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How can we explain the persistence of the Great Recession? A balanced stability approach

Teodoro Dario Togati*

The Great Recession (GR) creates a stalemate in macroeconomics. On the one hand, standard approaches fail to account for its persistence in a credible way due to their implicit assumption that the economy is internally stable. On the other, heterodox approaches fail to regain consensus. While often correctly stressing that the roots of the GR lie not only in developments within the financial sector but also in a lack of aggregate demand, they fail to devise an alternative method for showing why this problem has arisen in a systematic way. This paper fills the gap by proposing a new framework called the 'balanced stability approach'. Its specific contribution is to stress that the low demand problem is rooted in a wide range of structural changes which arise in the so-called 'new economy'.

Key words: Economic crisis, Stability, Deductivist methods, Macroeconomics,

Keynesian theory

7EL classifications: B50, E32, E60

1. Introduction

The peculiarity and persistence of the Great Recession (GR) has plunged macroeconomics into disarray. As noted for example by Andrew Lo in his review in the *Journal of Economic Literature*, not only is there 'still significant disagreement as to what the underlying causes of the crisis were' (Lo, 2012, p. 173) among various authors, but the latter also fail to provide a complete and coherent understanding of the GR.

According to this paper, this gap between the GR and the analyses of its causes is due to lack of a consistent and general approach to macroeconomic stability in the literature. First, the standard paradigm is in crisis due to its internal stability assumption. In particular, writing about the GR and 'just assuming' as a matter of faith that the economy is internally stable, as standard macroeconomists do, only allows a very limited understanding of the GR: it is like writing *Hamlet* without the prince. This assumption leads these theorists to rely on a deductivist method that

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¹ As Lucas remarked in 2007: 'So I am skeptical about the argument that the subprime mortgage problem will contaminate the whole mortgage market, that housing construction will come to a halt, and that the economy will slip into a recession. Every step in this chain is questionable and none has been quantified. If we have learned anything from the past 20 years it is that there is a lot of stability built into the real economy' (Lucas, 2007, p. A20).

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implies that events such as the GR are either impossible or due to external factors. This is why they focus on exogenous shocks, such as financial frictions (see, e.g., Hall, 2010; Woodford, 2010) and negative shifts in productivity in the construction sector (Minford, 2010) or in labour markets (Ohanian, 2010), to account for the most immediate impact of the financial crisis on the economy or identify instead various types of government failures—such as fragmented regulatory structure, political influence on credit and housing markets or overexpansionist monetary policy—as the deep causes of the housing bubble and the GR (see, e.g., Taylor, 2009; Rajan, 2010).

Second, the rejection of the internal stability assumption by several alternative accounts does not automatically open the way to a unique, general and consistent approach to the analysis of the GR and macroeconomic stability. On the one hand, while rejecting the above assumption, distinguished critics of the current orthodoxy, such as Stiglitz (2010) and Akerlof and Shiller (2009), capture only a 'moderate' degree of internal instability, which can somehow be 'fixed' with appropriate reforms or better information. They explain the financial crisis by tracing it to more significant developments within the financial sector itself, such as lax regulation allowing excessive leverage and risk-taking, irrational exuberance and misaligned incentives encouraging bad lending and distortions in the securitisation process. In this way, however, they implicitly assume that financial instability alone accounts for general instability, thereby neglecting the fact that 'the global crisis clearly has both financial- and real-sector roots' (Crotty, 2009, p. 564).

On the other hand, another group of theorists regard capitalism as being internally unstable in a fundamental sense and have a broader perspective of the deep causes of the GR. Based on Keynes and Minsky's financial instability hypothesis, they consider a more complex link between finance and 'real' trends, namely globalisation and technological change (Perez, 2009; Roubini and Mihm, 2010; Dow, 2011; Wray, 2010; Davidson, 2009; Skidelsky, 2009). In particular, many authors do recognise that the GR is rooted in growing inequality trends, which undermine aggregate demand in the recent credit-led regime (see, e.g., Boyer, 2012; Palley, 2012; Basu and Vasudevan, 2013; and many essays in Brancaccio and Fontana, 2011). It can be argued that, while correctly stressing the aggregate demand problem underlying the GR, these theorists fail nonetheless to devise an alternative, unified method to address the complex roots of the problem, which involves institutional, social and cultural aspects besides strictly economic ones.

This paper aims to fill this gap by proposing a new framework called the 'balanced stability approach' (BSA). Unlike standard macroeconomics, it considers capitalism neither as a priori stable nor unstable, but rather as a source of both positive and problematic effects to be analysed with reference to actual historical contexts on the grounds of a broad interdisciplinary perspective. It is possible to identify seven main features of this approach, which are analysed in the second section of this paper. First, the BSA extends the application of Keynes's principle of effective demand to long-term issues by embracing a broader notion of structure than other heterodox approaches, one that considers both 'objective' and 'subjective' dimensions of structural change, including for example changes in the fragility of agents' conventions and 'collective trust'. Second, it holds that the demand driver implies an approach to 'understanding' the GR, which is not based on formal but on narrative methods. Third, in contrast to standard theory stressing 'natural' or universal laws of economics, the BSA supports

a 'relativistic' stance according to which the laws of economics change according to the context. More specifically, the BSA places special emphasis on the recent stage of capitalism—which started in the 1980s with the acceleration of key phenomena such as financialisation, globalisation, the introduction of information technology, the diffusion of deregulation moves as well as postmodern cultural factors—labelling it 'new economy' (NE), as opposed to the 'credit-led regime' or 'technological paradigm' of most heterodox literature, to emphasise that what characterises capitalism today is not just a major role of finance or new technology, but that all the above factors are more strictly interconnected than ever before. One major implication of this broader perspective is that while standard theorists celebrated the NE as a golden age of capitalism, the era of the Great Moderation, for the BSA it is instead a major source of problematic factors that impair some standard macroeconomic 'laws'. Fourth, in contrast to the standard distinction between internal propagation mechanisms and exogenous shocks, the BSA focuses on the internal trends of the NE and suggests that they impair the law of the price adjustment mechanism at the macroeconomic level. Fifth, overcoming the isolation procedures of mechanistic approaches, the BSA provides a 'cumulative' account of the impact of multiple, interrelated causal factors on the economy by stressing that objective trends do not exercise a direct, mechanical impact upon the economy—as implied by standard deterministic approaches—but influence it only by changing agents' conventions, which underlie the key propensities of aggregate demand. Sixth, the BSA conceives of the key role of institutions in more general terms than alternative approaches; namely as providers of trust-restoring moves, rather than of just 'rules of the game'. Seventh and lastly, this perspective also leads one to reaffirm in a new way the view that policy is intrinsically discretionary.

It should be noted that the main aim of this paper is not to provide a full-blown account of the persistence of the GR, but to show that the BSA opens the way for it. For this purpose, in what follows I focus on how the BSA helps to highlight instability factors often neglected in the literature. In particular, with respect to the Mynskian or Regulation Schools' interpretations for example, the BSA's specific contribution is to stress that what accounts for the aggregate demand problem underlying the GR is not just finance or inequality in income distribution but also a wider range of structural changes of both the objective and subjective kind, which arise in the NE.²

2. The BSA

In this section I analyse the features of the BSA designed to map the relevant problematic effects of the NE. I show that they fall into two categories: those deriving from standard theory itself, in view of its influence upon policymakers and agents' expectations, and those that can be uncovered only by dropping the standard methodological features, in view of the fact that mainstream approaches, such as the Dynamic Stochastic General Equilibrium (DSGE) models, only allow a limited understanding of crises.³

² In particular, to show that the persistence of the GR is caused by a low level of aggregate demand, due to structural changes generated by the NE, I would need to develop a 'balanced' analysis of the impact of its key trends on demand drivers, considering both positive and negative effects. This task cannot be carried out here. For analysis of stability of the NE along these lines see Togati (2006, 2007).

³ As Lucas admitted, for DSGE models 'there is a residue of things they don't let us think about. They don't let us think about the US experience in the 1930s or about financial crises ... (or) about Japan in the 1990s' (Lucas, 2004, p. 23).

