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Explaining the Euro crisis: current account imbalances, credit booms and economic policy in different economic paradigms

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ABSTRACT
The paper proposes a post-Keynesian analysis of the Eurozone crisis and contrasts interpretations inspired by New Keynesian, New Classical, and Marxist theories. We analyze the role different paradigms attribute to current account imbalances, fiscal policy and monetary policy. Remarkably, opposing views on the relative importance of cost and demand developments in explaining current account imbalances can be found in both heterodox and orthodox economics. Regarding the assessment of fiscal and monetary policy there is a clearer polarization, with heterodox analysis regarding austerity as unhelpful and large parts of orthodox economics endorsing it. We conclude that there is a weak mapping between post-Keynesian, New Classical, New Keynesian and Marxist theories and different economic policy strategies for the Euro area, which we label Keynesian New Deal, European Orthodoxy, Moderate Reform and Progressive Exit respectively.

KEYWORDS
Current account balance; Euro crisis; European economic policy; fiscal policy; sovereign debt crisis; Quantitative Easing

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Introduction

The global financial crisis (GFC) began in 2007 in the US market for financial derivatives on subprime mortgages. By 2008/2009 all advanced economies were in a severe recession. In most countries the ensuing recovery was weak, yet only in the southern European Euro member states did the crisis turn into something akin to the Great Depression and only in these countries did the crisis morph into a sovereign debt crisis. These developments offer an occasion to assess the explanatory power of different economic paradigms. This paper presents a post-Keynesian (PK) explanation of the Euro crisis and systematically contrasts it with New Classical mainstream (NCM), New Keynesian mainstream (NKM), and Marxist Political Economy (MPE) approaches in order to pinpoint differences and similarities in explanations and policy recommendations.

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This exercise is useful since no comparison of paradigms regarding the Eurozone crisis exists and this crisis poses interesting and revealing challenges for all paradigms. To keep the exercise manageable, we focus on two heterodox approaches (PKE and MPE) with well-developed views on macroeconomic analysis alongside a broadly defined mainstream approach, which we divide into two sufficiently distinct paradigms (NCM and NKM). Three topics have taken the center stage in debates surrounding explanations of the crisis: current account imbalances, fiscal policy and (private) financial-sector dynamics along with monetary policy. We review what various authors have argued with respect to these factors and comment on differences and similarities between different theories.

While the main aim of the paper is comparison rather than an evaluation of different approaches, we endorse the PK interpretation. Thus it will be helpful to clarify what this entails. The origin of the crisis is the emergence of a debt-driven and an export-driven growth model, which resulted in a rapid increase in private debt ratios and current account imbalances. The reason the crisis escalated in southern Europe but not in other parts of the world lies in the unique dysfunctional economic policy regime of the Euro area. The separation of monetary and fiscal sovereignty implied by the introduction of the common currency, and the fact that the ECB failed to act as buyer of last resort of Eurozone governments' debt (thus a *de facto* lender of last resort to governments), has exposed member states to the threat of sovereign debt crises. The Troika (the European Commission, the European Central Bank and the International Monetary Fund) then imposed harsh austerity in countries in recession. Ergo, while the origins of the crisis lie in unstable neoliberal growth models, in particular real estate bubbles and a debt-driven growth model, the escalation of the crisis into a sovereign debt crisis and a depression in southern Europe is to a large extent the result of the European Monetary Union (EMU) policy regime. We prefer this explanation of the crisis over others due to its overall coherence and the predictive success of early PK discussions of European monetary union.

