to lend (Fontana, 2009). If the investment does not have to equal savings ($I = S$), the assumption that an equilibrium and hence, a balanced and stable system necessarily pertains can also be questioned. From a heterodox, especially a Minskian point of view (explained in more detail in Section 3.1), changing debt structures are indicative of changing system instabilities. Increasing instabilities are tied to increasing private sector debt and strongly hint towards the emergence of financial and economic crises (Minsky, 2008a).

Not only is the importance of endogenous money creation and changing debt structures neglected within mainstream schools of thought, but money itself is not realistically accounted for (Ingrao & Sardoni, 2019). It is believed that simple barter and endowment economies without money can actually represent modern capitalist economies and the crises within them (Azariadis, 1981; Azariadis & Guesnerie, 1986; Blanchard & Watson, 1982; Cass & Shell, 1983, 1989; Diba & Grossman, 1987, 1988; Farmer, 2015; Martin & Ventura, 2012). Though economic crises could possibly emerge locally and be restricted to a specific market (for example, seashells,

salt or fur in primitive exchange economies) if money and the various interrelated debt structures are ignored, it would not be possible for economic and financial crises to emerge simultaneously in different regions and different markets affecting different social groups. This phenomenon only becomes possible through money flows interconnecting different markets, regions and groups.

Through assigning the financial sector an intermediate role where the supply of money is exogenously given and where credit creation plays no role,⁵ the debt and financing structure of the economic system cannot be uncovered. Similarly, the underestimation of the importance of money to the point that it simply represents a veil leaves no room for the economic and financial crises clearly observable within modern capitalist economies. Yet, in order to understand how economic and financial crises emerge and spread across the globe, it is important to comprehend in detail how additional purchasing power is created from within the system and how the debt structures evolve and change over time. The endogenous creation of money is not only a crucial part to any boom phase in the business cycle, but also one of the main drivers of economic and financial bubble and crisis episodes.

To provide means of financing for a capitalist production economy, a financial sector that is not purely intermediate is needed while the interrelations between the real (producing) and financial side of the economy must be investigated and understood. Additionally, to comprehend specific crisis episodes, capitalist economies must be placed within the wider geographical and historical context (Dymski & Shabani, 2017). Similarly, economies should be understood to just be one of many different but highly interrelated subsystems that make up the Earth (Foxon et al., 2013). However, within the orthodox analytical framework, economies are analysed in isolation from socio-political and historical structures and planetary boundaries. Indeed, only one side (either the real or financial side) of the already isolated economy is looked at (classical dichotomy).

2.1.3 | Classical dichotomy and the missing placement of economies within the wider context of the socio-political system

Within the mainstream approach to modern capitalist economies, single markets are analysed in isolation from the rest of the economy (Alves & Kvangraven, 2020; Fine, 2019). As such, the analysis of the producing side of the economy takes place, without considering active financial markets, and with that, endogenously created money. However, as explained earlier, the endogenously created additional purchasing power via loans and in the form of money going to firms and households, in combination with increasing debt levels of both, firms and households, is indicative of emerging instabilities within the economic system. An identification and understanding of this process is especially important when the additional purchasing power is not used for productive investment, but instead for financial speculation, consumption and debt payments (Minsky, 1992, 2008a; Schumpeter, 1927) which, from a Minskian perspective

is indicative of the highest possible instability within the system.⁶ When looking at the changing level and quality of debt in combination with the usage of the endogenously created money, different stages of the business cycle (stable to unstable), and with that crisis episodes, can be identified over time. However, this necessitates not only the consideration of active financial markets and money, but it also requires that both, the real and financial sides of the economy are considered simultaneously in the analysis. In this way, important links between different actors within the economy that develop out of the emerging income structures and debt commitments can be identified (for example, via the balance sheet approach employed by Post-Keynesians).

By understanding the debt—and income structure within an economy, it will also become possible to link the real and financial side of the economy more clearly. While debt is created within the financial sphere, households and firms use this additionally created purchasing power to finance consumption and investment affecting the real side of the economy. At the same time, depending on the quantity and quality of debt, the debt commitments of both households and firms will influence (future) consumption and investment decisions. While the increasing availability of loans for investment and consumption could potentially lead to an economic boom phase stipulating the further creation of loans, the increasing debt to income ratios over the course of a boom could potentially lead to crisis episodes. Hence, both the financial and the real side of the economy are closely connected via financial commitments and income streams, both heavily influencing and causing the ups and downs of business cycles.

Without an active financial side tied to the real side of the economy via emerging debt structures, it is questionable if the observable cyclical behaviour of capitalist economies, let alone the huge crises within them would even emerge. Increasing investment during economic boom episodes leading to increasing levels of debt to finance investment could not take place. Similarly, increasing debt levels to a point where debt payments exceed the generated income inducing a downturn could also not occur. Hence, without the cyclical behaviour of economies, where the economic system goes through various stages of system stability, economic and financial bubbles and their following crises, as endogenous part of these cycles, would also not emerge. Again, the non-consideration of active financial markets, the disregard for the interplay between the real and the financial side of the economy as well as the neglect of money all make it impossible to understand, portray or even consider economic crisis episodes.

It is unexplained why financial markets would even exist if production and investment is not accounted for. The sole reason for the emergence and existence of financial markets is the financing of investment, productive and financial. There is no reason or possibility for financial markets to prevail without a producing side of the economy. A similar argument can be made for the real side of the economy where, without access to finance and financial markets investment could not take place (Schumpeter, 1927, 1928). And, even if (calibrated) mainstream (DSGE) models adhering to the classical

dichotomy can create hypothetical bubble and crisis behaviour or movements away from the equilibrium (path), this can only be done through very stringent model assumptions and via (large) exogenous shocks. It seems inconsequential that shocks of this magnitude have, in reality, not been observed. It appears more likely that large economic crisis episodes are an inherent part of the business cycle, closely related to investment and the overall lending situation.

