

THE EUROZONE'S CRISIS CONUNDRUM AND THE ROLE OF MACROECONOMIC THEORY

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Abstract: In the years before the global financial crisis (GFC), macroeconomic profession converged on many points of how financial markets work and how they should be regulated. However, the course of events mired the majority of **European Union (EU)** economies in the state of prolonged lower output, higher unemployment and ever-increasing levels of both private and public debt. They have marked an end to the economics profession honeymoon. Afterward, the main debate in the process of designing the crisis management response started to revolve around two opposed macroeconomic views: the New Keynesian and the New Classical/supply-side view. The New Keynesian view relies on the expansionary policy targeted to boost aggregate demand. However, New Classics/supply-siders advocate structural reforms and austerity as the path out of the current state of economic malaise. We provide an analysis of how those opposing views fail to appreciate the fundamental tenets of our monetary economy and inspire ineffective policies.

Key words: macroeconomic orthodoxy; fiscal policy; European Central Bank; endogenous money; debt

Introduction

In the last couple of decades, we could see a lot of convergence and groupthink in macroeconomic theory and its role in policymaking. This comes as strange since there are still several very prominent schools of economic thought vying to provide the most convincing economic narrative: New Keynesians, New Classics/

supply-siders and monetarists. However, these divergent schools of economic thought converged somehow on crucial aspects of the so-called new macroeconomic orthodoxy in the years before the global financial crisis (GFC). The orthodoxy embraced several important aspects such as rational expectations and efficient market hypothesis (EMH), quantitative theory of money, abolition of capital controls, conventional money multiplier model, Barro's Ricardian equivalence theorem, John Hicks' IS-LM model, non-accelerating inflation rate of unemployment (NAIRU) and mostly antithetical relationships between apparently rational financial markets and profligacy-prone sovereigns.

All of this translated into a policy framework which included two important features. The rational expectations and EMH revolution were primarily dedicated to the analysis of how financial market participants assess the value of various financial instruments without regard for the relationship between the monetary system and financial markets. This has essentially driven the wedge between financial theory and the role of macroeconomics. However, neoclassical synthesis developed a macroeconomic theory by disregarding the paramount significance of monetary theory (Kotarski and Deskar-Škrbić 2016).

The ultimate political consequence of new macroeconomic orthodoxy was to invert the balance of power between states and markets firmly anchored in the Bretton Woods institutions, as well as to allow for the "disciplining" effects of increasingly mobile capital on national treasuries. However, instead of a laissez-faire approach to finance paving the way for better allocation of scarce resources, it significantly entrenched rentiers' claims and their political authority (Jayadev, Mason, and Schröder 2018). Unfortunately, new economic orthodoxy has enabled the depoliticization and legitimation of the financialized mode of governance (Storm 2018). In light of the above-mentioned claims, this article invokes a new way of conceptualizing a macroeconomic framework in the Eurozone from the post-Keynesian perspective.

The central assumption of our article is that in a sophisticated monetary economy, money supply cannot be treated as some sort of exogenous variable but has to be viewed as an endogenous part of the economic system. This heavily informs our diagnosis of the underlying problems in the Eurozone's economic and political structure, as well as proposed policy solutions. Here, we elucidate a short explanation by claiming that in contemporary credit money economies, money's origin must be conceptualized in horizontal terms, determined by the increase in demand for loans and subsequent deposit creation by banks as the process of leveraging reserves or High-Powered-Money (HPM) takes place (Seccareccia 2015; Wray 2014). Therefore, vertical origin of money is only valid as far as commodity or fiat money is concerned. Following Moore's (1988) view and incorporating a small post-Keynesian caveat, it is evident that under the current framework, central

banks can only retain some ability to set exogenously the supply price of the money market (federal funds rate or Euro Overnight Index Average [EONIA] and short-term government debt rates) but not the quantity of credit money.

Some critics of the endogenous money approach may argue that we claim that there are no objective constraints on how much deposit money can be created. On the contrary, we argue that banks themselves are constrained by the amount of profitable lending, risk-management strategies, regulatory policy on capital requirements, desired demand for money by households and businesses, and central bank's policy (McLeay, Radia, and Thomas 2014). In light of the Currency School and Banking School claims, with the former emphasizing the principle of scarcity and the latter the principle of elasticity, we claim that the business cycle entails a changing balance between financial discipline and elasticity (Mehrling 2011). While banks can be severely constrained by liquidity and solvency problems in the mid of a deleverage and debt-deflationary environment because of their capital base and collateral limitations, they can easily circumvent them in the expansionary phase of the business cycle. Therefore, the liquidity preference can at times seriously impair both demand and supply of loans and undermine the efficacy of conventional monetary policy at aggregate demand management. The Eurozone's crisis experience is a case in point, and we will delve into it in the following sections.

Therefore, this article will be structured into four sections. In the first section, we outline the development trajectory of new orthodox macroeconomic theory composed of several distinct approaches and their temporary convergence toward the end of the 20th century. Accordingly, in the second section, we apply that theoretical framework to the origins of the financial crisis in the Eurozone. At the same time, we contrast it with the sectoral balance approach (SBA) and endogenous money theory. The third section juxtaposes two competing approaches to crisis management in the Eurozone, the New Keynesian and the New Classical/supply-side approach. Finally, the fourth section provides important insights distilled from the hitherto inefficient application of macroeconomic policy mix in the Eurozone. We conclude with important policy solutions that may serve as a part of the new reform agenda for the Eurozone.

Paving the Way for the Crisis—The Role of New Macroeconomic Orthodoxy

The second half of the 20th century was a period interspersed with lively macroeconomic debates between various schools of macroeconomic thought. The period after the Second World War until the 1970s saw a domination of what many refer to as the Keynesian paradigm. However, this label does much disservice to the true

ideas and views espoused by J. M. Keynes. Namely, the true Keynesian approach can be characterized as a limited activism deeply rooted in classical liberalism. It contains a very pronounced role for uncertainty and the notion of multiple equilibria (Colander and Kupers 2014). As opposed to those original Keynesian insights, the neo-Keynesianism that emerged in the 1940s was the work of his disciples such as Abba Lerner and John Hicks (Kirshner 2014). In that sense, Lerner postulated the necessity of his functional finance approach in tackling recessions. This basically meant that governments are able to fine-tune the economy. In this framework, issues such as public debt, deficits and money took only a secondary role.

In the 1970s, this mechanical approach to policymaking was forcefully challenged after stagflation had compromised the tenability of a Phillips curve. Monetarists led by Milton Friedman staged a counterattack by criticizing the use of fiscal policy in stabilizing the aggregate demand. In spite of this major difference, part of the common ground between neo-Keynesians and monetarists still existed. It consisted of the view that the collapse in aggregate demand needs to be prevented (Wolf 2014). However, monetarists argued in favor of monetary policy as an instrument for controlling the money supply. To ensure that control, the central bank should have used a clear formula in supervising the rate of money supply growth. It is difficult to incorporate the following quote by Milton Friedman (1948, 247) into the dominant perception of his work as strictly market fundamentalist in nature: “the chief function of the monetary authority [would be] the creation of money to meet government deficits or the retirement of money when the government has a surplus.” Nevertheless, this does not mean that the government would be allowed to use a printing press to stimulate the economy. On the contrary, it would be well advised to prevent the collapse in money supply during recession and tie its growth to some reasonable formula based on the estimate of long-term real output growth. Monetarism enjoyed popularity in its heyday, in the 1970s, but lost its appeal due to difficulty in defining the money supply in an age of rapid financial innovation.

In the 1980s, macroeconomic thought continued to be characterized by an intense clash between two new camps that were termed by Paul Krugman (2009) as saltwater and freshwater economists. On the one side, there were New Keynesians (saltwater economists) such as N. Gregory Mankiw and David Romer. Their framework retained some basic elements of neo-Keynesianism such as “sticky” wages and prices but heavily relied on monetary and fiscal policy in boosting nominal demand. This was justified by “wage–price stickiness” that precluded smooth adjustment over the business cycle. However, they decided to give micro-foundations to their macroeconomic framework in the domain of agent decision making. Essentially, that meant the partial embrace of the rational expectations approach. The other camp was represented by New Classics

(freshwater economists) grouped around Robert Lucas, Eugene Fama and Thomas Sargent. The backbone of their approach consisted of rational expectations and EMH that perceives agents as rational optimizers. In their view, these agents are capable of maximizing their own reward by incorporating available information into their rational choices (Hoover 2008). In this Panglossian world, there was no place for involuntary employment, overcompensation of managers and housing bubbles, let alone major depression. The “skewed regulation” of financial markets, often falsely termed as “deregulation,” ignored the potential dangers of socially disembedded finance and overemphasized the benefits of financial deepening. Unfortunately, this stance neglected the Lipsey–Lancaster theorem that posits that when an idealized state cannot be attained, moving closer to it may not represent an improvement.

Despite different theoretical facets, both sides of the debate underestimated or neglected the possibility of devastating financial crises, as well as missing policy instruments to tackle them. New Keynesians claimed that major financial instability could be handled by expansionary monetary and fiscal policy, while New Classical rejected the very possibility of an endogenously created financial meltdown. Under this view, if recession ever occurs, it is due to the economy being buffeted by some random and exogenously defined shock. Anyway, in that case, monetary policy was not so much to the dislike of New Classical economists since they did not perceive it as dysfunctional and destabilizing as fiscal policy, given central bankers’ encapsulation from democracy-related pressures in an era of independent central banks. This meant that both sides became rooted in the new macroeconomic orthodoxy that relied on various dynamic stochastic general equilibrium (DSGE) models, with narrowing differences between them (e.g., tax rates). The ensuing macroeconomic consensus was best marked by a famous Robert Lucas (2003, 1) quote: “Its central problem [macroeconomics] of depression prevention has been solved, for all practical purposes, and has in fact been solved for many decades.” Hence, it was largely assumed that the sufficient condition for macroeconomic stability lies only in inflation targeting regime as operationalized by the Taylor rule.