2.1 What vision of the economic process?

The first problematic feature is standard macroeconomics' reliance on a vision of the 'normal' working of the economy based on aggregate supply as the key driver. Lucas suggests for example that standard theory accounts for normal times as reflected in secular averages, such as the following: '140 years of 3% production growth and 2% per capita real income growth in the US' (Lucas, 2011, p. 15). This is one of the implications of the internal stability assumption—i.e. of the 'invisible hand' story of self-adjusting properties of a free market economy—known as Say's law, according to which aggregate production, obtained by using all the resources that are available in a certain economy, always finds a profitable outlet in markets thanks to the smooth working of the price mechanism and the rational behaviour of individuals who respond to price incentives in a stable and predictable manner. In other words, if prices are flexible and set to the 'right' or equilibrium level, there can be no limitations on the aggregate demand side, the true limit of growth being the amount of resources itself. It must be noted that in standard macroeconomics—which is, like its Keynesian counterpart, all about drastic simplification—this view does not simply lead to a set of interdependent markets all placed on the same footing in a general equilibrium system, but also translates into an implicit sequence or causal ordering based on the 'dominance' of the labour market, which provides the equilibrium level of employment that feeds into the aggregate production function to obtain, with a given capital stock, the amount of production. The latter then provides the level of consumption and saving that generates, through the capital market, investment and capital accumulation.

This picture undermines stability because it implies that the only structural data we need to understand the normal working of the economy are the so-called 'deep parameters' of general equilibrium models, i.e. (stable) individual preferences and resources, such as technology and the amount of labour and capital.

Strictly speaking, standard theorists or policymakers are aware that some crucial structural features of real-world economies are missing from this picture. Greenspan for example recognises that the GR has shown us once again 'the *innate human* responses that result in swings between euphoria and fear that repeat themselves generation after generation with little evidence of a learning curve' (Greenspan, 2008, emphasis added). In his view, such swings represent 'the large missing "explanatory variable" in both risk-management and macroeconometric models' (ibid.). He even lucidly admits the failure of current remedies:

Current practice is to introduce ... 'animal spirits' ... through 'add factors'. That is, we arbitrarily change the outcome of our model's equations. Add-factoring, however, is an implicit recognition that models ... are structurally deficient; it does not sufficiently address the problem of the missing variable. (Greenspan, 2008, emphasis added)

After making these remarks, however, Greenspan fails to propose an alternative remedial strategy. He simply treats animal spirits as a natural element that markets themselves are ultimately capable of curing: 'any reforms in ... the structure of markets and regulation [should] not inhibit our most reliable and effective safeguards against cumulative economic failure: market flexibility and open competition' (ibid.).

⁴ For analysis of the role of animal spirits in standard models see, e.g., Dow and Dow (2011) and Dow (2012B, ch. 3).

The BSA can be regarded as providing a constructive solution to Greenspan's 'missing variable' problem. It does so by placing the emphasis on a different picture of the normal behaviour of the economy, regarding it, like Keynes, as an open evolutionary system characterised by irreversible time and thus highlighting the potential sources of instability generating events, such as the GR.⁵ Basing itself on this, the BSA considers aggregate demand as a long-term driver of the economy, i.e. it regards the sequence of markets based on the 'dominance' of the goods market over the labour market, which is summarised in chapter 18 of the *General Theory* (Keynes, 1936), as being valid for discussing not only short-term issues—as many critics as well as supporters of Keynes suggest—but also long-term ones.

This view can be justified by singling out one element within Keynes's theory that is both structural (i.e. permanent) and endogenous (i.e. capable of changing for internal reasons). According to the BSA, this element does not lie in some of the 'objective' features neglected by Keynes, such as technological change or financial fragility, underlined for example by the neo-Schumpeterian and Mynskian approaches. While stressing their significance, the BSA does not place one-sided emphasis upon them. Its true distinguishing mark with respect to these approaches is its embracing of a broader notion of 'structure', one that also includes 'subjective' features, such as expectations, emotions, animal spirits and conventions, which represent the systematic features of agents' behaviour under uncertainty. The BSA thus holds that a meaningful dynamic analysis can only be developed by regarding the objective factors as not exercising a direct, mechanical impact upon the economy—as implied by standard deterministic approaches—but influencing it only by changing the subjective dimensions.⁶

It is by focusing on Keynes's analysis of these subjective dimensions that the key structural element of the BSA can be found. In particular, emphasis should be placed on conventions rather than on animal spirits. Although the two concepts partially overlap within Keynes's broad notion of rationality—in view of the fact that that animal spirits are not entirely innate or spontaneous as held by standard authors but also represent structural factors that can be 'endogenised' (see, e.g., Dow and Dow, 2011; Dow, 2013)⁷—reference to conventions is more appropriate for the purpose of stability analysis for at least three reasons. First, Keynes clearly recognised the conventional nature of his key data; he stressed for example that 'the rate of interest is a highly conventional, rather than a highly psychological, phenomenon' (Keynes, 1936, p. 203). Second, conventions represent the rational, widely shared, decisional criteria—ranging from simple rules of thumb to 'popular theories' or models of business—which

⁵ 'Keynes understood the economy as an open organic system, where creativity and evolutionary changes meant that the past was only a limited guide to the future' (Dow and Dow, 2011, p. 6).

⁶ This view is basically in tune with ch. 18 of the *General Theory*, where Keynes makes the distinction between the primary data of his demand sequence (e.g. the various propensities to consume, invest and liquidity preference) and the secondary data (objective factors taken as given for the purpose of his analysis, such as technology or population). Although he failed to discuss how the basic data change through time in the face of possible changes in secondary data, thus leaving his dynamic analysis concerning the 'laws of motion' of aggregate demand quite unaccomplished, it can be argued, as I do below, that he managed to identify the key elements of this analysis. This is not the place to discuss the limitations of the *General Theory* at length. For a discussion see, e.g., Togati (2006, 2012).

⁷ Also Akerlof and Shiller (2009) pursue an endogenisation of animal spirits on the grounds of a broad interpretation of this concept, one that includes both innate forces and conventional features. Unlike Dow, who emphasises the need to overcome dualistic distinctions in the analysis of agents' behaviour such as that between cognition and sentiment, these authors stick to the standard view of rationality and regard animal spirits as being entirely irrational.

allow the normal stable working of the economy. As Keynes noted for example, 'the conventional method of calculation will be compatible with a considerable measure of continuity and stability in our affairs, so long as we can rely on the maintenance of the convention' (ibid., p. 152, original emphasis). Third, he made clear the intrinsic fragility of conventions (e.g. they fail to provide 'absolutely right' foundations for knowledge capable of erasing doubt from agents' minds), which makes them subject to sudden change: 'it is not surprising that a convention, in absolute view of things so arbitrary, should have its weak points. It is its precariousness which creates no small part of our contemporary problem of securing sufficient investment ... A conventional valuation ... is liable to change violently' (ibid., pp. 153–4).

Now, according to the BSA, the fragility of conventions is the structural element that allows one to construct a proper stability account. It implies for example that macroeconomic stability crucially depends upon the existence of a sufficient level of 'collective trust' in the solidity of the conventional background, a point that Keynes himself hinted at when noting for example that 'economic prosperity is excessively dependent on a political and social atmosphere which is congenial to the average business man' (ibid., p. 162).8

This emphasis on collective trust marks a sharp departure from standard theory. While the latter does not even mention the issue since it implies, as does Greenspan's view, that the 'right' level of trust is automatically generated by the working of an intrinsically stable market economy—e.g. 'by informal mechanisms, through internalization or moral commitment' (Zucker, 1986, p. 20)—the BSA holds instead that collective trust warrants explicit treatment and plays a causal role in the analysis because it is not a natural datum or something that markets can produce spontaneously; on the contrary, trust appears as a necessary 'premise' for markets, in the sense that without it they simply cannot work.9

This is the structural feature of capitalism that justifies the role of the aggregate demand driver in long-term dynamic analysis. In particular, the BSA holds what can be labelled as the 'fragility of conventions hypothesis', according to which capitalism is internally unstable because market developments tend to disrupt 'collective trust' and the conventional background which depends upon it, almost continuously. This disruption then tends to cause a lack of aggregate demand, which economic policy tries to counter by appropriate 'trust-restoring' moves.

2.2 How can an 'understanding' of the GR be developed?

Another key feature of standard macroeconomics is the use of formal models derived on the grounds of an axiomatic or deductivist approach with a view to pursuing prediction as the primary aim of economic theory.¹⁰ Although the use of formal models is not new, a peculiarity of current mainstream approaches is to regard them as

⁸ As I argue below, the term 'collective trust' is preferable to 'collective confidence' for the analysis of the stability of today's global capitalism.

⁹ The view of trust as a causal factor, rather than a consequence of economic change, is held for example by Sheila Dow: 'the functioning of the economy in general ... require(s) the presence of a key social convention: trust' (Dow, 2012A, p. 86) and Tony Lawson, who stresses that when 'trust and confidence break down, we can have ... (a) crisis' (Lawson, 2009, p. 768), such as the GR. See also Zucker (1986). In particular, following a strong view of emergence that posits the irreducibility of entities to their individual components, such as that put forward by Lawson (2012, pp. 348–9), I regard 'collective trust' as a causal emergent feature.