Not only are the real side of the economy and the financial side of the economy analysed in isolation from one another, but the sole focus on single markets alone also results in the complete separation of economies from society (Alves & Kvangraven, 2020) and ecology (Foxon et al., 2013). Ties and interdependencies of capitalist economies to the natural (ecological) system, its resources and naturally occurring boundaries are all ignored. Not recognising that capitalist economies are simply a subsystem and hence part of the surrounding biosphere has justified the overbearing focus on unlimited economic growth and consumption irrespective of biological limits or planetary boundaries (Pirgmaier, 2020). The outcomes of such an approach in the form of climate change and mass extinction (to only name a few) are undeniable. Similarly, no attention is given to the institutional set-up (Foxon et al., 2013), political regimes (Milonakis, 2017), historical context (Fine, 2019) or ethical considerations (Alves & Kvangraven, 2020; Milonakis, 2017) when attempting to explain modern capitalist economies. Instead, greater focus is given to mathematical logic (Fine, 2019; Milonakis, 2017; Pernecky & Wojick, 2019) where universalities found in highly idealised and unrealistic economies are matched to what we see in the real world. This lack of realism is not only one of the biggest critiques brought forward by heterodox economists, it also renders any attempt to understand the rapid increase in economic and financial crises observable since the 1980s (Reinhart & Rogoff, 2009) impossible. The extensive shift in policy regimes starting in the 1980s towards deregulated and liberalised capitalist economies (Bellofiore, 2013; Crouch, 2009; Foster & Mcchesney, 2012; Wolfson and Epstein, 2013) in tandem with the deconstruction of the welfare state (Doling & Ronald, 2010) are all not touched upon. Similarly, the consequential emergence of financialisation (Krippner, 2005; Palley, 2007; Stockhammer, 2010) especially, but not only, in Anglo-Saxon countries and the concomitant changes in profit generation (Driver & Temple, 2013) and investment (Tori & Onaran, 2017), the resulting deindustrialisation (Glyn, 2006) of previously producing economies as well as rapidly increasing debt levels of the private sector (Stockhammer, 2010) are all ignored within the mainstream analysis (Fine, 2019). The link to overall increased economic and financial instability due to these developments can, therefore, not be made by neoclassical theorists.

In overlooking these real-world developments, mainstream economic theory continues to be incapable of accounting for crisis episodes. Even if after the Great Financial Crisis (GFC) ad hoc explanations (such as overconsumption and globalisation, availability of credit and accommodative monetary policies or financial deregulation) were added to account for this specific episode of high instability, underlying structures leading to crises, the importance of institutions and policy regimes as well as the consideration of

the overarching (complex) system have yet to be included into the analysis. Hence, orthodox theory has remained firmly in the normative camp where the analysis of modern capitalist economies is more concerned with how things should be (to fit with the underlying model) but not so much with what can actually be observed (Pernecky & Wojick, 2019). Therefore, if the workings of capitalist economies and the endogenously emerging crises within them are to be understood, one has to look elsewhere (heterodox approaches).

3 | HETERODOX PERCEPTIONS OF GLOBAL CAPITALISM AND CRISES

There is no one agreed upon definition of what exactly heterodox economics is (Dequech, 2007, 2012; Lawson, 2006; Mearman, 2011; Mearman et al., 2019). Issues surrounding the definition of heterodox economics possibly stem from the fact that under this umbrella term (Lawson, 2006), multiple varying schools of thought can be found (such as Marxism, Feminism, Post-Keynesianism, Institutionalism, Evolutionary and Ecological Economics to name a few). Different to the orthodox approach discussed above, heterodox schools of thought vary substantially in their approach to capitalist economies with differing analytical starting points, methodologies and more generally their understanding of reality. Yet, while great differences between the diverse heterodox schools of thought exist, it does not mean that these schools are inconsistent or that there does not exist any sort of coherence among these paradigms (Lawson, 2006; Mearman et al., 2019).

Attempted definitions for heterodox economics range from any economic paradigm that is in opposition to the mainstream theory (Dequech, 2007, 2012; Lawson, 2006; Mearman, 2011; Mearman et al., 2019) to ontological similarities that underlie all heterodox schools of economic thought (Lawson, 2006) such as, for example, plurality of theory and methodology (Dow, 2008; Mearman et al., 2019) and a rejection of deductivist methods (Lawson, 2006) that are inadequate for the explanation of social systems (Fine, 2019; Lawson, 2006). Research as to what exactly constitutes heterodox economics is ongoing (Mearman et al., 2019). Hence, for the purpose, here, we will focus on explaining what constitutes a heterodox economic theory, which is geared towards the aim of this paper, in understanding modern capitalist economies and specifically the crises within them.

At the core of the overall approach to modern capitalist economies lies, contrary to the neoclassical take, realism (Dequech, 2012; Fine, 2019; Lawson, 2006). Whereas, due to its mathematical formalism, modern mainstream economic theory requires, a closed system analysis, heterodox approaches purposefully analyse open systems (Lawson, 2006). This means, of course, that the classical dichotomy so prominent in mainstream theories is rejected since modern capitalist economies are understood to be evolutionary (complex) systems (Colander, 2005; Foster, 2005; Foxon et al., 2013) that are highly interconnected moving through historical time. Changes within these complex systems are caused

by the interplay between the macro- and microspheres leading to the observable ups and downs of a business cycle. Extreme events in the form of crisis episodes are not only understood to be one of the many possible system states of the economy, but they are also regularly occurring and emerge endogenously through the workings of the complex system alone. Especially, the consideration of active financial markets where money and endogenous money creation play a key role in the evolution of the system makes an analysis of endogenously emerging system states including crisis episodes possible. An equilibrium that governs the economic system and ensures continued economic stability is, at least theoretically not needed.

Due to the recognition that the open economic system is simply a subsystem of and highly connected to the socio-political system (Foster, 2005; Foxon et al., 2013), it follows that a thorough understanding of the socio-political and institutional context is fundamental if modern capitalist economies and the reoccurring crises within them are to be understood. For example, and in stark contrast to the previously discussed mainstream concept, heterodox approaches have long recognised that the deregulations of economies and the liberalisations of financial markets since the 1980s have not only led to increased inequalities and debt. These developments have also generated an increase in the frequency and magnitude of economic, financial and political instabilities all over the globe (Bauman, 2017; Bellofiore, 2013; Crouch, 2009; Glyn, 2006; Stockhammer, 2010; Streeck, 2014; Varoufakis, 2013).