Unfortunately, the prevailing macroeconomic orthodoxy totally neglected the crucial role of credit creation in the modern economy because of its insistence either on the concept of money neutrality or on the financial system’s role as a pure intermediary between savers and investors. It meant that money supposedly serves as a natural veil to the operations of the real economy, a medium that solely lubricates various transactions, as opposed to the fact that it underpins and shapes power relations (Otero-Iglesias 2015). The modern macroeconomic thought has totally ignored the fact that banks can create money in a fractional reserve system and that bank money is not a multiple of HPM, as claimed by neoclassical

theorists, but rather HPM is a quotient of the quantity of bank money (Lavoie 2006). Therefore, Eggertsson and Krugman's (2012) loanable funds theory that differentiates between patient and non-patient agents is poorly specified at best or completely wrong at worst.

Steve Keen (2015) poignantly drew an analogy between the modern macroeconomic framework that disregards money and banking and the ornithologist who tries to figure out how birds fly, without realizing that birds have wings in the first place. Unfortunately, a money creation process which can serve either as a force for good or as a force for bad has been brushed away in the mainstream pre-crisis and post-crisis debates. Any increase in private credit was perceived as inconsequential as long as inflation stayed stable. This meant that the steady increase in the financial system's complexity, interconnectedness and leverage was perceived beneficial since it "inevitably" facilitated allocative efficiency and market completion (Turner 2012a).

The central argument in favor of that view emanated from the assumption of the rationality of creditors and debtors. Financialization has been welcomed since the distinction between productive and unproductive debt is next to impossible in the world of financially sophisticated agents. Even today, in a world heavily affected by the decade-long consequences of GFC and rising wealth and income inequality, leading New Keynesian economic commentators such as Paul Krugman underestimate the importance of debt's distributional effects. The following statement further elaborates on the problematic argument that debt is one person's liability and the other person's asset: "Because debt is money we owe to ourselves, it does not directly make the economy poorer (and paying it off doesn't make us richer)" (Krugman 2015). Even in the case of a true political union such as the United States, this argument is quite unconvincing, let alone in the context of an integration that is a hybrid between a community of sovereign states and a supranational entity. Hence, the pre-crisis distributional and compositional effect of banks' power to create money by flooding the economy with credit was welcomed as rational and exogenous to the efficient state of the modern economy. The same macroeconomic orthodoxy was particularly ingrained in the Eurozone's economic governance framework, as we will observe in the next section.

The Embeddedness of Macroeconomic Orthodoxy in the Eurozone's Economic Governance Framework

The main thrust of the new macroeconomic orthodoxy, as elaborated in the previous chapter, was clearly visible in the European Central Bank's (ECB's) mandate, as well as in the design of the Stability and Growth Pact (SGP) signed in 1997. At

its outset, the ECB was entrusted with the sole role of guarding the euro's internal value as operationalized by the Harmonised Index of Consumer Prices (HICP) slightly below or close to 2%. The ECB was never envisioned as a lender of last resort (LOLR) with the goal of reducing unemployment, as was the case with the US Federal Reserve. Unfortunately, the ECB's mandate and European Economic and Monetary Union's (EMU's) design have not been conducive to conducting effective monetary policy. This has been due to its structure that encompasses very heterogeneous economies with different wage setting and product market institutions, as well as relatively segmented national financial markets. However, it was also entrapped in the new macroeconomic orthodoxy that tolerated rising private leverage and focused only on eradicating excess inflation. In spite of the above-mentioned differences with other important central banks worldwide, the ECB's leading experts and decision makers displayed the same syndrome of "captive minds" like most other central bankers worldwide (Zingales 2013). Their common intellectual background with leading financiers left them open to the latter group's argument in favor of rapid financial deepening as the only appropriate way of boosting economic growth.

Despite being enormously important in defending the ECB from political interference in a multi-national currency union setting, the political independence of the ECB did not grant it intellectual independence from the financial sector's interest disguised in sophisticated risk models. Inflation was kept in check since the age of globalization exposed Eurozone economies to new competitive pressures. Essentially, cost push factors that were largely present before the age of labor and product markets liberalization had been tamed not only by the resolute tightening of monetary policy but also with the help of the aforementioned structural changes in the global economy (Turner 2015). The most important claim of monetarist thought that inflation is always a monetary phenomenon and central bankers' concomitant success in "breaking the back" of inflation led to the increase in their power and prestige. From now on, it was unimaginable to question their policy stance and favorable view of rising private credit.

To demonstrate this claim, we provide data on public and private debt level in the Eurozone's five core and three periphery economies, in the period from 1990 to 2015. The data are obtained from the Bank for International Settlements (BIS; Figures 1-8). They indicate that the ECB and national financial regulators should have been more worried about the size and the composition of total debt. Essentially, the ECB failed to recognize that achieving GDP growth required ever-expanding debt levels. Exactly, this flies into the face of the argument that financial deepening is somehow immune to the law of diminishing marginal return (Turner 2012b).

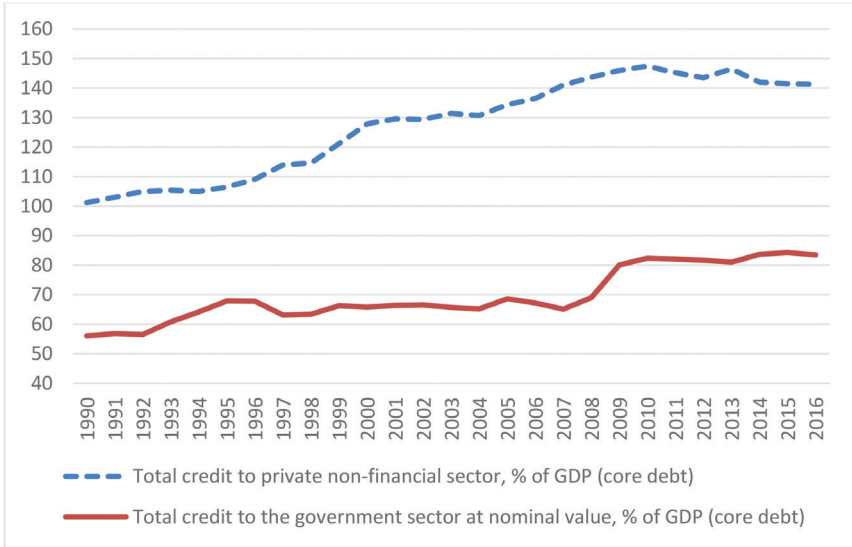


Figure 1 Austria

Source: Bank for International Settlements (2018a).

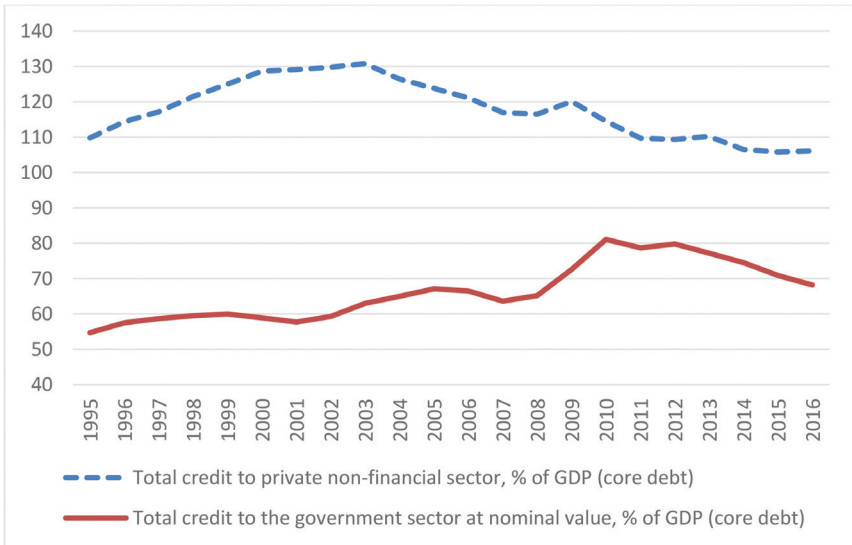


Figure 2 Germany

Source: Bank for International Settlements (2018a).

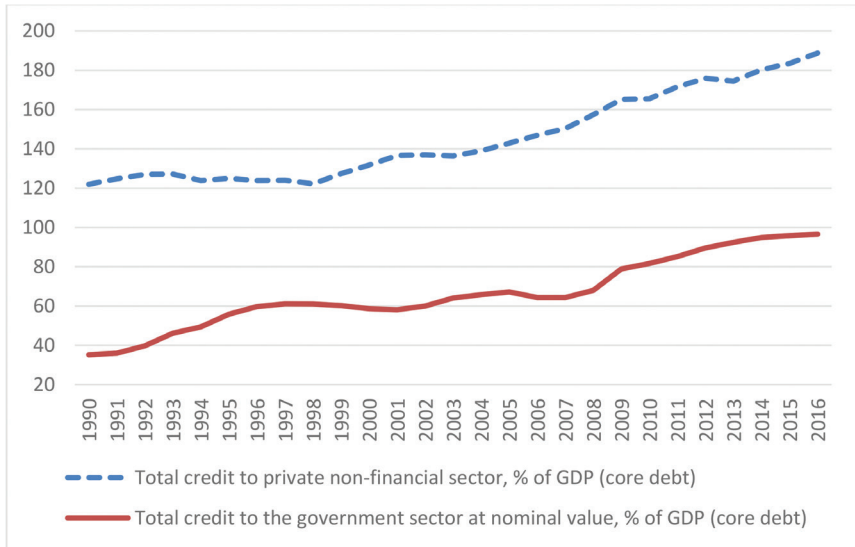


Figure 3 France

Source: Bank for International Settlements (2018a).