¹⁰ For a critique of the deductivist model see, e.g., Dow (2011, 2012B) and Lawson (2009, 2012).

'reality-creating' devices as part of a scientific strategy to deal with complexity. One example is efficient markets theory (EMT), which 'produced' new financial instruments so complex that 'instead of market prices, financial firms resorted to mathematical models to value them' (Roubini and Mihm, 2010, p. 67).

However, the harsh reality of the GR casts serious doubts among practitioners about the actual achievements of such models: 'Many of us like to think of financial economics as a science, but complex events like the financial crisis suggest this conceit may be more wishful thinking than reality' (Lo, 2012, p. 173). These doubts come in various forms. One is a defensive stance about prediction. Indeed many standard macroeconomists now argue that the GR was an unpredictable 'black swan' and that 'we will never be able to anticipate all discontinuities in financial markets ... we cannot hope to anticipate the specifics of future crises with any degree of confidence' (Greenspan, 2008; see also Lucas, 2009). Another is the view that formal models do not allow full understanding of the GR. While a few authors talk of the 'structural deficiencies' of models in general terms—by recognising their lack of realism¹¹ or their failure to capture a growing 'residue of things', including animal spirits—some other macroeconomists are more specific about the real achievements of their models. They note for example that while describing the immediate effects of shocks such as financial frictions on output and employment (see, e.g., Hall, 2010; Woodford, 2010), standard models and regression techniques fail to explain the persistence of the GR. 12 It can be argued that they identify only the 'proximate' rather than the 'deep' causes of the GR, i.e. they manage to show at best that a financial crisis causes recession, not why this crisis occurred. It is no surprise then that in order to explain the persistence of the GR many orthodox theorists, along with more heterodox ones, try hard to capture the 'deep' causes of the financial crisis and the GR on the grounds of rich narrative accounts. As emphasised by Lo, the list of causes changes considerably from author to author; moreover, it can added, what some authors regard as 'deep' causes turn out to be only 'proximate' causes for others. In Rajan's view for example factors such as greed, skewed incentives in the financial sector, Credit Default Swaps (CDS) and banks holding part of the credit securities 'are just the tip of the iceberg. The true sources of the crisis ... are not only more widespread but also more hidden' (Rajan, 2010, p. 4). He goes on to use the metaphor of 'fault lines'. 13 It would be simply erroneous however to believe that formal models have simply become obsolete in the standard approach. On the one hand, while recognising the deficiencies of formal models, Greenspan (2008) argues that they are the only tools that we will ever have to understand the world and that they are limited only by the amount and nature of our data and our ability to deal with complexity (for

¹¹ One type of critique is that the core of current macroeconomics—namely, DSGE models—is inadequate to deal with the GR because it has 'limited connection with reality' as 'it has become so mesmerized with its own internal logic that it has begun to confuse the precision it has achieved about its own world with the precision that is has about the real one' (Caballero, 2010, p. 85).

¹² As Hall notes, such frictions 'cannot explain why GDP and employment failed to recover once the financial crisis subsided—the model implies a recovery as soon as financial frictions return to normal' (Hall, 2010, p. 3).

¹³ 'One set of fault lines stems from domestic political stresses ... the second set of fault lines emanates from trade imbalances between countries stemming from prior patterns of growth. The final set of fault lines develops when different types of financial systems come into contact to finance the trade imbalances: specifically, when the transparent financial systems in countries like the United States ... finance, are financed by, less transparent systems in much of the rest of the world. Because different financial systems work on different principles and involve different forms of government intervention, they tend to distort each other's functioning whenever they come into close contact' (Rajan, 2010, p. 7).

a critique see Shiller, 2008, p. 41). On the other hand, while seemingly avoiding the strictures of formal models, the narrative accounts written by orthodox authors still rely on the general equilibrium model as a benchmark for analysing real-world economies. Rajan for example suggests that 'the basic ideas of the free-enterprise system are sound ... responsibility for some ... fault lines lies not in economics but in politics' (Rajan, 2010, pp. 4–5).

The key role played by formal models in the analysis undermines stability for at least two reasons. First, excessive reliance on such models generates an intolerable gap between constructed and 'out-there' reality: it makes people mistake the reality models create for the true one (see, e.g., Caballero, 2010, p. 85) with the result of fostering unjustified expectations about their powers and neglecting their limitations. ¹⁴ Second, it generates narrative accounts that lead to a one-sided understanding of the GR in view of their continual reliance on the stability assumption.

While sharing the view that 'understanding' can be achieved by providing a plausible narrative account or story about the deep causes of the GR, the BSA suggests that the best way to do so is not to follow an eclectic strategy such as that proposed by Lo (2012), based on a mere juxtaposition of several inconsistent narratives.¹⁵ A better understanding of the GR is unlikely to emerge in this way because most of such narratives still assume internal stability. This is true not just of standard narrative accounts, but also of alternative contributions. One may note for example that while denouncing the excessive role of formal models and stressing the role of 'animal spirits', Akerlof and Shiller's behaviouralist approach focuses on the deviations of actual values of assets from 'fundamentals' derived from standard models. Similarly, Stiglitz's approach focuses on capital market imperfections, such as moral hazard or asymmetric information, to be analysed in terms of departures from the standard paradigm. One problem with this approach is that it opens up a gap or inconsistency between his formal models stressing bad incentives in financial markets as the deep cause of the GR¹⁶ and the many insights contained in his narrative accounts that emphasise instead a persistent aggregate demand problem, such as the following:

The aggregate demand deficiency preceded the financial crisis and was due to structural changes in income distribution. Since 1980, in most advanced countries ... inequalities have surged in favour of high incomes. ... This trend has many causes, including asymmetric globalization (with greater liberalization of capital than of labour markets), deficiencies in corporate governance and a breakdown of the egalitarian social conventions that had emerged after WWII. (Fitoussi and Stiglitz, 2009, pp. 3–4)

According to the BSA, this gap can be closed not by devising ever-newer formal models based on the same departure strategy, but by building narratives centred on

¹⁴ In particular, 'an almost religious faith in [EMT] models helped create the conditions for the crisis in the first place, blinding traders and market players to the very real risks that had been accumulating for years' (Roubini and Mihm, 2010, pp. 59–60).

¹⁵ According to Lo, we should 'collect a diverse and often mutually inconsistent set of narratives of the GR for the same set of objective facts ... and hope that a more nuanced and internally consistent understanding of the crisis emerges in the fullness of time' (ibid., p. 154).

¹⁶ As his onion metaphor suggests, this is Stiglitz's favourite deep explanation for the crisis: 'figuring out what happened is like "peeling an onion": each explanation raises new questions. In peeling back the onion, we need to ask, Why did the financial sector fail so badly? ... I will give a simple explanation: flawed incentives. But then we must push back again: Why were there flawed incentives? Why didn't the market "discipline" firms that employed flawed incentives structures? ... The answers ... include a flawed system of corporate governance, inadequate enforcement of competition law, and imperfect information and an inadequate understanding of risk on the part of the investors' (Stiglitz, 2010, p. 11).

aggregate demand as the long-term driver. Following its vision of the economy as an open process characterised by irreversible time and complex dynamics, the BSA holds that the principle of effective demand involves a different process of abstraction or framing from the standard one (see Dow, 2012A, p. 80j). In particular, due to the conventional nature of Keynesian key propensities, the dynamic process driven by this principle cannot be properly understood by relying on the general equilibrium benchmark or any other formalistic approach seeking to establish a 'unique link' between some key parameters or variables and evolution. First, while being stable enough to warrant scientific analysis, conventions are intrinsically fickle in the sense that they do not give the economy a priori stability. A macroeconomic stability account thus calls for direct reference to a real-world system in a certain period of time, rather than to an abstract deductivist framework. In particular, what matters for stability is that particular conventions constrain aggregate demand in a given historical context. Second, while formal model building rests on a dichotomy between exogenous and endogenous factors, conventions cover both roles. They are causal factors in so far as they influence the key propensities underlying the demand sequence. However they are also partly endogenous in that they can be moulded by objective factors. Ultimately, even abstracting from effective demand and conventions, it is the very stability-type approach advocated by the BSA—involving the consideration of opposite effects—that calls for empirical analysis.17

2.3 What macroeconomic regularities?

Another objectionable feature of standard methodology is the focus on stochastic regularities, which consists of mild fluctuations defined as co-movements, i.e. stable patterns among data series. The emphasis on long-run equilibrium underlying the supply-driven sequence in standard macroeconomics does not mean that it neglects negative events such as recessions. Indeed, thanks to the notion of stochastic equilibrium, standard macroeconomics manages to show that ordinary fluctuations, like risky phenomena in general, are part of the normal set-up of the economy rather than just pathological phenomena. For this reason they can still be rationalised in terms of the deep parameters of general equilibrium reflecting rational behaviour in conditions of perfect competition, hence the absence of structural change.