Mainstream economic theory only recognised that liberalisations and deregulations may have contributed to the global financial crisis of 2008 after the fact in an ad hoc attempt to account for the subprime crisis. However, the underlying structural changes within the socio-political-economic system which have caused a shift towards continuously higher instability within the overall capitalist system have yet to be fully recognised. The failure to do so is of course tied to the underlying neoclassical paradigm and means that, as argued by Fine (2019), orthodox theory remains incapable to fully account not only for the global financial crisis of 2008 but also for any future crisis episodes. Therefore, and, in order to understand fluctuations and crisis episodes that are part of an evolutionary, complex system moving through time, a radically different (heterodox) theory, where money plays a role, where people are not rational and where economic crises emerge organically from within, has to be considered. Keynes and Post-Keynesians, who follow Keynes' theory most closely, offer such an alternative.⁷

3.1 | Endogenously emerging crises within Post-Keynesianism

Post-Keynesians maintain that when attempting to understand economic fluctuations, the analysis of a general equilibrium, barter economy is not sufficient (Snowdon et al., 1994). Money as well as the possibility of market-shattering crises on a macroeconomic scale

must be considered. Therefore, especially with regards to crisis episodes, and in contrast to neoclassical approaches, Post-Keynesians are capable of understanding such episodes and recognise its underlying causes (Keen, 2015). This is because Post-Keynesians take an inclusive approach to business cycles within the overall socio-economic system. Inclusive here means that economic bubble and the following crisis episodes, though outliers in magnitude, are by no means outliers in the frequency of occurrence. Although it is recognised that there exist basic commonalities defining business cycles, it is also understood that economies differ by region and that the economy is evolving over time. Hence, time- and space-specific factors also determine observable business cycles and with that, crises (Keynes, 1930, 1936).

Within this theoretical framework, Hyman Minsky combined the works of Keynes, Schumpeter and Fisher to develop his theory of a finance-driven business cycle (Keen, 2013; Minsky, 1992, 2008a) where economic booms, bubbles, crises and recessions are innate to the (system) behaviour of the economy (De Antoni, 2010; Minsky, 1970, 1982, 1992, 2008a). Capitalist economies, according to Minsky, not only have a tendency towards cycles (De Antoni, 2010; Keen, 2017), but they are, due to the link to financial markets, also inherently unstable (Keen, 1995, 2011, 2013; Minsky, 1970, 1982, 2008a, 2008b). This fundamental instability of capitalist economies is upward (De Antoni, 2010; Keen, 2017), which simply means that such economies have a tendency towards boom phases (Minsky, 1970). Periods of extended economic growth, signalling economic stability and future growth will inevitably, due to overoptimistic future expectations of banks, firms and households, lead to emerging instabilities ending in an economic downturn and possible economic crisis, even with big governments and active central banks (Minsky, 1970, 1982, 1992, 2008b). For Minsky, the changing level and quality of private debt⁸ over the course of a cycle plays a central role in this development (Keen, 2017).

Theoretically, Minsky sees the economy very much as a complex system, where developments on the micro level influence and change the properties of the system on a macro level, which, in turn, has effects on the micro-level properties. In earlier works, Minsky (Minsky, 1970) hints towards the feasibility of steady states and acknowledges the possibility of multiple equilibria within the economic system. Though Minsky (1970) assures us that there is no global equilibrium indicating that the system overall might not be stable (only local equilibria are), it remains inexplicable why such equilibria should, in a human-made system inhabited by non-rational people, exist. As previously mentioned, there is no reason to believe that socio-economic systems would tend towards or away from multiple possible equilibrium states, even if those states are only locally stable (unstable). Hence, it can be argued that the only reason Minsky employs the equilibrium notion is a mathematical one. When looking at the economic system as an evolutionary system that evolves over time within an ever-changing environment (society), theoretical explanations in favour of possible equilibrium states are not needed.

3.2 | The case for limits to growth

The systemic approaches emerging from the Post-Keynesian extensions, the idea that economic systems are not working in isolation and the complex system analysis based on the functioning of the natural environment, contributed to the development of schools of thought oriented to analyse the economy as a subsystem of the existing socio-environmental structure. The 'Limits to Growth' (Meadows et al., 1972), 'Small is Beautiful' (Shumacher, 1973), 'The Entropy Law and the Economic Process' (Georgescu-Roegan, 1971) or the 'Steady State Economy' (Daly, 1977) are just some examples of publications highlighting the impossibility to have an infinite economic growth in a finite natural environment. The main idea is that economic growth will, sooner or later, end. Energy and material constraints, together with the social instabilities, related to resources depletion and unequal distribution of burdens and rights, are just some of the main elements that, according to different authors, could compromise the stability of the capitalist structure (Ayres, 2006; Barnosky et al., 2012).

In addition, the mainstream economic approach has also been largely criticised for being unable to consider the multidimensional relationships existing between the economic and the socio-environmental structure. By using a monetary approach to quantify the value of market and non-market elements, the mainstream approach to economies reduces the plurality of human and natural values to a single monetary representation. The ethical implications related to this oversimplified approach highlight the inability to account for ethical principles and even values and priorities that different societies, generations and cultures could attribute to the non-monetary elements of socio-environmental structures (Martinez-Allier et al., 1998; Pirgmaier, 2021). Negative externalities, inequalities and long-term instabilities are then the consequences reflected in the recurring capitalist crises (Foxon et al., 2013; Martinez-Alier et al., 1998). The wide range of protest and socio-political movements that have emerged after the 2008 financial crash are examples of that. The 'M5 movement' in Italy, the 'Indignados' in Spain, the 'Occupy Wall Street' in the United States and the 'real democracy now' are examples of bottom-up and heterodox initiatives asking for a revision of the existing capitalist structure (Castells, 2012).