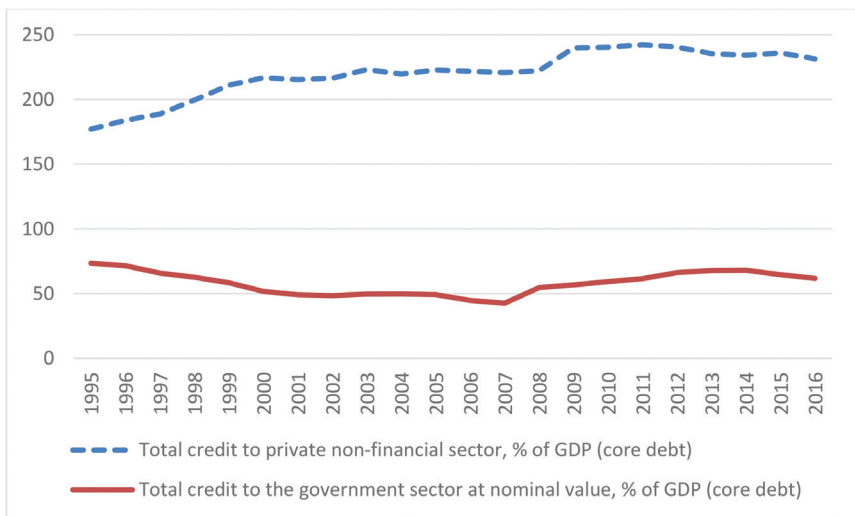


Figure 4 The Netherlands

Source: Bank for International Settlements (2018a).

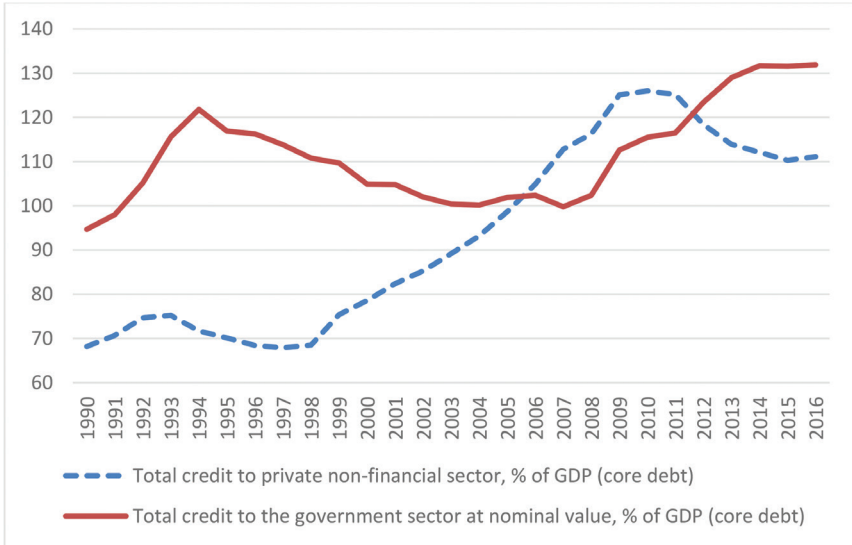


Figure 5 Italy

Source: Bank for International Settlements (2018a).

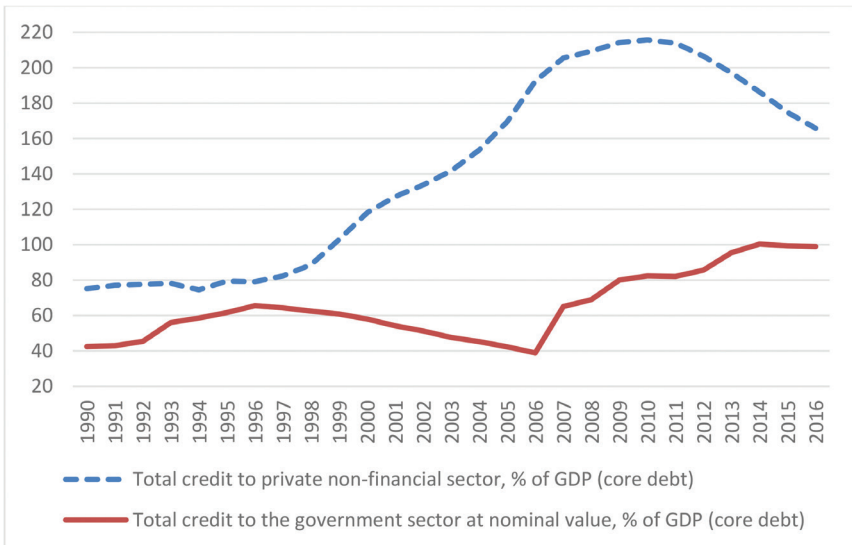


Figure 6 Spain

Source: Bank for International Settlements (2018a).

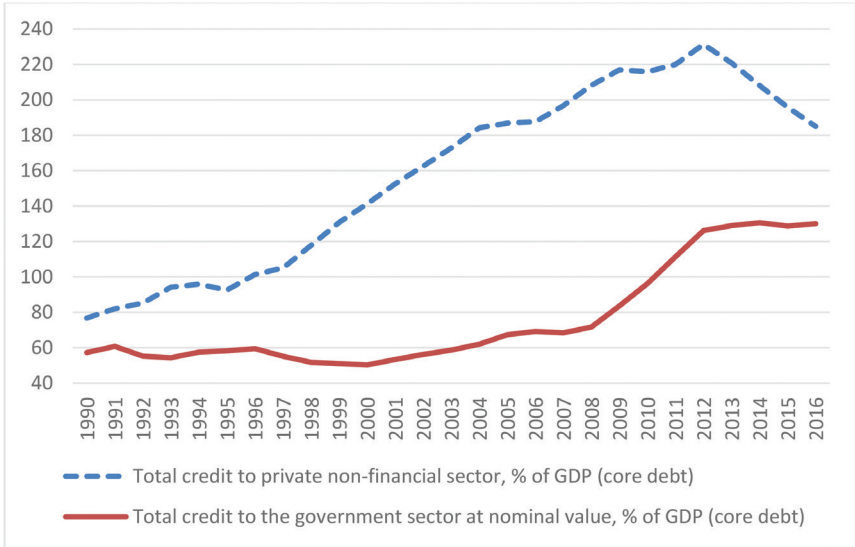


Figure 7 Portugal

Source: Bank for International Settlements (2018a).

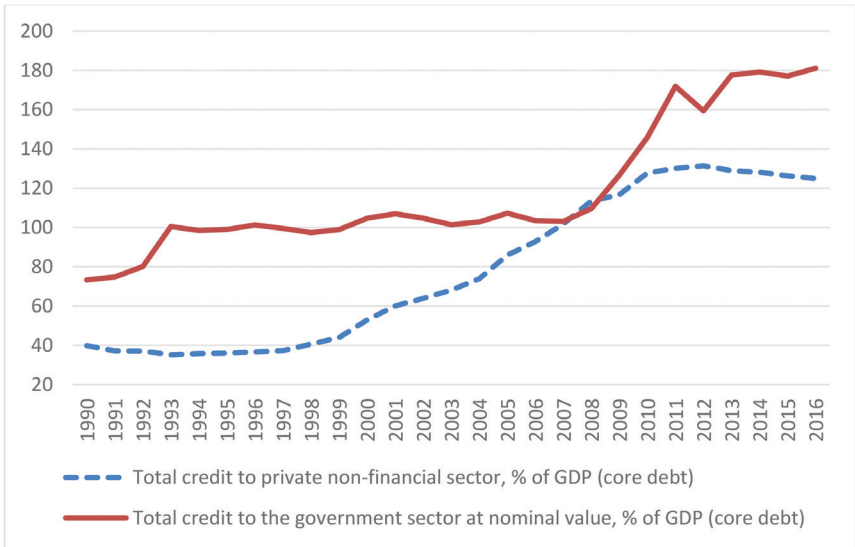


Figure 8 Greece

Source: Bank for International Settlements (2018a).

The central dilemma between stagnating GDP and the growing need to support it via private debt accumulation had been solved in favor of the latter option. This growth regime could be aptly labeled as privatized Keynesianism because it tried to reconcile the imperatives of the financialized economy with the needs of the real economy (Crouch 2009). However, the new macroeconomic orthodoxy was short-sighted as it embraced only part of the Wicksellian and Schumpeterian framework that had set banks as enablers of productive business investments by companies, while it ignored them as independent creators of purchasing power. This was misleading and dangerous as evidenced by a series of asset and credit bubbles. After all, bankers as the “ephors of capitalism” as suggested in the Schumpeterian framework have not proved adept at structuring accumulation and distribution in a socially useful way. The time-series data on residential property prices in the period between 1995 and 2015, collected by the BIS, attest to this conclusion. Figures 9–10 depict almost exponentially rising housing prices in 9 out of 10 European Union (EU) economies before the GFC erupted in 2008.

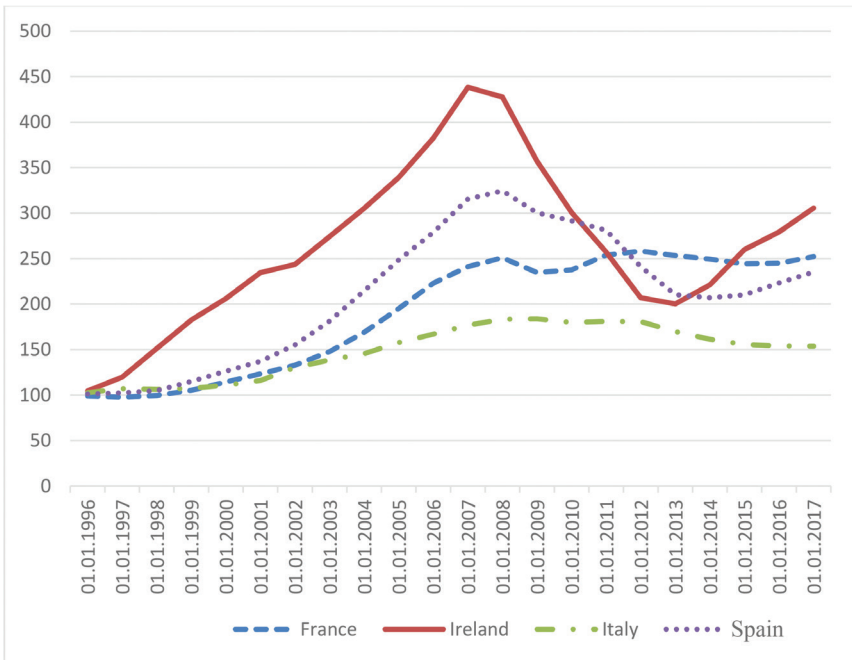


Figure 9 Long Series on Nominal Residential Property Prices; Index, 1995 = 100

Source: Bank for International Settlements (2018b).