Stochastic regularities can be regarded as the 'natural' laws of dynamics: Lucas asked for example, why it is that 'in capitalist economies, aggregate variables undergo repeated fluctuations about trend, all of essentially the same character?' (Lucas, 1977, p. 7, emphasis added). It is important to specify the meaning of the 'natural laws' label, especially in the light of standard macroeconomics' attempt to forge 'reality-creating' devices. By using this label I do not mean that such regularities arise spontaneously. Rather, they are artificially isolated within the general dynamics of the system, in line with the internal stability view, which presupposes a closed and mechanical world that can be segmented without loss of significance. In other words, standard theorists single out within available evidence what counts as 'reality' or 'actual economy'. By 'natural laws' I mean instead that in the neoclassical model, stochastic regularities have two features: (i) they must be explained in terms of self-contained deductivist theoretical

¹⁷ As noted for example by Boyer, who develops a similar approach to analyse the impact of austerity plans in Europe, 'there is no general theoretical reason to guarantee the success of any austerity policy. Everything depends on how [a number of] opposite effects interact' (Boyer, 2012, p. 297).

frameworks based on individual rationality; and (ii) they represent 'objective' dynamics, namely the behaviour of an actual economy independent of policy. Lucas however recognises that the GR defies this interpretation. It appears rather as a singular event or an 'occasional displacement' from a trend of stable growth—'the GR is deeper not typical' (Lucas, 2011, p. 15)—an event that standard theory is simply unable to cope with, a new entry in Lucas's growing list of exceptions to DSGE models.¹⁸

This dichotomy between natural laws and exceptions is another factor that undermines stability in so far as it ties the validity of economic theory to artificially constructed 'normal' cases, leaving economists in disarray when faced with a growing number of exceptions.

It is true, however, that some narrative accounts by orthodox economists would appear not to fit into this mould. First, criticising the recurrence of the 'this time is different' syndrome, Reinhart and Rogoff claim for example that 'our basic message is simple: We have been here before' (Reinhart and Rogoff, 2009, p. xxvii) and stress that the 2007 financial crisis is neither unprecedented nor extraordinary when compared with historical records. They seem to suggest the existence of some kind of natural laws applying to crises.¹⁹ Second, Rajan (2010) even seems to call into question the very existence of natural laws as defined above. For example he holds a systemic view, according to which the deep fault lines in the global economy he identifies 'have developed because in an integrated economy and in an integrated world, what is best for the individual actor or institutions is not always best for the system' (Rajan, 2010, pp. 4-5, emphasis added). He also criticises the Reinhart and Rogoff thesis by emphasising the peculiarity of the GR: 'We should also resist the view that this is just another crisis, similar to every financial crisis before it ... Although there are broad similarities in the things that go wrong in every financial crisis, this one centered on what many would agree is the most sophisticated financial system in the world' (Rajan, 2010, p. 4).

While sharing Rajan's emphasis on the need to adopt a systemic approach and recognise the peculiarity of the GR, I suggest however that to elaborate these views consistently, it is necessary to reject the stability assumption he relies upon. By making this step, the BSA is immediately led to reject the clear-cut distinction between normal and crisis times underlying the standard approach. In particular, like Minsky, it stresses two points. The first is that the behaviour of the economy in apparently normal times always generates the potential for crises, such as the GR (see, e.g., Minsky, 2008, p. 11)—indeed this potential should be seen 'as the norm rather than an aberration' (Dow, 2011, p. 236). The second is that the economy's normal behaviour is, to a significant extent, the result of the policy response in times of crisis (see, e.g., Minsky, 2008, p. 7).

On these grounds, the BSA is then led to call into question natural laws, embracing a stance that may be labelled as 'relativistic'.²⁰ One key feature of such a stance is to

¹⁸ The fact that in the standard paradigm crises appear only as 'freak events: highly improbable, extremely unusual, largely unpredictable, and fleeting in their consequences' (Roubini and Mihm, 2010, p. 4) is well confirmed by Lucas's candid admission that the simulations of standard forecasting models 'were presented ... as a forecast of what could be expected conditional on a crisis not occurring' (Lucas, 2009. p. 63).

¹⁹ Roubini and Mihm also stress the normality of crises in capitalism, due to general factors such as its power of innovation and its tolerance of risk that set the stage for asset and credit bubbles, and thus place the GR in the context of other crises 'that have occurred over the ages and across the world ... Crises ... are neither ... freak events ... nor ... rare "black swans" ... Rather, they are common-place and relatively easy to foresee and to comprehend. Call them white swans' (Roubini and Mihm, 2010, pp. 6–7).

²⁰ As I argued in past contributions (see Togati, 1998, 2001), it is possible to establish a link between many features of Keynes's theory, which lies at the heart of the BSA, and Einstein's relativity theory. The critique

underline that the GDP is not really an 'objective' indicator of stability, both in the sense that it depends upon policy to a growing extent (it is only thanks to unconventional policy measures for example that a new Great Depression has been avoided) and in the sense that, as testified by the many recent attempts to go 'beyond GDP' (see, e.g., Stiglitz et al., 2010), it is much less significant today than it was in the past due to the growing role of structural change that makes aggregates ever more non-homogenous over time. For this reason, not only does the BSA shift the focus away from 'regularities', such as co-movements, but also rejects the more general view that 'history repeats itself in some simplistic, cyclical way' (Roubini and Mihm, 2010, p. 59). Indeed, following its vision of economic process occurring in irreversible time, the BSA regards the economy as an organic whole—made up of a number of interconnected elements—and suggests that the analysis cannot be restricted to equilibrium states, steady paths or recurring phenomena in general, such as cycles of various length and financial crises, isolated within the whole capitalist evolution (for a discussion of such issues see, e.g., Freeman and Louça, 2001).

The definition of the 'laws of motion' of real-world economies is not impossible however. According to the BSA, the lack of objectivity of dynamic analysis implies that while one can say little about the evolution of capitalism in general—beyond certain broad claims, such as those about the normality of crises—more specific laws of motion can be singled out with reference to different stages of capitalist evolution. In this regard, the BSA is similar to the Regulation School (see, e.g., Boyer, 2012), the neo-Schumpeterian approach (see, e.g., Perez, 2009) or the neo-Mynskian approach (see, e.g., Wray, 2010; Dow, 2011), which break the whole capitalist evolution into various stages—labelled for example as 'growth regimes' or 'techno-economic paradigms' in relation to key causal factors, such as technological breakthroughs or changes in institutional regimes or waves of financial innovations—and focus on the last stage as the relevant one to understanding the GR.²¹ Basing himself on the notion of 'growth regimes', Robert Boyer (2012) holds for example that the deep causes of the GR must be understood in the light of the recent credit-led regime that has replaced the old Fordist regime.²² In a similar vein, Wray (2010) discusses the GR in the context of the current stage of 'money-manager capitalism'.

The peculiarity of the BSA with respect to such approaches is that it suggests a tripartite distinction between old economy, modern economy and NE, based on a variable degree of interconnectedness among a number of key components, such as those mentioned above. The focus on the NE rather than the 'credit-led regime' or other similar concepts is justified by its emphasis on the fact that what is peculiar today is not just a major role of finance or a new technology, but that all the above factors undergo a drastic acceleration and are more strictly interconnected than ever before.²³ As pointed

of the notion of natural laws also underlies Minsky's stance. He notes for example that 'Economic systems are not natural systems. An economy is a social organization created either through legislation of by an evolutionary process of invention and innovation. Policy can change both the details and the overall character of the economy' (Minsky, 2008, p. 7).

²¹ Marxist contributions also characterise contemporary capitalism as the phase of monopoly-finance capitalism (for a survey see Basu and Vasudevan, 2013).

²² As he puts it, 'Beneath the foam of financial bubbles ... the diffusion of credit-led growth regimes ... can be interpreted as a way out of the long-lasting crisis of the post-World War II Fordist regime that was built upon the synchronization of mass production and mass consumption, an extended welfare, and a reduction in inequality' (Boyer, 2012, p. 286).