According to these views, crises are a symptom of an intrinsic failure of the capitalist system and of the related mainstream perceptions. The proposed solutions would require an integration of ethics into the economic structure, a wider inclusion of the non-monetary values and multidimensional considerations of the elements characterising the nature of societies (Gowdy & Erickson, 2005; Washington & Maloney, 2020). Steady state, degrowth, circular economy, business ethics and green growth are just some examples of alternative economic approaches proposed to overcome crises and to promote a more equal and sustainable economic structure (Daly, 1977; Georgescu-Roegen, 1971; Illich, 1973; Kallis, 2011; Latouche, 2010; Soddy, 1926). The main alternatives presently debated in academia, society and in some political parties are then the results of decades

of discussions and critical reflections taking place in different inter-related areas of heterodox economic thinking.

Despite the extensive theoretical debate and the heterodox bottom-up initiatives that have been developed particularly after the global financial crisis of 2008, limited evidence exists around the impacts that a shift of economic paradigm could generate across the socio-economic and the environmental structure. Up to now, most of the policies applied to address capitalist crises have been related to the mainstream economic approaches, and little evidence exists on the feasibility of the alternative economic solutions. For this reason, it is difficult to clearly understand the impacts that the radical changes proposed by heterodox approaches could generate on the overall stability of the system, particularly considering the interconnected nature of the global capitalist structure. As reported by Andreoni and Galmarini (2014), further analysis would be required to investigate the feasibility, the long-term sustainability and the ethical implications of these approaches.

4 | ETHICS: CONSIDERATION RELATED TO THE MAINSTREAM AND THE HETERODOX APPROACHES

During the last few decades, extensive debates have been devoted to investigating the ethical implications of economic structures and market interactions. Three main theoretical approaches have then been defined in line with the utilitarian, deontological and virtue perspectives. The utilitarian approach, stating that an action is right when it achieves the greatest happiness for the greatest number, has been extensively used to support the Pareto efficient outcome and the market efficient hypothesis. Within this, perspective markets are perfectly able to self-regulate and the monetary quantification of outcomes can be used to balance the impacts. Ethical considerations are then relegated to external forces, such as government interventions interfering with the self-sufficient market mechanisms (Friedman, 1962). As reported above, the impossibility to account for the plurality of values characterising societies and the difficulties in internalising common goods and non-market elements has, however, been largely used by the heterodox approaches to explain the related crisis of the mainstream economic structure (O'Neill, 2017). Within this context, the heterodox approaches allocate ethical consideration endogenously, by considering market failures and lack of multidimensional values as drivers of crisis (Gowdy & Erickson, 2005; Washington & Maloney, 2020). The deontological perception, on the contrary, supports the idea that actions need to be taken in line with categorical imperative and moral rules. Within this context, certain actions are morally forbidden as they would make it impossible for civilised persons to live together. Fairness in contracts and compliance with the law are then considered fundamental prerequisites of business transactions (Friedman, 1970). The lack of consideration for the consequence of actions and the low attention to the singularity of a particular situation make it however difficult, for the deontological approach, to deal with the moral rules related to specific cultural backgrounds and with the practical wisdom that would

need to be used to account for the impacts of actions. The identification of the ethical consequences of economic structures should then go beyond the individualist aspects of markets and use virtue ethics to evaluate the impacts of actions. Often associated with the sentiment-based perspective of the care ethics, the virtue approach supports the idea that moral elements and situation-related judgements need to be used to minimise the socio-economic and environmental damages of activities (Melé, 2019; Wiggins, 2006). In the next paragraphs, the ethical implications of the mainstream and heterodox approaches are further discussed.

4.1 | Mainstream economics and ethics

Within mainstream economic approaches, the use of the efficient market hypothesis and the theories based on the Pareto efficient general equilibrium (which come with profit, utility and welfare maximisation assumptions) allows for both teleological (utilitarian) and deontological justifications of the fairness of free markets (Baumane-Vitolina et al., 2016; Lewis & Speck, 1990). Historically, teleological arguments were more prominent within the discipline of political economy. Classical economists such as James and John Stuart Mill, Hume, Smith, Bentham, Sidgwick and Edgeworth were utilitarian philosophers (Rawls, 1993), although Smith (1761), arguably, appears to be more of a virtue ethicist and contributed to the foundation of the modern welfare economics despite the claims that '[t]hey have (...) succeeded in pursuing what appears to be an amoral economic theory' (Myrdal, 1987, p. 274). All these economists share the idea that the good and right actions are identified with reference to utility, pleasure and happiness. This approach is later combined with the hypothesis of market efficiency and deontological arguments are introduced to explain the role of moral rules governing fairness in contracts and compliances with the law (Friedman, 1970). Despite limiting choices to act, these norms, such as property rights and free competition agreements, are necessary to guarantee that 'every person can pursue [their] ends, consistently with everyone else doing the same' (White, 2009, p. 305). The self-regulating market mechanisms together with the moral principles and rules are then able to generate the best possible outcome. Within this context, inequalities and crises are perceived as exogenous events and ethical analysis needs to be related to policy interventions and government approaches. Friedman famously argued social welfare and labour market regulations are the ultimate cause of discrimination and the outcome of these policies needs to be judged in terms of efficiency and fairness (Friedman, 1977). In line with this approach, markets and capitalism are considered as fair and just and thus not subject to ethical analysis or scrutiny. In other words, what needs fixing is not the market itself but the world around it.

4.2 | Heterodox economics and ethics

Contrary to this, ethical arguments related to the heterodox theories of capitalism and crises are more complex and challenging. The fact

that crises are inherent to the market system of capitalism requires the application of ethical analysis within the system itself. In other words, if crises of capitalism are systematic, then the question of fairness applies to way in which markets are organised, and the policy recommendations for addressing these crises should be within the scope of theorising. Smith (1976, pp. 302–303) already observed and warned of the consequences of markets, specifically with regards to the division of labour, by saying that '[t]he man whose life is spent in performing a few simple operations, of which the effects too are, perhaps, always the same, or very nearly the same, has no occasion to exert his understanding (...) naturally loses, therefore, the habit of such exertion, and generally becomes as stupid and ignorant as it is possible for a human creature to become' and that '[i]n every improved and civilised society, this is the state into which the labouring poor, that is, the great body of the people, must necessarily fall.' Smith (1976) realised that inequalities and class conflicts are based on the existence and unequal distribution of private property and that if governments were not to intervene, this would create a morally unsatisfactory society at risk of social instability (Nolan, 2003). Today, most heterodox approaches stand in the tradition to Smith's observations by giving governments a central role in the economy, not only in the prevention and easing of systemic crises, but also in related issues such as discrimination, income and wage.