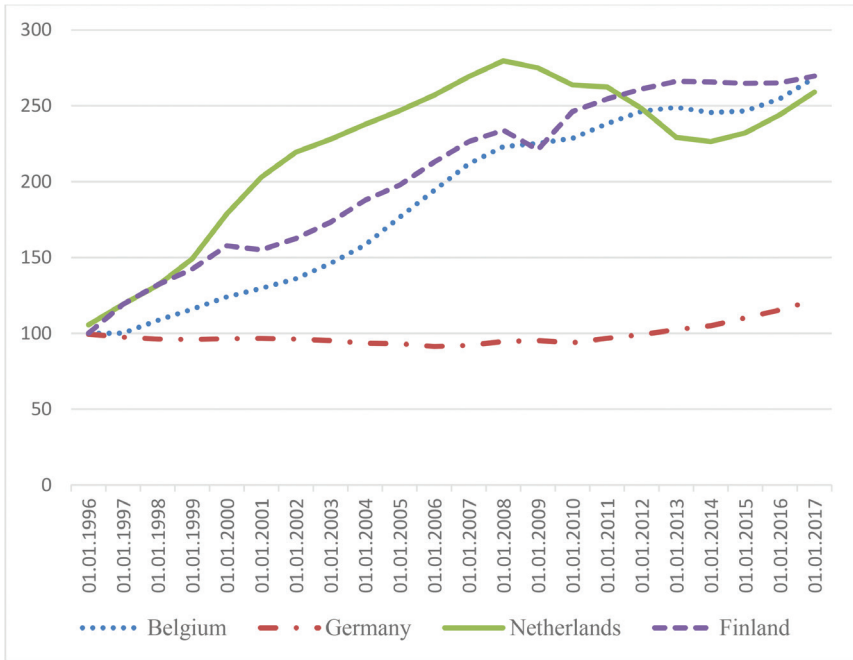


Figure 10 Long Series on Nominal Residential Property Prices; Index, 1995 = 100

Source: Bank for International Settlements (2018b).

What is even more worrying is the fact that most of the newly created purchasing power in the form of private credit has been apportioned for the purchase of already existing assets. This has rendered a highly destabilizing relationship between the highly elastic credit demand and the inelastic supply of locationally specific land and real estate (Turner 2014). A dataset collected by Óscar Jordà, Moritz Schularick and Alan Taylor (2014) strengthens this conclusion even more. Their dataset covers 17 developed economies during the long historical period from 1870 to 2007. The data show the share of mortgage-related debt in 1928, 1970 and 2007 as a percentage of total private debt. For the purpose of logically proceeding with our argument we took the data on 11 EU countries covered by their research. After a careful analysis, we can observe that 8 out of 11 EU countries displayed a disquieting accumulation of mortgage-related debt over the aforementioned period (Figure 11).

Therefore, the ECB as the Eurozone’s supreme monetary authority failed to take into account not only the growing debt level that had been producing modest increases in GDP. It also neglected its unhealthy structure as a harbinger of future financial instability and painful decelerating.

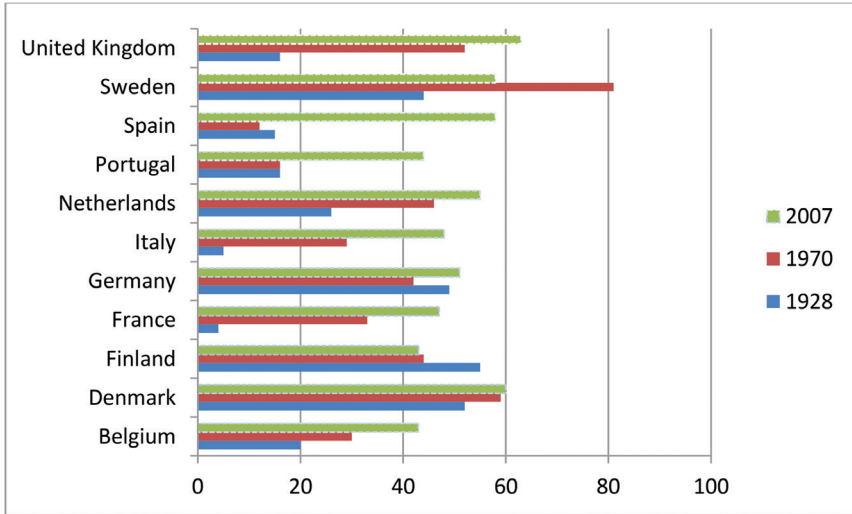


Figure 11 Disquieting Accumulation of Mortgage-Related Debt

Source: Jordà, Schularick, and Taylor (2014).

Besides the monetary policy framework, we also have to point out to fiscal policy as the other important lever which determined the Eurozone's overall economic governance framework and its susceptibility to crisis. Fiscal policies in the Eurozone/EU have been rooted in the SGP framework which precluded expansionary fiscal policy beyond a certain level, primarily due to fear of unwanted cross-border trade and financial spillover effects of diverging national policies. The critical thresholds for public debt and fiscal deficit were set quite arbitrarily at 60% and 3% of the country's GDP. The wording of the SGP was put together to point out that the main threat to macroeconomic stability in the EU lurks in the fiscal irresponsibility of sovereigns and not in the possibility of a systemic banking crisis. Therefore, this framework implicitly relied on the Lawson doctrine that posits that private-sector borrowing represents the behavior between "consenting adults," and it should not be a cause of concern.

Additionally, at the time of the euro introduction, only Luxembourg satisfied the complete laundry list of SGP criteria. Admittedly, it was thought that the SGP's impact would be similar to the legend of Hernán Cortés who apparently set conquistadors' ships in flame as a signal to his fellow conquistadors that their landing on the South American soil entailed only two outcomes, an astounding success or an abject failure (Zingales 2012). Having in mind the disastrous consequences of its potential failure, it was believed that the SGP would manage to

impose fiscal discipline on imprudent peripheral economies. The exact way of how that was to be done remained elusive. The dissatisfaction with the SGP framework after its launch was best expressed by Romano Prodi: “I know very well that the SGP is stupid. The pact is imperfect. We need a more intelligent tool and more flexibility” (cited in Baldwin and Wyplosz 2009, 519). Yet, nothing substantially improved took its place, and EU members had to contend with a slightly modified version of the SGP from 2005 onward. Furthermore, the pact lost its credibility in the course of German and French intransigence to the European Commission’s attempts at launching an excessive deficit procedure (EDP). Apart from the problem of the political viability of penalizing non-conforming governments, the SGP remained wedded to the new orthodoxy that had a strong bias against public debt as the key precursor to devastating financial crises. However, this bias has been problematized by the empirical research conducted by the aforementioned academic trio: Óscar Jordà, Moritz Schularick and Alan Taylor (2013). Their research demonstrated that from the historical point of view, financial crises did not typically have their roots in fiscal problems. In contrast, rising private leverage served as a crucial warning sign for the ensuing financial turmoil.

Finally, economists and policymakers who had coalesced under the umbrella of new orthodoxy failed to appreciate the fundamentals of a SBA when framing the role of fiscal policy. A SBA postulates that domestic output and job creation are indispensably linked to the readiness of the domestic private sector to increase its debt, the public sector’s capacity to issue new debt as well as the ability of the domestic private sector to build more financial claims on non-residents than *vice-versa*. The following macroeconomic entity postulates that the private sector’s assets must come outside of it, either in the form of claims on foreign entities, as measured in the current account surplus, or in the form of government deficit. This can be expressed by two simple formulas that measure both flow and stock:

1. Private sector surplus or net saving = government deficit + current account balance
2. Gross private financial claims = gross private debt + net government debt + net financial international position.

The entities presented above signify that the very act of financial saving requires funding and must be associated with a corresponding act of another entity incurring debt (increase in “inside money”). In a monetary economy, savings do not fund: they need to be funded by somebody else’s debt, as postulated by endogenous monetary theory (Terzi 2015). As opposed to the frequently repeated narrative of government versus markets, whereby governments’ borrowing crowds out private-sector borrowers, the post-Keynesian perspective

identifies precisely governments as the only source of the currency needed by the private sector for the payment of taxes, net saving and leveraging of HPM. The only way for escaping the above-mentioned logic of never-ending debt accumulation would be to introduce “outside money” into the monetary system, money which does not embody anyone’s liability. Nevertheless, this represents a powerful political taboo since Eurozone member states accepted the status of using non-sovereign money, while the ECB remains wedded to the *status quo*.