In comparing different approaches to explaining the Eurozone crisis, we identify four economic policy strategies and argue that these can be linked to different economic paradigms. However, any such mapping of positions is a messy one. The crisis has led to debates between and within paradigms and new battle lines are drawn, in particular within the mainstream (NCM and NKM). The *Social Europe* or *European New Deal* approach, which, as we argue, is most closely aligned with PK explanations of the crisis, seeks to overhaul the Eurozone economic policy regime. It gives a prominent role to European fiscal policy, which would be supported by central bank purchases of government bonds and a shift to a coordinated and egalitarian wage policy (Hein 2013; Sawyer 2018; Stockhammer 2016). Ultimately this aims at institutionalizing an anti-cyclical fiscal policy at the European level and a wage-led growth strategy. This is in sharp contrast to the strategy that we refer to as *European Orthodoxy*, which argues that the imbalances prior to the crisis were due to fiscal profligacy in southern European countries, paired with excessive wage growth (e.g., Feld et al. 2015). Thus austerity and labor market deregulation are essential to restoring order. Fiscal union is viewed as detrimental because it creates moral hazard problems for fiscal policy. While this is the line taken by the German finance ministry and the European Commission (EC) and is broadly consistent with New Classical economics, the crisis has shown new fault lines within the mainstream. Thus, there is also a *Moderate Reform* position that is connected to the NKM paradigm. It highlights the rapid growth of private debt and financial bubbles as important factors for the crisis and argues that in the short run austerity is harmful and indeed, excessive (frontloaded) austerity is regarded as having exacerbated the crisis (Baldwin et al. 2015). Labor market reform is desirable but is not helpful during a recession. The Marxist view on the Euro crisis is less fully developed but many Marxist writers regard the Euro area's policy arrangements as serving Germany's needs. Monetary union enabled German capital to improve its competitiveness at the expense of other EU countries (Lapavitsas 2015a, 2015b). At the core of Marxist analyses is the development of profitability while fiscal and monetary policy receive comparatively less attention. This approach lends itself to a *Progressive Exit* strategy. But while there is a strong pro-exit strand within MPE, Marxist authors also frequently make no clear recommendations (Duménil and Levy 2013; Roberts 2016b) and there are also authors from other paradigms advocating exit.

The paper is structured as follows. Section 2 presents the basic economic paradigms with regard to the role of demand, income distribution and the nature of money. Section 3 covers debates on the causes and significance of current account imbalances. Section 4 discusses different perspectives on austerity and fiscal policy. Section 5 summarizes the debates on credit booms and monetary policy. The different positions are brought together in section 6, where we analyze the relation between paradigms and policy strategies.

Post-Keynesian, new classical, new Keynesian and Marxist paradigms

This section briefly reviews the main economic paradigms to see how their analytical framework shapes their analysis of the Euro crisis.

Post-Keynesian economics

In PKE the economy is demand-led in the short- as well as in the long-run (Lavoie 2014; King 2002). Excess capacity and involuntary unemployment are regarded as normal in capitalist economies and supply adjusts via induced technological progress. Path dependency and hysteresis are pervasive features, and economic policy interventions can have short as well as long-run effects (Lavoie 2009; Setterfield, 2010; Stockhammer 2011). Among the demand determinants in PKE two stand out for our context: First, PKE has offered an extensive analysis of financialisation and financial instability (see below). Second, income distribution plays a central role in PKE. Following Bhaduri and Marglin (1990) a rich analysis of demand regimes has been developed. A rise in the wage share due to workers' increased bargaining power has a negative effect on investment (lower profits lead to lower investment), a positive effect on consumption (because capitalists save more than workers), and a negative effect on net exports (because the higher wages imply a loss of competitiveness). The net effect will depend on the relative size of the partial effects and may differ by country and time period. If the net effect of a rise in the wage share is positive, i.e., if the effect of a higher wage share on consumption outweighs the effect on investment and net exports, the demand regime is called wage led, if it is negative it is called profit led (Lavoie and Stockhammer 2014). The historical era of neoliberalism, starting roughly in the early 1980s is analyzed, using this dichotomy, as a group of growth models under which pro-capital distributional changes in a wage-led demand regime, such as that of the Eurozone (Stockhammer and Onaran 2012), lead to potential stagnation, but growth is stimulated by alternative sources of demand, most notably debt-financed expenditures and exports, giving rise to debt-driven and export-driven growth models. These are unstable because they rely either on increasing debt-to-income ratios or growing trade imbalances.

Effective demand in PKE is monetary demand. Money is a liquid asset that is held, in part, to allow flexibility in a world with an uncertain future. Money is thus, particularly in times of crises, held as an asset and not as a means for real transactions. The reason why in today's world bank deposits play the role of money is that they are backed by the state, both in the sense that states guarantee deposits (usually up to a certain amount) and banks have access to central bank (i.e., non-market) lending. Deposits are created endogenously as a side effect of commercial bank lending. In the PK view bank credit creates deposits, not vice versa as in most standard economics textbooks. Money is neither a commodity (as in Marxian and classical economics) nor is it fully under the control of central banks (as in Monetarist theory). While money in the modern economy is largely created by private banks, its origins lie with the state and sovereign authority. The state is not only the largest borrower, but it also uses legal and coercive powers to establish its currency. State authority is at the foundation of the hierarchy of monies.[1] While money is thus based on sovereign power, it is nevertheless largely created by profit-seeking private institutions, and hence the lending decisions of banks become a key variable. Building on Keynes (1936) and Minsky (1986), finance and leverage are an important element in PK explanations of business cycles and economic crises, as private lending decisions tend to be highly pro-cyclical, amplifying booms and trapping the economy in liquidity and debt-overhang crises.