However, heterodox approaches, that recognise the necessity to understand uncertainty, and to properly theorise interrelated socio-economic elements, instability and power relations, face a complex ethical challenge. Keynes (1979) himself makes an interesting point about ethical judgements under uncertainty, saying that he was unsure if we were ever able to show that rules of actions are generally right in the sense of Pareto efficiency conditions, i.e., producing a maximum of total good as often as possible (Lawson, 1993). He further concluded that 'if one good is greater than another, but the probability of attaining the first less than that of attaining the second, the question of which it is our duty to pursue may be indeterminate, unless we suppose it to be within our power to make direct quantitative judgments of probability and goodness jointly' (Keynes, 1979, p. 345). In the absence of judgements of probability (i.e., the presence of true Keynesian uncertainty), ethical judgements are impossible. This challenge has significant consequences. If, as argued above, heterodox economists not only theorise about capitalism and its crises, but also propose alternative models of society, then we may be in no position to decide on the best of two or more alternative structures and ultimately build a more satisfying society. Therefore, in the absence of certainty and full information, Keynes expresses the view that 'any course of action is more desirable the greater the weight of the argument for it, while its undesirability increases more than in direct proportion to any increase in risk' (Lawson, 1993, p. 185). Yet, if the risk is not quantifiable, what are we ought to do?

5 | CONCLUSION

General agreement exists on the fact that economic crises can be related to a set of complex and interrelated events. Excessive

debt, overconsumption, lack of regulation, fail of financial supervision and macroeconomic imbalances are some of the main factors that both mainstream and heterodox approaches advocate as elements responsible for the recurrent crisis. Conflicting views, however, exist in the definition of the core and fundamental elements that generate the overall instabilities of the capitalist system. If from one side the mainstream economic approaches consider crises as consequences of external shocks (Ietto-Gilles, 2010), the heterodox economic perspectives perceive endogenously emerging crises as a failure of the capitalist system. Based on different perceptions of the defining elements and the working structure of the global capitalism, the mainstream and the heterodox approaches use different analytical structures, narratives and ethical considerations. In particular, the mainstream approach generally describes market efficiency and growth as the best way to address the socio-economic instabilities and inequalities. Based on the idea that markets are perfectly able to self-regulate themselves through a set of mechanisms and rules, the mainstream economic approaches consider inefficiency and crisis as external instabilities induced by government interventions. The heterodox perspective, on the contrary, considers markets and capitalist structure as elements of overexploitation and unequal distribution. Within this context, ethical considerations and related changes are expected to take place to adjust the intrinsic limitations of markets and capitalism. However, since most of the previous crises have been addressed in line with the mainstream theoretical framework, limited evidence exists around the feasibility of the heterodox solutions. For this reason, it is difficult to clearly understand the impacts that the radical changes of heterodox initiatives could generate both in terms of ethical implications and in terms of socio-economic and environmental outcomes. Within this context, further analysis would be needed to investigate the overall impacts of the proposed changes. By discussing the main perceptions of capitalism and crises, the related ethical implications associated with the mainstream and the heterodox economic perspectives, the present paper contributes to the existing debate around the stability of capitalist systems and provides a starting point for future analysis oriented to investigate the feasibility of orthodox versus alternative economic approaches.

PEER REVIEW

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DATA AVAILABILITY STATEMENT

Data sharing not applicable—no new data generated. Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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ENDNOTES

- ¹ The developments and usage of dynamic stochastic general equilibrium (DSGE) models is representative of this.
- ² With the exception of the NCS which was heavily criticised for not having microeconomic links. This criticism has been addressed within the NKM school of thought.
- ³ <https://www.rebuildingmacroeconomics.ac.uk/>
- ⁴ The newest neoclassical interpretation can be found in *The Economy: Economics for a changing world* (2017).
- ⁵ Since the 2008 crisis attempts have been made to overcome this shortcoming—though unsuccessfully.
- ⁶ Which means that an economic and/or financial crises can be expected.
- ⁷ It should be mentioned that Marxism, specifically with regards to the evolution of a complex socio-economic system over time is also worth looking at.
- ⁸ Only firms are considered when debt is created. Private debt of households is not mentioned.