Therefore, Germany and Spain, proxying both Eurozone’s core and periphery, are contrasted as good examples of the SBA within the Eurozone. In pre-crisis years, Germany beefed up its savings rate without a commensurate increase in investments. At the same time, Germany’s government posted only moderate fiscal deficits. The resulting savings and current account surpluses found their outlet in a peripheral country such as Spain, which had been characterized by a diametrically opposed institutional framework. Namely, Spain accumulated large financial deficits due to heavy foreign borrowing from abroad to cover staggering current account deficits. In the same period, Spain’s public finances were balanced, but not in a cyclically adjusted fashion to provide an adequate policy buffer when households’ and private non-financial corporations’ deficits peter out (Koo 2013; Pettis 2013). As soon as the crisis emerged, the above-elaborated trends for Spain went into reverse, while Germany remained reluctant to assist adjustment. In light of these facts, we conclude that in the Eurozone’s monetary economy fiscal deficits cannot be conceptualized from some abstract moralistic premise of right and wrong, but they are a “functional” part of the Eurozone’s rather dysfunctional economic governance framework. In the next section, we observe that the main protagonists of the debate of how to overcome the crisis legacy miss some crucial findings as outlined above.

The New Keynesian and the New Classical/Supply-Side Approach to Eurozone’s Crisis Management — “The Debate of the Deaf”

As soon as the GFC erupted in September 2008, the apparently happy macroeconomic orthodoxy marriage between the New Keynesians and the New Classicals came into serious distress. The sheer intensity and scope of the crisis awakened New Keynesians to the importance of fiscal policy. Contrary to this view, New Classicals/supply-siders advocated self-imposed market equilibrium, followed by the need to cut taxes and squeeze an overstretched budget (Krugman 2009). This debate was swiftly opened in the United States after Lehman’s bankruptcy. It did not take long before it arrived in Europe and penetrated into the political and institutional sphere through complex process of knowledge production that privileges certain crisis narratives over others (Matthijs and McNamara 2015).

Unfortunately, the myopia that characterizes both the New Classical/supply-side and New Keynesian framework precludes both camps from understanding not only the nature of modern investment but also the nature of our monetary economy. On one hand, New Classical/supply-siders argue that governments have to get out of the way by reducing onerous regulations, cutting taxes and eliminating labor market protections, so that confidence and recovery will somehow magically arise (Sachs 2014). They conceptualize crisis as something natural, with the austerity as an equivalent of the apocryphal vomitorium at Roman feasts, allowing the economy to purge itself from the overindulgence. On the other hand, New Keynesians uncritically argue in favor of stimulating aggregate demand by relying on quantitative easing (QE) and fiscal stimulus, regardless of the empirical support for the size of fiscal multiplier and the obstacle of broken transmission mechanism of monetary policy, when the economy is in the deleveraging mode. They are also largely oblivious to the issue of ensuring public investments quality, especially in countries with a low quality of institutions responsible for controlling corruption. Last but not the least important is the utmost significance of how this stimulus is being financed, whether it is debt financed or financed by issuing non-interest bearing or “outside money.”

When discussing the optimal economic policy response to the financial crisis that tottered a large number of Eurozone countries, we encounter a fierce debate between the advocates of fiscal stimulus/fiscal union and their opponents, who put structural reforms and competitiveness at the forefront. Those two approaches are basically the dividing line between the “French view” and “German view” of appropriate reforms for the Eurozone. While the “French view” accentuates discretion in crisis management, the need for solidarity between surplus and deficit countries, provision of liquidity and Keynesian demand management, the “German view” insists on sticking with *ex ante* rules, the liability for one’s own debts, provision of liquidity only in cases of indisputable solvency and austerity/supply-side reforms (Brunnemeier, James, and Landau 2016).

In the academic arena, the “French view” has been spearheaded by Nobel Laureates Paul Krugman and Joseph Stiglitz, and it detected the Eurozone’s crucial problem in the asymmetry between centralized monetary policy and decentralized fiscal policies. Moreover, they argue that the Eurozone’s current economic governance framework has deeply compromised the possibility of boosting aggregate demand via expansionary fiscal policy. In Stiglitz’s (2015) view, the Eurozone’s challenge is best characterized by two slogans: *It’s the politics stupid* and *Demand, demand, demand*. Both of them advocate eurobonds issuance as a crucial step in advancing a more symmetric process of macroeconomic adjustment (Krugman 2011; Stiglitz 2016). Nevertheless, their approach has failed to sufficiently take into account the possibility that fiscal stimulus cannot always deliver

expected results when leakages exist, such as a high marginal propensity to import or the stimulus is poorly targeted (low fiscal multiplier).

In addition, Paul Krugman has denied any relevance to the endogenous money theory in framing the debate of how to stimulate aggregate demand, whether in terms of interest bearing or non-interest bearing money. He went even further and labeled Steve Keen as one of the leading protagonists of the endogenous money as a “banking mystic” (Krugman 2012). The other leading advocate for more spending within the Eurozone, Joseph Stiglitz (2012), has remained surprisingly silent on this issue despite his frequent writing on the perils of financialization. In the absence of an endogenous money framework, they both advocate incompatible goals by insisting on raising aggregate demand. In the case of stimulus being pursued by heavier reliance on common debt instruments (eurobonds), they fail to appreciate the trade-off between the goal of crowding-in private investments via fiscal policy and the challenge of adding new debt to the already existing pile of debt.

However, the “German view” comprises pretty staunch advocates of fiscal consolidation and supply-side reforms. It is well represented by Hans-Werner Sinn of the Munich’s CESifo-Institute and Daniel Gros of the Centre for European Policy Studies. They both view the current malaise in the Eurozone exclusively through the lens of public finance and the inability of governments to balance the budget. In his *Project Syndicate* op-ed, Gros claimed that the rising debt-to-GDP level in the course of administering austerity cannot be taken as proof that austerity does not work (Gros 2013). His reasoning relied on the belief that this set of measures will somehow miraculously preempt insolvency. In a complementary argument, Hans-Werner Sinn (2013) argued for strict fiscal rules that emanate from the German-inspired ordoliberalism. This reflects a dominant position in the German mainstream that the Eurozone’s problems do not rest with the deficiency of aggregate demand but are predominantly derived from the unwarranted fiscal policies. The approach of those two influential opinion makers fits neatly with the position of New Classical/supply-siders that output and job creation are solely determined by supply factors. Correspondingly, prices and wages have to adjust smoothly. If that is not the case, this connotes that some institutional rigidities interfere with the natural process of market adjustment (Dullien and Guérot 2012).

The guiding principle behind the need for fiscal consolidation emanates from the argument about the farsightedness of financial markets and the importance of business confidence. The logic of “expansionary contraction” consists of signaling to entrepreneurs, investors and citizens that their tax bill would not increase as a consequence of fiscal stimulus financed with new government debt (Alesina and Ardagna 2012). Alberto Alesina of Harvard University epitomized this stance in a paper prepared for the Madrid ECOFIN meeting in 2010. There he claimed

“that large, credible and decisive spending cuts to rescue budget deficits have frequently been followed by economic growth” (Coy 2010). This logic is firmly rooted in the belief that rational actors would assume the Ricardian equivalence or the famous Robert Barro’s debt neutrality. In October 2012, José Manuel Durão Barroso, then the President of the European Commission stated, “These [austerity] conditions will allow Greece to achieve renewed growth and will ensure its future in the euro area” (Barroso 2012). The previously elaborated reasoning is particularly true of Germany’s Federal Minister of Finance, Wolfgang Schäuble, who stated in late 2011,

There is some concern that fiscal consolidation, a smaller public sector and more flexible labour markets could undermine demand in these countries in the short term. I am not convinced that this is a foregone conclusion, but even if it were, there is a trade-off between short-term pain and long-term gain. An increase in consumer and investor confidence and a shortening of unemployment lines will in the medium term cancel out any short-term dip in consumption. (Schäuble 2011)

However, the logic of New Classicals/supply-siders has ignored the efficacy of austerity measures from the distributional, compositional and logical perspective (Blyth 2013). Apart from ignoring the fallacy of composition when almost all states in a large economic bloc try to do the same by slashing expenditures, this policy approach also ignores the negative distributional effects of these measures if too much reliance is put on cutting expenditures that improve the well-being of the most vulnerable segments of a society (Padoan 2013). Finally, the insistence on curing serious structural problems and ramifications of a large systemic banking crisis predominantly by invoking austerity rests on a logically unconvincing and unjust argument. Namely, the argument that the economy is composed of cold-headed and rational persons, who are capable of assessing the government’s long-term fiscal capacity in the mid of a serious balance-sheet recession, seems pretty naive (Carroll 1992).

To wrap up, both New Keynesians and New Classicals/supply-siders find themselves in the heated debate of imposing structural narratives about the true origins of the Eurozone’s malaise. So far, both sides can claim certain political victories. For instance, the survival of some elements of macroeconomic orthodoxy, such as rational expectations when discussing the relevance of Ricardian equivalence, serves as a reminder of the tenacity of ideas purported by New Classicals/supply-siders. However, the attempt at aggregate demand management by gradually introducing QE reflects the victory of the New Keynesian camp. The ECB gradually started to act as a LOLR, which haphazardly tries to substitute for the role of missing fiscal policy. The covered bond-purchase program in 2011, LTRO, TLTRO and the launch

of QE in 2015 fit into this frame. However, New Classicals/supply-siders managed to introduce some successful reforms. Their crown jewel in promoting the goal of fiscal responsibility refers to the signing of the Treaty on Stability, Coordination and Governance or Fiscal Compact in 2012 and stronger Macroeconomic Imbalance Procedure in 2011. In essence, the Fiscal Compact allows only a primary budget deficit of no more than 0.5% of GDP over the full economic cycle.

Regrettably, the New Keynesians and New Classicals/supply-siders debate has produced a very poor macroeconomic mix since the crisis, since both of them pulled the Eurozone's monetary and fiscal policy in diverging directions, instead of insisting on their coordination. We can observe that since 2010, fiscal policy has become ever tighter while monetary policy has turned looser, which is hardly an optimal mix (Matthijs and Blyth 2018).