²³ Mynskian contributions to the analysis of the GR emphasise a particular aspect of this feature, namely the interconnectedness of portfolios as accounting for systemic risk. For a critical analysis of this point see, e.g., Dow (2012B, p. 5).

out by postmodernist authors such as Bauman (2000), the NE can be labelled as a 'liquid' society in which all rigid separations—such as those between economic sectors (e.g. financial/real), between different spheres of society (e.g. cultural/institutional/economic) or between different temporal trends—break down.²⁴ This means that, in principle, to capture the complexity of the NE we should pursue a broader interdisciplinary approach than achieved by current heterodox frameworks so far. In particular, to justify a theoretical framework that places the emphasis on 'collective trust', we should regard the NE as a 'risk society', in line with sociological thought.²⁵

In comparison with the modern economy to which Keynes referred, the NE presents, as Boyer (2012) in particular points out, a number of significant novelties—such as financialisation, an unprecedented deepening of labour division, stronger interdependency, increasing specialisation among national economies and a greater diversity of capitalisms (including different modes of regulation and styles of macroeconomic regimes)—all of which lead to greater instability: crises have become more frequent or normal in the NE.²⁶ Indeed, we live in a stage of 'capitalism that has delivered serial crises instead of delivering the goods on a consistent and stable basis ... the frequency and virulence of economic and financial crises have increased in both emerging markets and industrial economies' (Roubini and Mihm, 2010, p. 11). There is thus reason to believe that 'this crisis was bigger, swifter and more brutal than anything seen before. It was a nineteenth-century panic moving at twenty-first-century speed' (ibid., p. 88).

One significant implication of this relativistic stance is that in order to gauge stability it is not enough to focus on the macroeconomic variables captured by standard models, such as income, unemployment and inflation. As shown by attempts to go 'beyond the GDP', one should also consider other variables that are influenced by the institutional sphere, such as income and wealth distribution, social capital, knowledge and sense of security, which affect people's 'happiness' or 'collective trust'. But that is not all. Another significant feature of BSA's relativistic stance is its stressing of the fact that, due to its major dependency upon policy, the GDP concept does not simply tell a story about 'free markets' or private agents' behaviour as held by Lucas. This means that, for the purpose of a truly 'systemic' stability analysis, we should shift the focus away from individual optimising behaviour as the ultimate explanatory factor.

It is by placing the emphasis on conventional behaviour underlying aggregate demand that the BSA seeks to accomplish this task. In particular, by focusing on conventions the BSA is led to regard the aggregates underlying Keynesian macroeconomics as irreducible entities rather than a simple sum of optimising agents behaving according to the canons of standard choice theory, just as Einstein's fields in relativity theory for

²⁴ This point cannot be further developed here. For more details see Padua (2012) and Togati (2006, 2012)

²⁵ As Padua points out with reference to sociologists' contributions—such as those by Giddens and Beck, interpreting the NE as the 'society of risk'—their standpoint justifies the special emphasis placed on trust: 'In the global society trust has a greater role than confidence. As the global society usually connects subjects who don't know each other, an investment in trust becomes of utmost importance. In the Internet Age society ... the individual has a "strong psychological need to trust others" ... In truth, the open-network character of the digital society doesn't facilitate the satisfaction of this requirement, and a feeling of risk thus becomes pervasive' (Padua, 2012, pp. 6–7).

²⁶ The emphasis on the peculiarity of the NE does not deny that many similarities exist between the GR and the Great Depression, in particular mechanisms such as 'irrational euphoria, the pyramids of leverage, the financial innovations, the asset price bubbles, the panics, and the runs on banks and other financial institutions' (Roubini and Mihm, 2010, p. 14).

example are not just an aggregate of atoms behaving according to Newtonian theory (for more details see Togati, 1998, 2001).

Indeed, for the BSA, individual agents following conventions no longer appear as in standard theory, namely as autonomous decision-makers capable of making *a priori* optimal choices under given constraints—i.e. prices and incomes—and reacting in a predictable manner in the face of changes in such parameters because of the assumption of stable preferences. Due to uncertainty—which makes standard choice theory indeterminate by undermining its basic premises, such as optimisation and stability of preferences—individuals appear as being increasingly aware, as Keynes put it, that their 'individual judgement is worthless' (Keynes, 1973, p. 114) and thus forever looking for external anchors, such as conventions, which the theory cannot determine in a priori terms.

However, following its emphasis on conventions, the BSA does not simply reaffirm Keynes's concept of the autonomy of macroeconomics from standard microeconomics; it also renders it somehow more stringent. In particular, if it is true that the dynamic analysis of conventional behaviour is no longer a matter of abstract theory, in view of the fact that the relevant conventions can only be defined with reference to real-world institutional contexts, then it follows that to deal with stability analysis, it is not sufficient to state the principle of effective demand as a 'general' law of the economy by considering 'generic' conventions, such as that tomorrow is like today or reliance on other people's judgements, which are considered by Keynes in his General Theory. It is also necessary to 'operationalise' this principle in terms of more 'specific' dynamic laws by focusing on the particular conventions that account for the behaviour aggregate demand in a specific context, such as the NE. In other words, it can be argued that in order to understand the behaviour of groups of individuals, the relevant constraints are not those that affect individual agents such as income or prices, but systemic constraints such as the NE, incorporating qualitative or structural change that does not show up in national income figures.

According to the BSA, moreover, macroeconomics also achieves a more complete autonomy of its 'laws' with respect to standard theory than envisaged by Keynes, because it incorporates the extra-economic dimensions deriving from the strict interconnectedness of the NE. One may note for example that the latter undermines the significance of pure economic variables, such as the real wage. Since a major part of it is construed in terms of welfare, the 'social wage' concept is more appropriate for stability analysis.

2.4 How do we go beyond abstract shocks?

The standard approach may also be criticised for its emphasis on the distinction between abstract shocks and propagation mechanisms, which reflects its mechanistic stance and intrinsic stability assumption. While there are many different theories of business cycles, all share some properties. One is that the business cycle is seen as the consequence of some exogenous factors or random shocks 'displacing equilibrium without disrupting it' (Vercelli, 2009, p. 14). In addition, most theories build on a propagation mechanism that amplifies shocks. In general, all standard economists accept the view that market economies react to changes with price adjustments; for example a negative productivity shock lowers the marginal product of labour so that the real wage would have to move downward to adjust labour demand and supply.

The problem is to explain why markets sometimes fail to absorb even small shocks smoothly and what is the propagation mechanism that translates small, short-lived shocks into large, persistent economic fluctuations.

Although the emergence of a new neoclassical synthesis based on DSGE models in recent years has reduced the analytical distance among standard economists, differences persist over the range of shocks and propagation mechanisms considered. According to new Keynesian contributions, cycles represent a failure of the economic system. They emphasise risk shocks, markup shocks and financial shocks and regard frictions or market imperfections as the relevant propagation mechanisms capable of explaining why the economy experiences depressions and fails to achieve the efficient level of output and employment. Models of this kind rely on financial frictions to account for the immediate effects of the GR on the economy, while sticky prices are necessary to account for its more persistent effects (see, e.g., Woodford, 2010). Neoclassical contributions, such as the real business cycle models or Lucas's models, view cycles instead as the economy's optimal reactions to unavoidable shocks. They emphasise technology retardation, changes in preferences or tightness in monetary policy as the main cause of economic fluctuations and suggest that shocks are propagated through intertemporal substitution within an efficient market mechanism. According to some economists, on these grounds it is possible to rationalise even the GR. Minford (2010) for example interprets the financial crisis as a rational reaction by markets to a negative shift in the productivity of the construction sector (for a critique see Boyer, 2012, p. 295).

This conception represents another threat within the NE. First, not unlike Jevons's sunspots, it induces economists to blame factors that the theory cannot explain. As Ohanian admits: "The literature on general equilibrium business cycle models has made considerable progress in understanding how different model economies respond to what we call *abstract shocks*: shocks that do not have a precise definition or acknowledged source ... There has been less progress on developing and testing theories about the nature and sources of ... abstract shocks' (Ohanian, 2010, p. 47). Second, it makes people mistake false stability factors (full price flexibility) for true ones (price rigidities).