REFERENCES

- Akerlof, G. A., & Shiller, R. J. (2009). *Animal spirits: How human psychology drives the economy, and why it matters for global capitalism*. Princeton University.
- Alves, C., & Kvangraven, I. H. (2020). Changing the narrative: Economics after Covid-19. *Review of Agrarian Studies*, 10(1).
- Andreoni, V., & Galmarini, S. (2014). How to increase well-being in a context of degrowth. *Future*, 55, 78–89. <https://doi.org/10.1016/j.future.2013.10.021>
- Arnsperger, C., & Varoufakis, Y. (2006). What is neoclassical economics? The three axioms responsible for its theoretical oeuvre, practical irrelevance and thus, discursive power. *Panoeconomicus*, 53(1), 5–18. <https://doi.org/10.2298/PAN0601005A>
- Ayres, R. U. (2006). From my perspective—turning point: The end of exponential growth? *Technological Forecasting and Social Change*, 72, 501–519.
- Azariadis, C. (1981). Self-fulfilling prophecies. *Journal of Economic Theory*, 25(3), 380–396. [https://doi.org/10.1016/0022-0531\(81\)90038-7](https://doi.org/10.1016/0022-0531(81)90038-7)
- Azariadis, C., & Guesnerie, R. (1986). Sunspots and cycles. *The Review of Economic Studies*, 53(5), 725–737. <https://doi.org/10.2307/2297716>
- Barnosky, A. D., Hadly, E. A., Bascompte, J., Berlow, E. L., Brown, J. H., Fortelius, M., Getz, W. M., Harte, J., Hastings, A., Marquet, P. A., Martinez, N. D., Mooers, A., Roopnarine, P., Vermeij, G., Williams, J. W., Gillespie, R., Kitzes, J., Marshall, C., Matzke, N., ... Smith, A. B. (2012). Approaching a state shift in earth's biosphere. *Nature*, 485, 52–58. <https://doi.org/10.1038/nature11018>
- Bauman, Z. (2017). A chronicle of crisis: 2011–2016. *Social Eur*. Social Europe Ltd.
- Baumane-Vitolina, I., Calsa, I., & Sumilo, E. (2016). Is ethics rational? Teleological, deontological and virtue ethics theories reconciled in the context of traditional economic decision making. *Procedia Economics and Finance*, 39, 108–114. [https://doi.org/10.1016/S2212-5671\(16\)30249-0](https://doi.org/10.1016/S2212-5671(16)30249-0)
- Bellofiore, R. (2013). Two or three things I know about her: Europe in the global crisis and heterodox economics. *Cambridge Journal of Economics*, 37(3), pp. 497–512. <https://doi.org/10.1093/cje/bet002>
- Blanchard, O., & Watson, M. (1982). *Bubbles, rational expectations and financial markets* (NBER Working Paper Series). Retrieved from <http://www.nber.org/papers/w0945.pdf>
- Cass, D., & Shell, K. (1983). Do Sunspots Matter? *Journal of Political Economy*, 91(2), 193. <https://doi.org/10.1086/261139>

- Cass, D., & Shell, K. (1989). Sunspot equilibrium in an overlapping-generations economy with an idealized contingent-commodities market. In W. Barnett, J. Geweke, & K. Shell (Eds.), *Economic complexity: Chaos, sunspots, bubbles, and nonlinearity* [Online] (pp. 3–20). Cambridge University Press.
- Castells, M. (2012). Networks of outrage and hope. *Social movements in the internet age*. Polity Press.
- Colander, D. (2005). The future of economics: The appropriately educated in pursuit of the knowable. *Cambridge Journal of Economics*, 29(6), 927–941. <https://doi.org/10.1093/cje/bei078>
- Crouch, C. (2009). Privatised Keynesianism: An unacknowledged policy regime. *British Journal of Politics and International Relations*, 11(3), 382–399. <https://doi.org/10.1111/j.1467-856X.2009.00377.x>
- Daly, H. E. (1977). *Steady state economy* (318p). Island Press. Reprinted 1991.
- De Antoni, E. (2010). Different sources of capitalism's instability: Finance in Minsky and money in the general theory. *European Journal of Economics and Economic Policies*, 7(2), 241–247.
- Demsetz, H. (1967). Toward a theory of property rights. *American Economic Review*, 57, 347–359.
- Dequech, D. (2007). Neoclassical, mainstream, orthodox, and heterodox economics. *Journal of Post Keynesian Economics*, 30(2), 279–302. <https://doi.org/10.2753/PKE0160-3477300207>
- Dequech, D. (2012). Post Keynesianism, heterodoxy and mainstream economics. *Review of Political Economy*, 24(2), 353–368. <https://doi.org/10.1080/09538259.2012.664364>
- Diba, B. T., & Grossman, H. I. (1987). On the inception of rational bubbles. *The Quarterly Journal of Economics*, 102(3), 697–700. <https://doi.org/10.2307/1884225>
- Diba, B. T., & Grossman, H. I. (1988). The theory of rational bubbles in stock prices. *The Economic Journal*, 98(392), 746–754. <https://doi.org/10.2307/2233912>
- Doling, J., & Ronald, R. (2010). Home ownership and asset-based welfare. *Journal of Housing and the Built Environment*, 25(2), 165–173. <https://doi.org/10.1007/s10901-009-9177-6>
- Dow, S. C. (2008). Plurality in orthodox and heterodox economics. *The Journal of Philosophical Economics*, 1(2), 73–96.
- Driver, C., & Temple, P. (2013). Capital Investment: What are the main long term trends in relation to UK manufacturing businesses, and how do these compare internationally? *Future of manufacturing project: Evidence paper*.