As an example, the ECB has had difficulties in implementing its QE operations since it relies on highly rated debt instruments which are not disposable in the needed amount. Furthermore, the creation of additional government debt instruments is clearly incompatible with the Fiscal Compact rules. Therefore, government debt could be only substituted by private debt instruments such as asset-backed securities or corporate bonds. According to the Royal Bank of Scotland estimates, QE can generate a rather small amount of aggregate demand by buying debt securities since it cannot circumvent the broken monetary policy transmission channel. Furthermore, the key beneficiaries of QE such as traders, hedge funds, investors, banks, high-wealth individuals and speculators lack a high marginal propensity to consume, which reinforces the divergence of monetary conditions in the Eurozone (*Financial Times* 2015). Conversely, QE does not reach ordinary and cash-strapped consumers with a high marginal propensity to consume. As opposed to the US political economy context, QE's effects in the Eurozone have remained limited. This is due to lower interest rates in the situation where households' liquid assets tend to be larger than their debts (Muellbauer 2014). The other condition which is present in the United States, the large equity portfolio of households, simply does not exist in the Eurozone. Thus, the configuration of the Eurozone's political economy renders QE less effective in relative terms.

Apart from being ineffective, QE also subsumes several collateral effects. It has a huge impact on wealth distribution, credit allocation and the potential for asset bubbles. Inevitably, it makes wealth inequality more unequal, lowers productivity growth and risks a financial boom and bust cycle. All of the aforementioned factors create an environment that has not been conducive to growth. Perversely, Gowan, Andrews and Millot (2017) show that QE has tied capital to "zombie companies" unable to put their business on a healthy footing. However, hypercompetitive companies can now cheaply substitute labor with capital, further

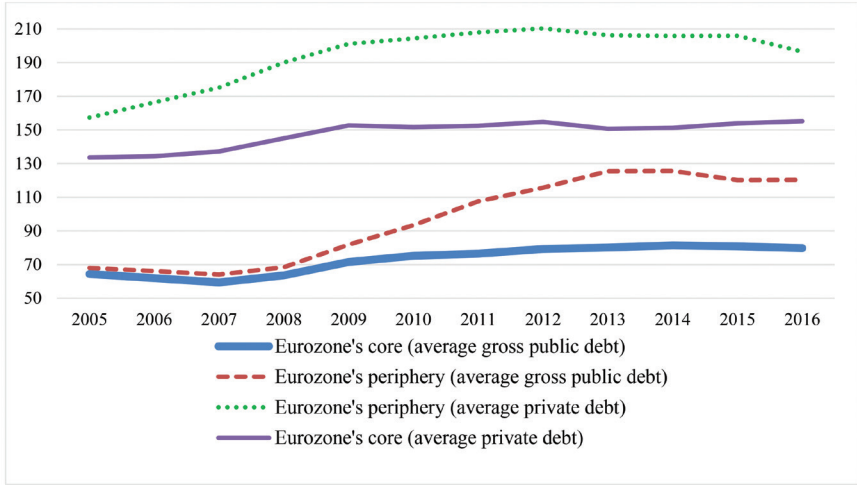


Figure 12 Average Gross Public Debt and Average Private Debt in Eurozone’s Core and Periphery (% GDP)

Source: European Statistics (2018a, 2018b).

exacerbating downward pressure on aggregate demand. Noticeably, this represents a vicious cycle that could drag Eurozone economies in the direction of fragmentation when the next crisis occurs.

As already stated, while New Keynesians have had their say in alleviating pressure by ever looser monetary policy, New Classical/supply-siders wrung their victory with the passing of the Fiscal Compact. However, its design has been deeply flawed due to its procyclical nature in the context marked by a “balance sheet recession” (simultaneous attempt at deleveraging). The Fiscal Compact dangerously ignores the wisdom emanating from a SBA that renders public debt reduction only possible by means of private indebtedness at home or abroad. It straddles the fundamental dilemma between the need for fiscal credibility and the risk of pressing on the austerity pedal, thus prematurely putting an end to recovery. Ironically, both New Classical/supply-siders and New Keynesians have argued directly or indirectly for more debt, public or private, regardless of their preference for expansionary fiscal policy. However, there is no more space for additional debt as observed in Figure 12. It shows average gross public and average private debt in the Eurozone’s core (Germany, France, Belgium, the Netherlands, Finland and Austria), as well as the Eurozone’s periphery (Cyprus, Italy, Spain, Greece, Ireland and Portugal). BIS and Eurostat data show that public sector leveraging took place since 2008 to compensate for relatively unsuccessful private-sector deleveraging.

The ECB's QE has been the only significant effort so far, of trying to jumpstart the mediocre recovery. It has turned many bonds into temporary good investments, but only bought some time before the desperately needed overhaul of the Eurozone's structure. The Eurozone's problems are both an issue of aggregate demand and supply *hysteresis*. In contrast to the orthodox view, aggregate supply cannot be treated separately from the existing level of aggregate demand which can shift the potential output in both directions. The lack of demand has been hard to deny in the context of large accumulated debts, spare capacity, long-term unemployment and rising inequality. According to our post-Keynesian approach, there is no predetermined NAIRU that renders any further attempt at lowering unemployment pro-inflationary. At the same time, we do not deny the existence of equally meaningful supply-side constraints such as dual labor markets or unsustainable pension systems. Therefore, the Eurozone needs to go beyond the false dichotomy propagated by vocal supporters of both orthodox approaches and embrace new economic thinking.

Nesting Monetary and Macroprudential Policy Solutions within the Post-Keynesian Perspective

The Eurozone's crisis management since 2010 has encompassed a whole panoply of measures such as capital injections, liquidity provisions, state guarantees, alphabet soup acronyms such as QE, long-term refinancing operation (LTRO) and negative interest-rate policy (NIRP), fiscal consolidation, structural reforms and so on. However, all of them proved inept at reversing the increase in total indebtedness, despite some economic recovery taking place since 2014. Indeed, some countries such as Germany managed to shift leverage to their trading partners, by running chronic current account surpluses. Spain and Portugal followed suit since 2013. Nevertheless, other countries managed only to shift their leverage from private- to public-sector balance sheet (France, Italy, Greece and Austria).

The McKinsey Global Institute's report "Debt and (Not Much) Deleveraging" (McKinsey Global Institute 2015) published in May 2015 gives a detailed overview of 47 countries and their total indebtedness, as well as its composition. It is striking that out of 14 countries that increased their total debt-to-GDP ratios by more than 50 percentage points since 2007, 10 countries were members of the EU. Making matters even worse in terms of cost-effectiveness, for every extra dollar of output, the world economy cranks out almost 10 extra dollars of debt, and the Eurozone is not an exception to that trend (Storm 2018).

Therefore, coping with the challenge of constantly expanding debt will require a heterodox theoretical and policy framework. So far, both sides to the aforementioned debate ignore the necessity and viability of debt monetization or increased fiscal deficit financed by permanent money creation (monetary finance). In

practice, the ECB could use one out of two options at hand: directly credit governments' current account to finance productive investments and/or tax rebates or governments issue interest-bearing debt that could be purchased by the ECB and converted to non-interest-bearing irredeemable debt. This purchase would be funded through an irreversible or permanent increase in the stock of base money (Buiter 2014). Conceptually, it would constitute an asset for the holder but not a liability for the issuer. Certainly, its application would directly stimulate spending by circumventing an objection of Ricardian equivalence since deficits would be financed by future inflation and not by not future taxes or spending cuts.

All of this points out to the benefits of using non-interest bearing or "helicopter money" in pre-specified cases such as recapitalization of ailing banks, tax-cut/green investments funding in the mid of a prolonged recession or the administration of "helicopter money" directly into the income stream by arranging transfers to social security accounts owned by Eurozone citizens in pre-specified cases. This would be fully compatible with retaining the mandate to keep price stability (Muellbauer 2014). The approach entails no bigger amount of moral hazard as expressed by lower work effort of poorer citizens than the scenario in which richer citizens rely on QE to boost the value of their securities. The ECB's operations would be calibrated to close a country's output gap, for example, when real output falls by 3 percentage points as compared with potential output, the ECB would increase base money supply in that given country by 1 percentage point. This is especially important if creditor countries within the Eurozone refuse to assist in resolving balance-of-payments (BOP) imbalances between surplus and deficit countries.¹ However, for the aforementioned operations to work, both monetary and fiscal policy have to work together again, the very opposite of the Eurozone's experience so far. The simultaneous reliance on restrictive fiscal policy and QE has been similar to stepping on both the car's accelerator and brake pedals at the same time. In that sense, it would be necessary to consider the addendum to the SGP that would allow for monetary finance in strictly defined cases. ECB could still retain its independence, but it would be free to use monetary finance as a novel and effective tool to fulfill its mandate.

Unfortunately, due to several high-profile inflationary cases in 20th-century history, policymakers nowadays shy away from coordinating monetary and fiscal policy to create money that is non-interest bearing for the purpose of boosting nominal demand. It portends a political economy taboo that rests on the discriminatory treatment between "inside money" and "outside money," when analyzing implications of the increase in money supply in producing financial instability. This argumentation has been followed by the often espoused view that governments are always currency users according to the government budget constraint approach, instead of simply embracing the possibility to become currency issuers without

budget constraints in terms of financing (Kelton 2011; Wray 2014). The following statement by Paul Samuelson reveals the role of particular ideas in framing the monetary and fiscal policy nexus that later on becomes deeply ingrained in the collective mind-set and works as a major impediment to future policymaking:

I think there is an element of truth in the view that there is a superstition that the budget must be balanced at all times. Once it is debunked that takes away one of the bulwarks that every society must have against expenditure out of control. (Cited in Blaug 1995)

Besides introducing institutional innovations in the domain of monetary policy that would allow it to be better coordinated with fiscal policy, the EU needs to address the issue of macroprudential regulation head-on. This is another crucial battlefield in laying the foundation for stable and prosperous monetary union. Unfortunately, the current state of macroprudential regulation in the EU can be best described as having a shaky foundation. Basel III capital requirements lack the necessary teeth to reduce banks' exposure to financial shocks. Martin Wolf named them accurately as *capital inadequacy ratio* (Wolf 2014). Clearly, Basel III has many weaknesses, but the most important ones are easy to spot.