Narrative accounts by some orthodox authors now call these views into question. In contrast to formal models that are forced in particular to neglect structural change by their use of the representative agent device, Rajan for example recognises the existence of structural fault lines, such as growing inequality in income and wealth distribution or the fact that globalisation in the NE somehow changes an important 'law' of standard economics that seemed to hold in the past, that of inflation tending to rise following an increase in demand:

There are usually limits to debt-fueled consumption, especially in a large country like the United States. The strong demand for consumer goods and services tends to push up prices and inflation. A worried central bank then raises interest rates, curbing both households' ability to borrow and their desire to consume. Through the late 1990s and the 2000s, though, a significant portion of the increase in US household demand was met from abroad. (Rajan, 2010, p. 9)

However, given Rajan's reliance on standard formal models as a benchmark, the logic of his argument is that in the end, 'responsibility for ... fault lines lies not in economics but in politics' (Rajan, 2010, p. 5). This means that he regards the NE trends not as 'objective' but as the product of bad politics. Income inequality and job insecurity for

example are ultimately due not to technological progress *per se*, but to political failure to accommodate it by effectively reforming the education system, which has failed to provide the highly qualified labour force needed in particular by the new information technologies (see Rajan, 2010, pp. 8–9). Likewise, US consumers' high propensity to debt is not a product of financial innovation *per se*, but is due to distortions brought about by politics (such as governments' influence on credit and the housing market, low interest rate policy and China, Germany and Japan's political choice to rely upon the export-led model of growth).

Similar problems also arise in more heterodox approaches that criticise standard macroeconomics, but still rely on the shock/propagation mechanism distinction. While certainly breaking with standard theory by recognising the key role of cultural norms, collective beliefs and confidence, Shiller for example regards them as non-structural factors—in line with his definition of animal spirits²⁷—which generate 'shocks' hitting the stable structure of the economy (defined in the traditional sense as including individual tastes reflecting standard rationality axioms) and thus determining deviations from the fundamental or benchmark asset values. In particular, he regards the NE itself as a 'story' or false rationalisation of a 'new era', as one instance of animal spirits leading to unjustified or irrational asset prices, rather than as a number of interrelated objective and subjective structural trends generating internal threats. Basing himself on this, Shiller thus identifies collective false beliefs as the deep cause of the GR: 'the ultimate cause of the global financial crisis is the psychology of the real estate bubble' (Shiller, 2008, p. 4). In particular, he regards an epidemic of irrational public enthusiasm for housing investment or 'social contagion of boom thinking as the most important single element to be reckoned with in this speculative boom' (ibid., p. 41)

According to the BSA, instead, an alternative theory of stability calls for the rejection of the shock/propagation mechanism distinction. It holds, in particular, that standard models invert cause and consequence (for a similar view see Boyer, 2012, p. 295). The factors that such models treat as exogenous shocks (e.g. shifts in productivity or in animal spirits) turn out instead to be endogenous phenomena that need to be accounted for. For example changes in productivity appear as the consequence of a change in aggregate demand. Similarly, changes in animal spirits appear, at least to some extent, as changes in collective trust brought about by a number of interrelated trends of the NE.

Moreover, in view of the interconnectedness of the NE, the BSA also reverses standard conclusions about price adjustments and ends up by restoring Keynes's conclusion about price rigidity as a stabilising factor. First, while standard macroeconomics emphasises universal laws of the behaviour of the price level (for example, it is supposed to adjust the economy through invariable mechanisms, such as the real-balance effect), BSA holds instead that price level behaviour tends to change and influence the economy in a complex manner according to context. For example the basic trends of the NE, such as globalisation and technological change, tend to generate low inflation at a global level. In turn, a low-inflation regime enabled a long period of low interest rates, which triggered the diffusion of very large leverage ratios (see, e.g., Boyer, 2012, p. 284). Second, the BSA suggests that price flexibility, rather than price rigidity, in the

²⁷ In particular, unlike Greenspan. In his 2009 book co-authored with Akerlof, Shiller interprets 'animal spirits' very broadly, i.e. in social rather than 'naturalistic' or individualistic terms, and thus encompasses a number of important social dimensions such as confidence, cultural norms and 'stories'.

NE may be even more destabilising than in Keynes's times. One may note for example that greater financial instability is also caused by a pricing process on financial markets that has become more flexible and 'perfect' than in the past (see, e.g., Orlean, 2011). Moreover, as clearly shown especially by the firm intention of central banks to counter deflation as much as inflation at all costs, flexible goods prices are likely to generate more instability than ever before in so far as they undermine conventions and the state of collective trust, i.e. the 'premises for markets', which have become a more important part of the economy, a complex function of a number of variables, including income and wealth distribution.

2.5 How can we account for multiple causes?

Another questionable feature of the standard approach that follows from its mechanistic, closed-system view is that it is legitimate to use the *ceteris paribus* method, i.e. to focus on isolated subsets of the complex socio-economic system, even to draw macro-economic conclusions.²⁸ More specifically, this method underlies standard models of the business cycle that typically achieve 'results' by taking several factors as given and often draw the conclusion that only one main factor is responsible for a downturn (e.g. a real or a monetary shock).

This conception highlights a further threat in the NE in so far as it makes most economists feel overconfident about the value of conclusions and forecasts obtained by neglecting the systemic features of macroeconomics, such as the interconnect-edness of the parts. The sterility of the *ceteris paribus* method in the analysis of the GR is candidly admitted by Lucas himself, who notes for example that prior to the Lehman bankruptcy, standard forecasts were still 'a reasonable estimate of what would have followed if the housing market had continued to be ... the main factor involved in the economic downturn' (Lucas, 2009, p. 63). Rajan goes even further, recognising that the standard belief that securitisation should have made banks safer amounts to committing 'the economist's cardinal sin of assuming *ceteris paribus*, i.e. assuming that everything else but the phenomenon being studied, in this case securitization, remained the same. Typically, everything does not remain the same' (Rajan, 2010, p. 2).

Strictly speaking, Rajan's narrative account seeks to go well beyond this method. Rajan stresses that he has 'no single explanation for this crisis, and so no single silver bullet to prevent a future one. Any single explanation would be too simplistic' (ibid., p. 7). Indeed, his metaphor of fault lines is an attempt to provide a kind of cumulative account of critical factors underlying the GR. Moreover, Rajan focuses on the 'things that do not remain the same'; he recognises for example that the above trends bring about endogenous changes in risk perceptions: 'Most important, deregulation and developments like securitization had increased competition, which increased the incentives for bankers ... to take on more complex forms of risk' (ibid., p. 2).

However, it can be argued that Rajan cannot go beyond a certain point in this analysis of endogenous instability. One limitation is that, like all orthodox theorists, he has no method to deal with both positive and problematic effects of many internal factors

²⁸ In what follows I do not mean to criticise the *ceteris paribus* method *per se* (it may be fully legitimate in some contexts and its use is certainly not limited to standard theory). I only emphasise its limitations as far as the analysis of macroeconomic stability and the GR is concerned.

taken together, as one ought to do to analyse complex crises, such as the GR. Rajan emphasises multiple fault lines, each still based on the ceteris paribus approach, which lead him to draw the same conclusion, namely to underline the political roots of the GR, e.g. US government intervention on the credit market and developing countries' patterns of growth and their crony capitalism. Moreover, in view of his reliance upon the assumption of stable agents' preferences, Rajan cannot really provide an endogenous account of their behaviour by seeking to answer questions such as, Why do people feel more unsecure in the NE? Or, Why do people want to consume more? Which he partly raises in his account.²⁹ This is also true of those approaches that focus on limited deviations from the stability assumption or partial 'disequilibrium' stories locating instability in just one key factor or market. In this category fall either formal models dealing with structural financial factors, such as bad incentives due to asymmetric information and moral hazard, or narrative accounts stressing key psychological and conventional determinants of agents' behaviour on financial markets (see, e.g., Shiller, 2008; Akerlof and Shiller, 2009).

However, this is also true of other heterodox approaches—such as neo-Schumpeterian and Mynskian—that break more sharply with the standard paradigm. While not committing the cardinal sin of assuming internal stability, they fall short of providing a full-blown alternative stability analysis in so far as they often tend to emphasise just one causal objective factor, such as technology or financial fragility, or just one key demand driver, such as investment. As Minsky points out for example:

Implicit [in Keynes] is a view that the capitalist economy is fundamentally flawed. This flaw exists because the financial system necessary for capitalist vitality and vigour—which translates entrepreneurial animal spirits into effective demand for investment—contains the potential for runaway expansion, powered by an investment boom. This runaway expansion can readily grind to a halt because accumulated financial changes render the financial system fragile. (Minsky, 1975, pp. 11–12)

However, even those authors who broaden the range of causal factors, such as Boyer, tend to place the emphasis only on objective factors and fail to indicate a systematic method for carrying out long-term dynamic analysis based on a clear-cut theoretical driver.