- Dymski, G. A. (2014). The neoclassical sink and the heterodox spiral: Political divides and lines of communication in economics. *Review of Keynesian Economics*, 2(1), 1–19. <https://doi.org/10.4337/roke.2014.01.01>
- Dymski, G. A., & Shabani, M. (2017). On the geography of bubbles and financial crises. In: *Handbook on the geographies of money and finance* (pp. 29–50). Edward Elgar Publishing.
- Farmer, R. E. A. (2015). *Global sunspots and asset prices in a monetary economy*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1331242
- Fine, B. (2019). Economics and interdisciplinarity: One step forward, N steps back? *Revista Crítica De Ciências Sociais*, 119, 131–148. <https://doi.org/10.4000/rccs.9230>
- Fontana, G. (2009). *Money, uncertainty and time*. Routledge.
- Foster, J. (2005). From simplistic to complex systems in economics. *Cambridge Journal of Economics*, 29(6), 873–892. <https://doi.org/10.1093/cje/bei083>
- Foster, J. B., & Mcchesney, R. W. (2012). The endless crisis. *Monthly Review*, 64(1), 1–227. https://doi.org/10.14452/MR-064-01-2012-05_1
- Foxon, T. J., Kohler, J., Michie, J., & Oughton, C. (2013). Towards a new complexity economics for sustainability. *Cambridge Journal of Economics*, 37(1), 187–208. <https://doi.org/10.1093/cje/bes057>
- Friedman, M. (1962). *Capitalism and freedom*. University of Chicago Press.
- Friedman, M. (1968). The role of monetary policy. *The American Economic Review*, 58(1), 1–17.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *New York Times Magazine*, September 13, 32–33, 122, 126.
- Friedman, M. (1977). Fair vs free. *Newsweek*, July 4, p.70
- Friedman, M., & Schwartz, A. J. (1963). Money and business cycles. *The Review of Economics and Statistics*, 45(1), 32–64. <https://doi.org/10.2307/1927148>
- Georgescu-Roegen, N. (1971). *The entropy law and the economic process*. Harvard University Press.
- Glyn, A. (2006). *Capitalism unleashed: Finance, globalization and welfare*. Oxford University Press.
- Gordon, R. J. (1997). What is new-Keynesian economics? In B. Snowdon & H. R. Vane (Eds.), *A macroeconomics reader* (pp. 445–452). Routledge.
- Gowdy, J., & Erickson, J. D. (2005). The approach of ecological economics. *Cambridge Journal of Economics*, 29(2), 207–222. <https://doi.org/10.1093/cje/bei033>
- letto-Gilles, G. (2010). The current economic crisis and international business. Can we say anything meaningful about future scenarios? *Future*, 42, 910–919.
- Illich, I. (1973). *Tools for conviviality*. Calder and Boyars.
- Ingrao, B., & Israel, G. (1990). *The invisible hand: Economic equilibrium in the history of science*. The MIT Press.
- Ingrao, B., & Sardoni, C. (2019). *Banks and finance in modern macroeconomics*. Edward Elgar Publishing. Retrieved from: <https://www.elgaronline.com/view/9781786431523.xml>
- Juergensen, J., Guimón, J., & Narula, R. (2020). European SMEs amidst the COVID-19 crisis: Assessing impact and policy responses. *Journal of Industrial and Business Economics*, 47(3), 499–510. <https://doi.org/10.1007/s40812-020-00169-4>
- Kallis, G. (2011). In defence of degrowth. *Ecological Economics*, 70, 873–880. <https://doi.org/10.1016/j.ecolecon.2010.12.007>
- Keen, S. (1995). Finance and economic breakdown: Modeling Minsky's "financial instability hypothesis". *Journal of Post Keynesian Economics*, 17(4), 607–635. <https://doi.org/10.1080/01603477.1995.11490053>
- Keen, S. (2011). *A dynamic monetary multi-sectoral model of production*. International Scientific Symposium for Development devoted to the 110th anniversary of Simon Kuznets.
- Keen, S. (2013). A monetary Minsky model of the great moderation and the great recession. *Journal of Economic Behavior & Organization*, 86, 221–235. <https://doi.org/10.1016/j.jebo.2011.01.010>
- Keen, S. (2015). Post Keynesian theories of crisis. *American Journal of Economics and Sociology*, 74(2), 298–324. <https://doi.org/10.1111/ajes.12099>
- Keen, S. (2017). *Can we avoid another financial crisis?*. Polity.
- Keynes, J. M. (1930). *The great slump of 1930*. Retrieved from <http://www.gutenberg.ca/ebooks/keynes-slump/keynes-slump-00-h.html>
- Keynes, J. M. (1936). The state of long-term expectation. In: *The general theory of employment, interest, and money*. Retrieved from: <https://cas2.umkc.edu/economics/people/facultypages/kregel/courses/econ645/winter2011/generaltheory.pdf>
- Keynes, J. M. (1979). The collected writings of John Maynard Keynes. *A treatise on probability* (Vol. VIII). Royal Economic Society.
- Kindleberger, C. P., & Aliber, R. (2005). *Manias, panics and crashes: A history of financial crises* (5th ed.) John Wiley & Sons Inc.
- Krippner, G. R. (2005). The financialization of the American economy. *Socio-Economic Review*, 3, 173–208. <https://doi.org/10.1093/SER/mwi008>
- Kuehnlenz, S. (2018). *Economic and financial bubbles: Definition, theory and recent history* [Online] (PhD Thesis). University of Leeds. Retrieved from <https://etheses.whiterose.ac.uk/23505/>
- Landell-Mills, N., & Porras, N. (2002). *Silver bullet of fool's gold? A global review of markets for environmental services and their impact for the*