First, its provisions enable too long a time frame for the implementation that spans until 2019. Second, some of its key tenets such as counter-cyclical buffers (CCB) are categorized only as optional, which is especially worrying with regard to systemically important financial institutions (SIFI). Third, banks are still left off the hook since they are permitted to use their internal models in determining their risk-weighted assets.² Finally, Basel III leaves the leverage ratio of 3% intact, which sounds quite unsettling after the experience with Lehman Brothers.

The public discourse on the Basel III aspect of financial regulation is too often framed in terms of external forces that shape the art of the possible in the EU. However, it is not widely appreciated that exactly France and Germany were the key protagonists in watering down the Basel III content to make it to conform to the goals of their banking sectors (Helleiner 2014). In spite of these political obstacles, the public needs to be constantly informed that all banking crises have their origin in the combination of risky lending and poor capital requirements (Calomiris and Haber 2014). Correspondingly, stable economic growth is only viable when the increase in private debt level goes proportionally with the rise of GDP.³ In that sense, higher capital requirements have a crucial role in creating the environment for stable and abundant credit supply. Despite an increase in Tier 1 common equity since the GFC erupted, the resilience of major EU banks such as Deutsche Bank and BNP Paribas is still to be tested during the next crisis. In the coming years, EU needs to keep raising banks' equity, which would climb

up to the tune of 25% of a given balance sheet. Uttered in other words, capping the leverage ratio at 4:1 is indispensable in creating socially useful financial systems (Admati and Hellwig 2013).

There are primarily two approaches of how the leverage ratio could be curtailed. The first one entails balance sheet reduction. However, single-minded insistence on that approach could seriously curb the flow of productive credit. To avoid that scenario, it needs to be combined with the second approach that encompasses higher equity. It could be achieved either by private sector driven or by state-led recapitalization, especially if the first mode has not addressed the goal of securing stable systemically important banks. In line with our argument in favor of a greater reliance on non-interest bearing money in predetermined cases, this recapitalization should be conducted by a permanent increase in central bank money which is fiscally sustainable. Finally, apart from insisting on the major supply-side reform in providing credit, EU's policymakers also have to incorporate appropriate loan-to-value and loan-to-income ratios on the demand side, as a part of the new macroprudential philosophy. The crisis has clearly demonstrated that policymakers need a second line of defense apart from microprudential regulation at the level of each individual bank.

Conclusion

The overwhelming majority of reform plans for tackling the crisis legacy in the Eurozone have been focused on some sort of fiscal and financial union (Jones 2015; Matthijs and Kelemen 2015). While they may be economically feasible under certain conditions, they also require a very favorable political window of opportunity for their implementation as they imply revocation of national sovereignty where it matters the most, fiscal policy. But not everything has been lost, and the post-Keynesian approach offers useful recommendations such as monetary finance. The creation of fiscal and financial union would not be able to reduce financial instability and rising total indebtedness, especially, if this process were to disregard the key lessons of heterodox monetary and macroprudential tools outlined in this article. The adoption of the aforementioned tools is politically laden but it is an unavoidable step in creating a functional and viable fiscal and financial union, if this is the goal advocated by the majority of EU citizens. In the absence of stricter macroprudential regulation as outlined above, financial union would only lead to the socialization of risks. However, the introduction of fiscal union in the absence of a heterodox approach to preventing financial crises would only aggravate the dire state of European sovereigns' balance sheets. In that sense, debt monetization in strictly pre-specified cases could act as a circuit breaker for the debt-deflationary trap.

Despite modest economic recovery since 2015, due to a combination of lower oil prices, global economic recovery and limited effects of the ECB's QE program, the crucial task in the years to come entails the process of taming the socially counterproductive role of the Eurozone's financial sector. Hence, the crucial battle ahead is that in the realm of ideas. In addition to the power of ideas in constructing one's identity or worldview, it is crucial to remind ourselves of the Marxian dictum from *The German Ideology* that "ideas of the ruling class are in every epoch the ruling ideas." The Eurozone's growth in national financial sectors' assets size, the financial sector's value-added share and both the public and private credit ratio had provided spectacular rents for the self-serving bankers, while their balance sheets had become essentially a giant put option against the rest of society as it turned out at the height of the last crisis (Blyth 2013). This has to be exposed and reversed by enlightened social mobilization.

The main lesson from analyzing the current state of crisis management is that European policymakers have to be way more stringent and careful with private debt increase in the future and at the same time more relaxed in their stance to non-interest bearing money creation in the deleveraging phase of the business cycle. At the same time, the Eurozone needs to find a sustainable solution to the crucial challenge of achieving economic growth with less credit intensity. If the Eurozone finds an optimal balance anchored within a new institutional architecture propelled by fresh ideas, the success of its integration project rests assured.

Notes

1. Things are even more delicate in the setting of a multi-national currency union, where decision making becomes burdened by the division of Eurozone member states into creditors and debtors groups.
2. As an example, Robert W. Jenkins of the London Business School gives a vivid example by referring to the case of collateralized debt obligation (CDO) Squared. According to the Basel III framework, banks are required to put up only 1.35 euros in equity for each AAA-rated CDO Square which has nominal value of 100 euros. It is observable that a 1.4% margin for error is set too low for ensuring any semblance of financial stability (Finance Watch 2013).
3. There is no trade-off between having better capitalized banks and economic growth. The same is true of having safer and more profitable banks. Finally, one need not choose between a stronger banking system and one that can compete internationally.

References

- Admati, A., and M. Hellwig. 2013. *The Bankers' New Clothes: What's Wrong with Banking and What to Do about It*. Princeton: Princeton University Press.
- Alesina, A., and S. Ardagna. 2012. "The Design of Fiscal Adjustments." In *Tax Policy and the Economy*, edited by J. Brown, 19–67. Chicago: The University of Chicago Press.

- Baldwin, R., and C. Wyplosz. 2009. *The Economics of European Integration*. Berkshire: McGraw-Hill.
- Bank for International Settlements. 2018a. "Credit to the Non-financial Sector." April 16. <http://stats.bis.org/statx/toc/CRE.html>.
- Bank for International Settlements. 2018b. "Long Series on Nominal Residential Property Prices." April 16. https://www.bis.org/statistics/pp_long.htm.
- Barroso, J. M. D. 2012. "The European Council in 2012." Accessed February 28, 2013. <https://www.consilium.europa.eu/media/21325/euco-annualreport-updated-2012-en.pdf>.
- Blaug, M. 1995. "John Maynard Keynes: Life, Ideas, Legacy." Accessed on April 16, 2018. https://www.youtube.com/watch?v=4_pasHodJ-8.
- Blyth, M. 2013. *Austerity: The History of a Dangerous Idea*. New York: Oxford University Press.
- Brunnemeier, M., H. James, and J. P. Landau. 2016. *The Euro and the Battle of Ideas*. Princeton and Oxford: Princeton University Press.
- Buiter, W. 2014. "The Simple Analytics of Helicopter Money: Why It Works—Always." *Economics: The Open-Access, Open-Assessment E-Journal* 8: 2014–2028. Accessed July 13, 2015. <https://willembuiter.com/helifinal.pdf>.
- Calomiris, C. W., and S. H. Haber. 2014. *Fragile by Design: The Political Origins of Banking Crises and Scarce Credit*. Princeton and Oxford: Princeton University Press.
- Carroll, C. D. 1992. "The Buffer-Stock Theory of Saving: Some Macroeconomic Evidence." *Brookings Papers on Economic Activity* 23 (2): 61–156.
- Colander, D., and R. Kuper. 2014. *Complexity and the Art of Public Policy: Solving Society's Problems from the Bottom Up*. Princeton and Oxford: Princeton University Press.
- Coy, P. 2010. "Keynes vs. Alesina. Alesina Who?" *Bloomberg Business*, June 29. Accessed April 9, 2018. <https://www.bloomberg.com/news/articles/2010-06-29/keynes-vs-dot-alesina-dot-alesina-who>.
- Crouch, C. 2009. "Privatised Keynesianism: An Unacknowledged Policy Regime." *The British Journal of Politics & International Relations* 11 (3): 382–399.
- Dullien, S., and U. Guérot. 2012. "The Long Shadow of Ordoliberalism: Germany's Approach to the Euro Crisis." Accessed February 24, 2012. http://www.ecfr.eu/publications/summary/the_long_shadow_of_ordoliberalism_germanys_approach_to_the_euro_crisis.
- Eggertsson, G. B., and P. Krugman. 2012. "Debt, Deleveraging, and the Liquidity Trap: A Fisher-Minsky-Koo Approach." *The Quarterly Journal of Economics* 127 (3): 1469–1513.
- European Statistics. 2018a. "Private Sector Debt." Accessed April 14, 2018. <http://ec.europa.eu/eurostat/web/products-datasets/-/tipspd20>.
- European Statistics. 2018b. "General Government Gross Debt." Accessed April 14, 2018. http://ec.europa.eu/eurostat/en/web/products-datasets/-/SDG_17_40.
- Finance Watch. 2013. "Bank Lobby Has Been Successful at Fighting Reform." Accessed August 28, 2014. <http://www.finance-watch.org/hot-topics/blog/916-interview-robert-jenkins>.
- Financial Times*. 2015. "ECB's QE Won't Be Enough." Accessed June 25, 2017. <https://www.dailymotion.com/video/x6egqhc>.
- Friedman, M. 1948. "A Monetary and Fiscal Framework for Economic Stability." *American Economic Review* 38 (3): 245–264.
- Gowan, M. A., D. Andrews, and V. Millot. 2017. "The Walking Dead? Zombie Firms and Productivity Performance in OECD Countries." Accessed March 20, 2018. <https://www.oecd.org/eco/The-Walking-Dead-Zombie-Firms-and-Productivity-Performance-in-OECD-Countries.pdf>.
- Gros, D. 2013. "Has Austerity Failed in Europe?" *Project Syndicate*, August 14. Accessed April 16, 2018. <https://www.project-syndicate.org/commentary/how-austerity-has-helped-the-eurozone-periphery-by-daniel-gros?barrier=accessreg>.