The BSA seeks to fill this gap by suggesting a method to deal with mutiple causes of the GR. As noted above, this method relies on two assumptions. First, the BSA embraces a broader notion of structure than alternative approaches; it considers both the tight interrelations between the key objective trends of the NE and the subjective collective features of agents' behaviour which underlie the key propensities of aggregate demand, the long-term driver of the economy. Second, it analyses structural change by assuming that objective trends do not exercise a direct, mechanical impact upon the economy but only by influencing a number of agents' socio-psychological perceptions that shape all the key Keynesian propensities, not just one key variable.30

²⁹ Lucas also hints at an internal 'confidence' problem underlying the GR—e.g. he talks about a 'feardriven rush to liquidity' (Lucas, 2009, p. 63).

³⁰ In particular, unlike Mynskian contributions, the BSA places the emphasis on the dynamic behaviour of other components of aggregate demand beyond investment. The GR highlights for example the crucial role of consumption. Second, the BSA focuses on the fragility and malleability of conventions, rather than financial fragility, as the key endogenous element. Third, financial fragility plays a role in shaping all of them (not just the propensity to invest), but is not the exclusive determining factor.

Below is a list of the most significant changes in perceptions that are likely to account for greater internal instability in the NE (for more details see Togati, 2006, 2007):

- (i) perception of 'space': the stronger interaction between globalisation, financialisation and technological change has led to a drastic reduction in distances and various other barriers such as transaction costs, with the result that agents get used to living in a 'flat world';
- (ii) perception of 'time': as a result of technological change bringing about greater differentiation of consumer goods and larger and faster information flows, the NE induces a shortening of agents' horizons;
- (iii) perception of 'value': due to the growing role of intangibles in the NE, it is more difficult to price goods and services produced. Intangibles call for different criteria for measurement and valuation in firms' accounting from those required by ordinary physical goods. Moreover, the key interrelated phenomena of globalisation, financialisation and technological change tend to favour the acceptance of widening income gaps and changing standard norms of fairness (such as the huge increase in the difference between top managers and average employees); new financial instruments are difficult to value and this leads agents to underestimate real and potential losses in their balance sheets (Boyer, 2012, p. 289);
- (iv) perception of the 'market': due to the increasing mutual influence between the economic and socio-institutional spheres, agents have different perceptions of the boundaries between private, market-based activities and public intervention and interest. In particular, after the unprecedented scale of bailouts in the financial sector, it is not clear to what extent capitalism is still based on private enterprise (the risk of bankruptcy included);
- (v) the state of 'collective trust': it can be argued that the NE implies a more fragile state of collective trust (what many describe as a 'broader sense of insecurity') than in the past, because its key trends bring about phenomena such as the disruption of 'social capital' (e.g. due to increasing working time and productivity and the diffusion of lower ethical standards and fraud) and a reduction of the autonomy of individual decisions due to the growing complexity of information.³¹

2.6 Institutions as reassuring devices

The interpretation of the role of institutions is another feature of standard macroeconomics deserving of criticism. Today, most mainstream scholars seem to agree that internal market forces do not suffice to grant stability. The market system can only work if there are adequate institutional premises. Indeed, as North points out, institutions 'are the underlying determinant of the long-run performance of economies' (North, 1990, p. 107). In particular, it is held that their key role is to establish 'the economic rules of the game' (see, e.g., North, 2003) or implement what Rodrik regards as the 'first-order economic principles' of neoclassical analysis, such as 'protection of property rights, contract enforcement, market-based competition, appropriate incentives, sound money, debt sustainability' (Rodrik, 2007, p. 15), which will stimulate economic development and enable markets to function well.

³¹ As Lo points out, several accounts of the GR emphasise that the NE involves significant risk-shifting moves. Lowenstein's account for example 'considers the crisis a natural consequence of a financial system that, rather than extracting Marxist superprofits from society, extracted risk from its investments and dumped it on those members of society least able to handle it. The individual firm reduces its risk, but society as a whole has its risk increased.' (Lo, 2012, p. 171)

While authors such as Rodrik maintain a conditional stance, according to which such principles are compatible with many possible institutional arrangements and policy packages, including those that appear as anomalies from the standpoint of standard economics, such as China's, more standard macroeconomics approaches, such as the ones underlying the Washington and post-Washington consensus, maintain a more unconditional approach whereby, *a priori*, only one set of institutional solutions—often resembling those of particular countries such as the USA—meet the higher-order principles. Rajan's approach to the GR seems to fit in with the latter view. Not only does he criticise China's and Japan's model of growth, but he also praises for example the greater transparency of the US financial system compared with other systems, often seen as instances of 'crony capitalism' (Rajan, 2010, p. 7).

Strictly speaking, the unconditional stance towards the GR is not so straightforward. In fact two lines of thinking over the role of institutions emerge in Rajan's narrative account. On the one hand, Rajan suggests that the GR has been generated to a large extent by institutional or policy violations of first-order principles. In many countries, institutions have produced bad incentives (e.g. bailouts create risk underestimation) and distorted market competition (e.g. political pressures to grant easy credit or mortgages). On the other hand—in line with the political economy stance stressing that the economy is driven by structural trends, such as rapid structural change, which institutions should try to accommodate—Rajan holds that the GR has been made worse and unacceptable (e.g. in terms of greater inequality) because institutions have failed to play this accommodating role (e.g. by reforming the education system).

This unconditional view further undermines stability in the NE as it amounts to assuming: (i) that some countries (e.g. the USA) represent the benchmark of a 'right' institutional set-up; (ii) the gap between more advanced and less advanced or backward countries can be explained in terms of the failure of the latter to converge with the institutions of the former; and (iii) this gap should be closed by adopting adequate 'structural reforms'. The emphasis on structural reforms and the perennial failure of politicians to enact them as the ultimate cause of all economic problems leads people to neglect other deep, possibly more relevant causes, such as a lack of effective demand.

According to the BSA, to remedy this kind of instability it is necessary to consider the role of institutions in a broader perspective than allowed by neoclassical analysis. Their task is not simply to implement first-order principles to set the stage for (or accommodate) market forces, albeit in a flexible way as presumed by the conditional view. While it is true that such principles 'are universal in the sense that it is hard to see what any country would gain by systematically defying them' (Rodrik, 2007, p. 31), when considering their implementation the institutions' only task amounts to assuming internal stability, i.e. believing that, once such principles are respected, market forces will automatically deploy their beneficial potential for the whole economy.

According to the BSA, there is no guarantee that this is actually the case. One notes for example that even countries such as the USA—which broadly respect first-order principles and act as a benchmark for others—have not been saved from instability (rather, as Rajan himself recognises, they have been at the heart of the GR). On the contrary, actual policy moves attempting to stabilise the economy have been forced to violate such principles (e.g. the rise in public debt following bailouts in the USA).

The problem with first-order principles is that they are too vague to represent a valid guide for policymakers, as Rodrik himself recognises: 'From the standpoint of policy-makers, the trouble

is that these universal principles are not operational as stated ... in effect the answers to the real questions that preoccupy policy-makers ... cannot be directly deduced from these principles' (Rodrik, 2007, p. 29).

According to the BSA, in an evolutionary uncertain context, the other essential role of institutions is to adapt to changing conditions that can evolve quite unfavourably, i.e. by checking the sources of private sector instability. In particular, in view of the key role played by the fragility of conventions in causing a weak aggregate demand, institutions must seek to grant the relative stability of the conventional background of capitalism by influencing its key premise, namely collective trust. While standard theory implies that the 'right' level of trust is automatically generated by the working of an intrinsically stable market economy, the BSA holds instead that 'disruption' of trust occurs continuously due to the major structural change brought about by the NE. Hence to achieve stability, 'production' of trust must be provided especially by formal mechanisms, such as institutional 'anchors', beyond the traditional 'rules of the game'.

Basing itself on this, the BSA makes sense of key policy trends that have accounted for the structural rise of public expenditure over GDP in all advanced countries in the last 80 years (from 3% to over 30% in the USA). In particular, many trust-restoring devices have actually been used to tame private sector instability, especially since the Great Depression, and have now become endogenous or structural, built into the system. They include for example the pledge of central banks to defend the value of money, the introduction of deposit insurance and key features of the welfare system, such as unemployment benefits or public pensions and health services, incomes policy aimed at promoting national competitiveness through social pacts rather market mechanism and government strategies favouring innovation as a 'public good' (see, e.g., Quiggin, 2010, ch. 4; Dow, 2011, 2013).