- poor. International Institute for Environment and Development (IIED).
- Latouche, S. (2010). Degrowth. *Journal of Cleaner Production*, 18(6), 519–522. <https://doi.org/10.1016/j.jclepro.2010.02.003>
- Lawson, T. (1993). Keynes and conventions. *Review of Social Economy*, 51(2), 174–200.
- Lawson, T. (2006). The nature of heterodox economics. *Cambridge Journal of Economics*, 30(4), 483–505. <https://doi.org/10.1093/cje/bei093>
- Leijonhufvud, A. (2009). Macroeconomics and the crisis: A personal appraisal. In: *Opening Lecture at the 6th Annual Research Conference of the Economic and Financial Affairs Directorate of the European Commission, Brussel* (p. 17).
- Lewis, P. V., & Speck, H. E. (1990). Ethical orientations for understanding business ethics. *Journal of Business Communication* 27(3), 213–232.
- Lucas, R. E. J. (1976). *Understanding business cycles*. University of Chicago.
- Lucas, R. E., & Sargent, T. H. (1979). After Keynesian macroeconomics. *Federal Reserve Bank of Minneapolis Quarterly Review*, 3(2). Retrieved from <https://www.minneapolisfed.org/research/qr/qr321.pdf>
- Mankiw, N. G. (2018). New Keynesian economics. *Econlib*. Retrieved from <https://www.econlib.org/library/Enc/NewKeynesianEconomics.html>
- Martin, A., & Ventura, J. (2012). Economic growth with bubbles. *The American Economic Review*, 102(6), 3033–3058. <https://doi.org/10.1257/aer.102.6.3033>
- Martinez-Alier, J., Munda, G., & O'Neill, J. (1998). Weak comparability of values as a foundation for ecological economics. *Ecological Economics*, 26(3), 277–286. [https://doi.org/10.1016/S0921-8009\(97\)00120-1](https://doi.org/10.1016/S0921-8009(97)00120-1)
- Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. W. III (1972). *The limits to growth: A report for the club of Rome's project on the predicament of mankind*. The American Library.
- Mearman, A. (2011). Who do heterodox economists think they are? *The American Journal of Economics and Sociology*, 70(2), 480–510.
- Mearman, A., Berger, S., & Guizzo, D. (2019). *What is heterodox economics?* Abingdon, Oxon. Routledge.
- Mel  , D. (2019). Business ethics in action. *Managing human excellence in organizations* (2nd ed.). Red Globe Press.
- Melvin, M., & Taylor, M. P. (2009). *The crisis in the foreign exchange market* (Cesifo Working Papers No. 2707).
- Milonakis, D. (2017). Formalising economics: Social change, values, mechanics and mathematics in economic discourse. *Cambridge Journal of Economics*, 41(5), 1367–1390. <https://doi.org/10.1093/cje/bex045>
- Minsky, H. P. (1970). Financial instability revisited: The economics of disaster. Retrieved from <http://www.ssrn.com/abstract=161024>
- Minsky, H. P. (1982). Can "it" happen again? A reprise. *Challenge*, 25(3), 5–13. <https://doi.org/10.1080/05775132.1982.11470774>
- Minsky, H. P. (1992). *The financial instability hypothesis*. Retrieved from <http://www.levyinstitute.org/pubs/wp74.pdf>
- Minsky, H. P. (2008a). *Stabilizing an unstable economy*. McGraw-Hill.
- Minsky, H. P. (2008b). *John Maynard Keynes*. McGraw-Hill.
- Muradian, R., Corbera, E., Pascual, U., Kosoy, N., & May, P. (2010). Reconciling theory and practice: An alternative conceptual framework for understanding payments for environmental services. *Ecological Economics*, 69(6), 1202–1208. <https://doi.org/10.1016/j.ecolecon.2009.11.006>
- Myrdal, G. (1987). Utilitarianism and modern economics. In G. R. Feiwel (Ed.), *Arrow and the foundations of the theory of economic policy* (pp. 273–278). Palgrave Macmillan. https://doi.org/10.1007/978-1-349-07357-3_9
- Nolan, P. (2003). Adam Smith and the contradictions of the free market. *Challenge*, 46(3), 112–123.
- O'Neill, J. (2017). Pluralism and incommensurability. In C. Spash (Ed.), *Routledge handbook of ecological economics: Nature and society* (pp. 227–236). Routledge.
- Palley, T. I. (2007). Financialization: What it is and why it matters. *SSRN Electronic Journal*. Retrieved from <http://www.ssrn.com/abstract=1077923> <http://www.ssrn.com/abstract=1077923>
- Pernecky, M., & Wojick, P. (2019). The problematic nature and consequences of the effort to force Keynes into the conceptual cul-de-sac of Walrasian economics. *Cambridge Journal of Economics*, 43(3), 769–783. <https://doi.org/10.1093/cje/bey039>
- Pirgmaier, E. (2020). Consumption corridors, capitalism and social change. *Sustainability: Science, Practice and Policy*, 16(1), 274–285.
- Pirgmaier, E. (2021). The value of value theory for ecological economics. *Ecological Economics*, 179, 106790. <https://doi.org/10.1016/j.ecolecon.2020.106790>
- Rawls, J. (1993). *Political liberalism*. Columbia University Press.
- Reinhart, C. M., & Rogoff, K. S. (2009). *This time is different: Eight centuries of financial folly*. Princeton University Press.
- Romer, D. (1993). The new Keynesian synthesis. *Journal of Economic Perspectives*, 7(1), 5–22. <https://doi.org/10.1257/jep.7.1.5>
- Schumpeter, J. (1927). The explanation of the business cycle. *Economica*, 21, 286–311. <https://doi.org/10.2307/2548401>
- Schumpeter, J. (1928). The instability of capitalism. *The Economic Journal*, 38(151), 361. <https://doi.org/10.2307/2224315>
- Shiller, R. J. (2005). *Irrational exuberance* (2nd ed.). Currency Doubleday.
- Shumacher, E. F. (1973). *Small is beautiful: Economics as if people mattered*. Harper Perennial.
- Smith, A. (1761). *The theory of moral sentiments* (2nd A. ed.). Edinburgh.
- Smith, A. (1976). *An Inquiry into the nature and causes of the wealth of nations*. Chicago University Press.
- Snowdon, B., Vane, H., & Wynarczyk, P. (1994). *A modern guide to macroeconomics: An introduction to competing schools of thought*. Edward Elgar Publishing Limited.
- Soddy, F. (1926). *Wealth, virtual wealth and debt*. George Allen and Unwin, Ltd.
- Stockhammer, E. (2010). *Financialization and the global economy* (Workingpaper Series). Retrieved from <https://www.peri.umass.edu/publication/item/392-financialization-and-the-global-economy>
- Streeck, W. (2014). *Buying time: The delayed crisis of democratic capitalism*. Verso.
- Tori, D., & Onaran, O. (2017). The effects of financialisation and financial development on investment: Evidence from firm-level data in Europe (No. 44; GPERC). <https://doi.org/10.2139/ssrn.3064062>
- Varoufakis, Y. (2013). *The global Minotaur: America, Europe and the future of the global economy* (2nd ed.). Zed Books.
- Venetoklis, T. (2021). Exogenous shocks and citizens' satisfaction with governmental policies: Can empirical evidence from the 2008 financial crisis help us understand better the effects of the COVID-19 pandemic? *Quality & Quantity*, 55(6), 1973–2000. <https://doi.org/10.1007/s11135-020-01087-2>
- Visco, I. (2005). From theory to practice in macroeconomic models. *BNL Quarterly Review*, LVIII (September), 67–90.
- Washington, H., & Maloney, M. (2020). The need for ecological ethics in a new ecological economics. *Ecological Economics*, 169, 1106478. <https://doi.org/10.1016/j.ecolecon.2019.106478>
- Wiggins, D. (2006). *Ethics: Twelve Lectures on the Philosophy of Morality*. Penguin Books.
- Wolfson, M. H., & Epstein, G. A. (2013). *The handbook of the political economy of financial crises*. Oxford University Press.

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