The labor market plays a passive role in PKE. In the short run the level of demand determines the employment level. Moreover, the adjustment mechanisms on the labor market may lead to perverse goods market adjustments: falling wages may cause a decline in effective demand and a further decline in employment if demand is wage led. But PKE argues that even over longer periods labor market outcomes will be dominated by developments on the goods market due to a range of hysteresis or path dependency mechanisms (Stockhammer 2008, 2011),[2] in particular endogenous technological progress (Kaldor and Mirrlees 1962; Setterfield 2010), endogenous normal capacity utilization and endogenous wage norms (Skott 2005; Stockhammer and Klär 2011).

The mainstream: new classical and new Keynesian economics

In mainstream economics the economy is anchored in a long-run equilibrium determined by supply side factors such as technology and preferences. Whereas in the NCM version the economy is regarded as being primarily driven by supply factors affecting this equilibrium position, even in the short run (Snowdon and Vane 2005, Chs. 5–6), the NKM version emphasizes short-run dynamics that are driven by demand shocks in the presence of various frictions and imperfections (Galí 2015). NKM models are still rooted in a long-run labor market equilibrium, a NAIRU (non-accelerating inflation rate of unemployment) (Nickell 1998; Stockhammer 2008), but if adjustment to this equilibrium is slow because of wage and price rigidities, there may be a positive role for government intervention (Gordon 1990). Before the crisis the NKM gave priority to monetary policy for this purpose. Since the crisis, it has been recognized that situations may arise where monetary policy ceases to be effective because of the zero lower bound (DeLong and Summers, 2012; Eggertson and Krugman 2012). In addition, there is an empirical recognition that fiscal multipliers may be higher in recessions than during periods of high growth (Blanchard and Leigh 2013; Auerbach and Gorodnichenko 2012). While acknowledging that government intervention along NK lines may in some circumstances have beneficial effects, the NCM approach is generally less interventionist and often prefers rule-bound policies to discretion in order to avoid moral hazard and time inconsistency issues in policy formation (Snowdon and Vane 2005, Ch. 5).

In the context of this paper, two central features of mainstream treatments (encompassing both NCM and NKM) of money and finance should be highlighted. The first is its focus on the medium of exchange function of money rooted in the historical view of money as a commodity (Ingham 2004). This becomes evident in the analysis of optimum currency areas (OCA) (e.g., Ricci 1997), which focuses on transaction cost reductions in evaluating the benefits of currency unions and does not discuss the historical connections and interdependencies between monetary and fiscal policy spaces (Goodhart 1998). The second central point is the continued use of the loanable funds model of credit in which the interest rate is determined by the supply and demand for savings, despite some objections from within the mainstream (Jakab and Kumhof 2015). In the context of the Eurozone crisis, this approach is especially associated with Sinn (2010, 2011, 2012a) who argues that prior to the crisis, German savings were "exported" to the south and hence unavailable to finance investment in Germany. Many of the NK-leaning contributions in Baldwin and Giavazzi (2015) also make use of loanable funds concepts, such as the natural rate of interest. Since the loanable funds model and the natural rate of interest are non-monetary concepts, their use underlines the continued attachment of the mainstream to a separability of monetary and real analysis in which money is neutral at least in the long run. Despite these shared features of mainstream economics, NCM and NKM disagree on their assessment of the efficiency and stability of private financial markets. NCM endorses a view of financial markets as essentially efficient intermediaries, and consequently gives little weight to financial factors in explaining economic fluctuations (Greenwald and Stiglitz 1987). In contrast, NKM has stressed imperfections in financial markets as potential amplifiers for business cycles (Bernanke, Gertler, and Gilchrist 1999; Brunnermeier, Eisenbach, and Sannikov. 2013), and there have recently been considerable efforts to incorporate these ideas systematically into analyses of the GFC and the Eurozone crisis (Beyer, Cœuré, and Mendicino 2017).

Marxist political economy

MPE is critical of the capitalist mode of production and takes a supply-side focus in its analysis of capitalist dynamics. However, the supply side is associated with class struggle and the degree of exploitation rather than with preferences and technology. MPE is based on a classical surplus model where investment is financed out of profits (Goodwin 1967). Business cycles emerge when unemployment declines during a boom, which increases the bargaining power of workers, which in turn depresses profits and thus investment spending. Distribution thus plays a prominent role, but analyses of several other traditional macroeconomic topics, in particular (for our purposes) fiscal and monetary policy, have not featured as prominently in MPE as they have in other paradigms.