2.7 Why discretionary policy?

The last objectionable feature of standard macroeconomics is its emphasis on tight policy rules as a pre-condition for stability:

In the past 50 years, there have been two macroeconomic policy changes in the United States that have really mattered. One of these was the supply-side reduction in marginal tax rates, initiated ... in 1980 ... The other was the advent of 'inflation targeting' ... to the exclusion of other objectives. As a result of these changes, steady GDP growth, low unemployment rates and low inflation rates—once thought to be an impossible combination—have been a reality in the US for more than 20 years. (Lucas, 2007, p. A20)

This is another key aspect of the unconditional view seen above; it is not just about affirming that a certain institutional setting is the benchmark for others, but also about interpreting the road to macroeconomic stability in terms of sound money and public finance targets as a one-way street from strict rules on inflation control and balanced budgets—such as the Maastricht fixed parameters or the 90% debt/GDP rule advocated by Reinhart and Rogoff (2010)—to stability and growth.

This view undermines stability for one major reason: namely, because it involves the 'one size fits all' approach, which consists in 'applying fixed rules (austerity policy) whatever the causes of the public deficits and regardless of the structural and institutional configurations of each national economy' (Boyer, 2012, p. 310), aimed at generating crowding-in effects, credibility restoration and the enhancement of

competitiveness via the reduction of unit production costs. This approach is dangerous since it leaves policymakers completely unarmed when facing events such as the GR, which often turn even 'virtuous' countries into seemingly 'profligate' ones by forcing them to adopt discretionary policies only as a pragmatic, last-resort weapon, without a clear theoretical rationale. As noted for example by the former President of the European Central Bank 'As a policy-maker during the crisis I found the available models of limited help ... we felt abandoned by conventional tools ... In the absence of clear guidance from the existing analytical frameworks, [in] exercising judgement we were helped by ... historical analysis' (Trichet, 2010).

The BSA's relativistic framework justifies discretionary policy on theoretical rather than simply pragmatic grounds. Although the flexible stance taken by policymakers in the GR is obviously better than their blindness during the Great Depression, the BSA suggests that the NE increases the costs of pragmatic policies considerably. One key limitation of pragmatic approaches is their relative failure to learn from the past. In such approaches, reference to 'history' simply amounts to recognising that discretionary policy moves were taken in previous periods without explaining why. Indeed, the essence of pragmatism is 'doing the right thing without knowing it', with the result that policymakers remain forever trapped within the following sequence: bold definition of some 'in principle right' policies for supposedly 'normal' times; discovery that they do not work in the particular, exceptional case at hand; need to adopt some ad hoc unconventional measures that last only until things start to improve; and then restoration of the standard policy paradigm. While this sequence is per se painful and time-consuming, it becomes almost intolerable in the rapidly changing NE, in view of the greater role that collective trust plays in it. Without a consistent and stable policy paradigm, agents can only grow more anxious about the aims and effectiveness of actual policy moves, with likely negative effects on their spending decisions.

According to the BSA, adequate learning can best be achieved on the grounds of a relativistic approach that leads policymakers to overcome the dichotomy between normal and exceptional times. This should not be confused with the 'conditional' view as stated by Rodrik, i.e. flexibility in the implementation of first-order principles. As noted above, these principles are correct but are too vague. For example simply advocating fiscal solvency is not only institution free as Rodrik suggests, but also macroeconomic theory free, in the sense that it says nothing about the causal links that lie at the heart of macroeconomics. To obtain fiscal solvency starting from a relatively high debt/ GDP ratio and high deficit/GDP ratio, one can in principle follow two paths: either by promoting growth first (the current stance of the USA) or by cutting expenditure/raising taxes first (the European Commission's current stance). While the unconditional policy stance—which regards debt as limiting growth in all cases—only allows for the latter in line with the one-way street idea, the other approach allows instead for both, i.e. it implies a two-way street in which the choice depends upon the context in that while accepting that growth can be limited by debt, it also considers the possibility that high debt may be the result of low growth (e.g. as is the case in many countries in Southern Europe).

According to the BSA, this second approach, which represents the essence of discretionary policy, fits in with a relativistic stance, in the sense that it can only be justified by rejecting the idea of natural laws and the internal stability assumption, which are instead still accepted by Rodrik. While many 'relativistic' policy suggestions are made in the literature (e.g. the idea that national debt is not like personal debt, emphasised

among others by Krugman, 2012),³² the BSA suggests that they are better justified by emphasising the role of conventions and the autonomy of collective trust.

A few examples will suffice to illustrate this claim. First, by making reference to agents' conventions and collective trust, the BSA manages to accommodate 'history', a necessary step towards justifying discretionary policy. One may note for example that conventions defy purely theoretical definitions in so far as they incorporate a changeable element, namely agents' responses to objective trends in a given historical period that make them understandable only *ex post*. Thus, from the standpoint of the macroeconomist, conventions can only be taken as they are, as the irreducible starting point not just for theoretical analysis but also for policymaking, which is not about thinking in abstract terms but adapting to circumstances. One may note for example that there are no clear 'natural' limits to public expenditure (or public debt) in terms of GDP and how far a government can go in increasing this ratio is a matter of shared conventions, which vary across time and place. This means that not only that the 'one size fits all' policy is wrong, but also that one cannot implement any policy stance, including tax and spend policies, in a mechanistic fashion.

Second, attaching weight to collective trust allows one to see that 'tight' rules are only a special case of a broader category of trust-keeping moves, which it may be necessary to adopt as a response to private sector instability. Indeed, what standard theory takes as 'unique' anchors that always work irrespective of the context, appear as much weaker policy moves in the relativistic approach, where they adapt to circumstances. Inflation targeting for example is not the end result of a struggle to establish a truly scientific monetary policy as conventional wisdom would have it, but a common-sense policy in certain contexts (e.g. when hyperinflation occurs) to be quickly replaced in others, such as the GR, when unemployment or financial instability are more relevant. In other words, one cannot single out on *a priori* grounds the best policy to keep collective trust at bay; discretionary policy is simply whatever is needed to reach this aim.

Ultimately, placing the emphasis on collective trust as a function of welfare features, such as safety nets for workers, helps to make sense of different policy stances across countries in the face of unemployment. It can explain for example why some countries (e.g. the USA) with relatively weak safety nets and role of family appear more intolerant in the face of unemployment and thus tend to react more quickly than other countries (e.g. some European ones) in which these features play a more significant role.

3. Conclusion

This paper has tried to indicate a way out of the stalemate in current macroeconomics in the face of the GR. In contrast to the 1930s, the current crisis of the dominant paradigm has so far failed to produce clear-cut alternatives. One likely reason is that all those who disagree with standard macroeconomics fail to converge on a new alternative paradigm suggesting a plausible method to deal with macroeconomic stability analysis.

This paper's aim is to provide a first, tentative contribution along these lines by introducing a new approach to stability, the BSA, designed to extend the application

³² Another example is the view that large balance sheet disequilibria cannot be cured by the conventional tools, since agents are seeking to minimise debt rather than maximise utility (see, e.g., Koo, 2009).

of Keynesian analysis beyond the 'short run'. Based on the 'fragility of conventions' hypothesis, which leads one to focus on a variable level of collective trust as a key dynamic element in the analysis, the BSA seeks to overcome some of the limitations of existing heterodox frameworks by suggesting that the principle of effective demand is the basis for dealing not just with fluctuations but also with 'normal' times, in which events such as the GR do not necessarily arise but are possible.

Following this view, the BSA subscribes to the thesis that the GR is rooted not only in developments within the financial system, but also in low aggregate demand due to other factors, such as income inequality. Within this perspective, the BSA's specific contribution, with respect for example to the Mynskian and Regulation Schools' interpretations, is to stress that what accounts for the aggregate demand problem is a wider range of structural changes of both an objective and a subjective kind, which arise in the NE.

Given the interconnectedness and the complexity of the latter, the BSA holds that one cannot hope to account for such changes on the grounds of better formal methods than existing ones. As shown by the orthodox literature itself, formal models are inevitably partial, i.e. they commit various 'cardinal sins', such as focusing only on a key factor, taking everything else as given or omitting key structural variables (e.g. collective trust). Whatever their usefulness in other contexts, they are not suitable for discussing macroeconomic stability issues. This is why even orthodox authors relying on the stability assumption, provide narrative accounts of the GR just as many other more heterodox writers do.

This paper has sought to show that building a proper narrative account of the GR without assuming internal stability calls for a broad interdisciplinary perspective—which may be termed 'relativistic' in contrast to the 'naturalistic' approach of standard theory—bringing together economic, institutional and cultural factors.

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