- Helleiner, E. 2014. *The Status Quo Crisis: Global Financial Governance after the 2008 Financial Meltdown*. New York: Oxford University Press.
- Hoover, K. D. 2008. "New Classical Macroeconomics." *The Concise Encyclopedia of Economics*. Accessed May 24, 2016. <http://www.econlib.org/library/Enc/NewClassicalMacroeconomics.html>.
- Jayadev, A., J. W. Mason, and E. Schröder. 2018. "The Political Economy of Financialization in the United States, Europe and India." *Development and Change* 49 (2): 353–374.
- Jones, E. 2015. "The Forgotten Financial Union: How You Can Have a Euro Crisis without a Euro." In *The Future of the Euro*, edited by M. Matthijs and M. Blyth, 44–69. New York: Oxford University Press.
- Jordà, Ò., M. Schularick, and A. Taylor. 2013. "Sovereigns versus Banks: Crises, Causes and Consequences." Accessed October 18, 2016. https://cepr.org/sites/default/files/Schularick%20-%20SovBanks_Dec2013.pdf.
- Jordà, Ò., M. Schularick, and A. Taylor. 2014. "The Great Mortgaging: Housing Finance, Crises, and Business Cycles." Accessed January 23, 2015. <http://www.nber.org/papers/w20501>.
- Keen, S. 2015. "Nobody Understands Debt—Including Paul Krugman." *Forbes*. February 10. Accessed April 16, 2018. <https://www.forbes.com/sites/stevekeen/2015/02/10/nobody-understands-debt-including-paul-krugman/#283c43911ac3>.
- Kelton, S. 2011. "Limitations of the Government Budget Constraint: Users vs Issuer of the Currency." *Panoeconomicus* 1: 57–66.
- Kirshner, J. 2014. *American Power after the Financial Crisis*. Ithaca, NY: Cornell University Press.
- Koo, R. 2013. "Central Banks in Balance Sheet Recessions: A Search for Correct Response." Accessed May 30, 2013. <https://www.ineteconomics.org/research/research-papers/central-banks-in-balance-sheet-recessions-a-search-for-correct-response>.
- Kotarski, K., and M. Deskar-Škrbić. 2016. "Transcending the New Macroeconomic Orthodoxy in the Eurozone: A Post-Keynesian View." *Zbornik radova Ekonomskog fakulteta u Rijeci [Proceedings of Rijeka School of Economics]* 34 (2): 419–441.
- Krugman, P. 2009. "How Did Economists Get It So Wrong?" *New York Times*, September 2. Accessed April 16, 2018. <https://www.nytimes.com/2009/09/06/magazine/06Economic-t.html>.
- Krugman, P. 2011. "Paul Krugman Defende Emissão de Eurobonds." *Expresso*, January 3. Accessed April 16, 2018. <https://www.publico.pt/2011/01/03/economia/noticia/paul-krugman-defende-emissao-de-eurobonds-1473396>.
- Krugman, P. 2012. "Banking Mysticism." *New York Times*, March 27. Accessed April 16, 2018. <https://krugman.blogs.nytimes.com/2012/03/27/banking-mysticism/>.
- Krugman, P. 2015. "Nobody Understands Debt." *New York Times*, February 9. Accessed April 16, 2018. <https://www.nytimes.com/2012/01/02/opinion/krugman-nobody-understands-debt.html>.
- Lavoie, M. 2006. *Introduction to Post-Keynesian Economics*. New York: Palgrave Macmillan.
- Lucas, R. E. 2003. "Macroeconomic Priorities." *American Economic Review* 93 (1): 1–14.
- Matthijs, M., and M. Blyth. 2018. "When Is It Rational to Learn the Wrong Lessons? Technocratic Authority, Social Learning, and Euro Fragility." *Perspectives on Politics* 16 (1): 110–126.
- Matthijs, M., and R. D. Kelemen. 2015. "Europe Reborn: How to Save the European Union from Irrelevance." Accessed April 16, 2018. <https://www.foreignaffairs.com/articles/europe/europe-reborn>.
- Matthijs, M., and K. McNamara. 2015. "The Euro Crisis' Theory Effect: Northern Saints, Southern Sinners, and the Demise of the Eurobond." *Journal of European Integration* 37 (2): 229–245.
- McKinsey Global Institute. 2015. "Debt and (Not Much) Deleveraging." Accessed August 21, 2016. <https://www.mckinsey.com/global-themes/employment-and-growth/debt-and-not-much-deleveraging>.

- McLeay, M., A. Radia, and R. Thomas. 2014. "Money Creation in the Modern Economy." *Bank of England Quarterly Bulletin*, Q1. Accessed July 5, 2016. <https://www.bankofengland.co.uk/quarterly-bulletin/2014/q1/money-creation-in-the-modern-economy>.
- Mehrling, P. 2011. *The New Lombard Street*. Princeton and Oxford: Princeton University Press.
- Moore, B. 1988. *Horizontalists and Verticalists: The Macroeconomics of Credit Money*. Cambridge: Cambridge University Press.
- Muellbauer, J. 2014. "Combatting Eurozone Deflation: QE for the People." Accessed December 24, 2014. <https://voxeu.org/article/combating-eurozone-deflation-qe-people>.
- Otero-Iglesias, M. 2015. "Stateless Euro: The Euro Crisis and the Revange of the Chartalist Theory of Money." *Journal of Common Market Studies* 53 (2): 349–364.
- Padoa-Schioppa, C. 2013. "How to Get It Right: Government Balances, Growth and Income Inequality." Accessed July 28, 2015. <http://www.oecd.org/economy/government-balances-growth-and-income-inequality.htm>.
- Pettis, M. 2013. *The Great Rebalancing: Trade, Conflict and the Perilous Road Ahead for the World Economy*. Princeton and Oxford: Princeton University Press.
- Sachs, J. 2014. "A New Macroeconomic Strategy." *Project Syndicate*, October 23. Accessed April 16, 2018. <https://www.project-syndicate.org/commentary/declining-investment-in-rich-countries-by-jeffrey-d-sachs-2014-10>.
- Schäuble, W. 2011. "Why Austerity Is Only Cure for the Eurozone." *Financial Times*, September 5. Accessed April 16, 2018. <https://www.ft.com/content/97b826e2-d7ab-11e0-a06b-00144feabdc0>.
- Seccareccia, M. 2015. "Sir John and Maynard Would Have Rejected the IS-LM Framework for Conducting Macroeconomic Analysis." Accessed February 4, 2016. <https://www.ineteconomics.org/perspectives/blog/sir-john-and-maynard-would-have-rejected-the-is-lm-framework-for-conducting-macroeconomic-analysis>.
- Sinn, H.-W. 2013. "In Praise of Debt Ceilings." *Project Syndicate*, October 17. Accessed April 16, 2018. <https://www.project-syndicate.org/commentary/hans-werner-sinn-on-the-high-cost-of-binge-borrowing?barrier=accessreg>.
- Stiglitz, J. 2012. *The Price of Inequality*. New York and London: W.W. Norton.
- Stiglitz, J. 2015. "The Politics of Economic Stupidity." *Project Syndicate*, January 20. Accessed April 16, 2018. <https://www.project-syndicate.org/commentary/politics-of-economic-stupidity-by-joseph-e--stiglitz-2015-01>.
- Stiglitz, J. 2016. *The Euro: How a Common Currency Threatens the Future of Europe*. New York and London: W.W. Norton.
- Storm, S. 2018. "Financialization and Economic Development: A Debate on the Social Efficiency of Modern Finance." *Development and Change* 49 (2): 302–329.
- Terzi, A. 2015. "The Eurozone Crisis: A Debt Shortage as a Final Cause." Accessed October 31, 2015. <https://www.ineteconomics.org/research/research-papers/the-eurozone-crisis-a-debt-shortage-as-the-final-cause>.
- Turner, A. 2012a. *The Economics after the Crisis: Objectives and Means*. Cambridge, MA: MIT Press.
- Turner, A. 2012b. "Monetary and Financial Stability: Lessons from the Crisis and from Classic Economics Texts." Accessed October 21, 2013. <https://www.ineteconomics.org/uploads/papers/Turner.pdf>.
- Turner, A. 2014. "Escaping the Debt Addiction: Monetary and Macro-Prudential Policy in the Post Crisis World." Accessed January 2, 2015. <https://www.ineteconomics.org/uploads/downloads/Paper-Escaping-Debt-Addiction.pdf>.

- Turner, A. 2015. "Have We Become Too Flexible?" *Project Syndicate*, January 22. Accessed April 16, 2018. <https://www.project-syndicate.org/commentary/global-demand-deficiency-by-adair-turner-2015-01?barrier=accessreg>.
- Wolf, M. 2014. *The Shifts and the Shocks: What We've Learned—and Have Still to Learn—from the Financial Crisis*. New York: Penguin Press.
- Wray, R. 2014. "Outside Money: The Advantages of Owning the Magic Porridge Pot." Accessed December 29, 2014. http://www.levyinstitute.org/pubs/wp_821.pdf.
- Zingales, L. 2012. "Democracy's Burning Ships." *Project Syndicate*, September 24. Accessed April 16, 2018. <https://www.project-syndicate.org/commentary/democracy-s-burning-ships-by-luigi-zingales?barrier=accessreg>.
- Zingales, L. 2013. "The Federal Reserve's Captive Minds." *Project Syndicate*, October 15. Accessed April 16, 2018. <https://www.project-syndicate.org/commentary/luigi-zingaleson-how-political-independence-has-harmed-central-banks?barrier=accessreg>.

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