MPE has traditionally been based on a commodity theory of money (Marx 1976; Dos Santos 2012), but there have been attempts to incorporate credit money along similar lines as is done in PKE (Graziani 1997; Bellofiore 2005). Credit and the banking system are regarded as a source of instability, because they allow for temporary expansions of economic activity (e.g., Hilferding 1910). However, Marxists tend to highlight deeper structural factors for the explanation of crises and treat financial factors as amplifying. Additionally, even if finance is accorded more prominence, money and credit are regarded as private relation and there is no active role for the state in the formation of money, which may partly explain the relative absence of discussions of monetary policy in MPE.

PKE differs from both mainstream economics and MPE on several grounds. First, it has a strong focus on demand formation, whereas NCM and MPE tend to favor supply-side factors (albeit different ones) in explaining economic dynamics. Second, PKE offers an analysis of demand regimes that allows for wage-led as well as profit-led growth. There is no a priori assumption that profits get reinvested, and higher wage growth can result in higher aggregate demand. MPE routinely assumes that wage moderation has positive growth and employment effects; in other words, they assume a profit-led demand regime.[3] Marxist theory usually has a secondary, short-run role for demand, but it tends to assume that growth is profit-led in the long run (e.g., Dumenil and Levy 1999; Foley and Michl 1999). Crises originate from the (lack of) production of surplus value or from a rising organic composition of capital, not from lack of demand. Indeed, in Marxist theory crises are often regarded as rooted in overaccumulation, i.e., excessive investment due to competitive pressures (e.g., Brenner 1998).[4] Third, PKE regards money as mostly created by commercial banks, whose lending decisions are likely to be pro-cyclical. Consequently, it regards liberalized financial systems as a major source of instability. From this perspective, European monetary integration, which led to increased capital flows but was not accompanied by stronger financial regulation, appears as a destabilizing force. Additionally, since money is not a purely private institution but is backed by government authority, the separation of monetary and fiscal policy authority which resulted from EMU threatens to undermine the ability of governments to respond to crises. In other words, the fiscal stances of individual member states are no longer backed by a monetary authority at the national level. This analysis is distinct from NCM and MPE analyses, which tend to look to supply-side factors as explanations for crises, and from the NKM, which explains short-run dynamics in terms of demand factors but regards monetary policy as sufficient for stabilization except for cases when interest rates hit the zero lower bound.

Current account imbalances, cost-competitiveness and demand booms

Several authors have highlighted current account imbalances within the Euro area as a key reason for the crisis (Febrero, Uxo, and Bermejo 2016). The Euro crisis has thus at times been interpreted along the lines of a traditional balance of payments crisis, with the associated recessionary adjustment, that occurred within a currency union (Sinn 2012b; Higgins and Klitgaard 2014). In 1999, under the semi-fixed exchange rate regime of the ERM, current accounts for most European countries were close to balance. However, post 2000, when the EMU was completed, substantial divergences in current account positions among Euro member states became evident. The Eurozone periphery (mainly Spain, Greece, Portugal and Italy) soon began to post large and persistent current account deficits, while the Eurozone core (chiefly Germany) registered large surpluses. Germany's external position turned positive in the 2000–2003 period and its current account surplus was almost 7% of GDP in 2007. However, in the post crisis period, there was substantial adjustment in peripheral countries' external balances. On average, external balances improved in the periphery and even reached surpluses for Spain, Portugal and Italy. However, this rebalancing was mainly due to contractions in domestic demand and consequent reductions in imports.

The role of price competitiveness, in particular unit labor costs, in determining these intra-Eurozone imbalances has been a subject of major controversy, especially in PKE. But there is some agreement across the heterodox/orthodox divides on the role of demand developments and credit booms in determining trade imbalances, though heterodox and mainstream scholars often arrive at very different policy conclusions. Importantly, there is also disagreement across as well as within different schools of thought regarding the significance of current account imbalances for explaining the Eurozone crisis.

A post-Keynesian view on current account imbalances and the Euro crisis

PKs have offered divergent accounts of causes of Eurozone current account imbalances. German PKs well before the crisis highlighted that Germany pursued a strategy of real depreciation at first through exchange rate policy

(Thomasberger 1995) and later through wage policy (Priewe 2011). They then typically conclude with calls for wage coordination across countries to limit divergences in competitiveness and emphasize that a redirection of fiscal and monetary policy is also required (Hein and Truger 2005). In particular, they argue for higher wage growth and fiscal expansion in the surplus countries. Mazier and Petit (2013) and Cesaratto (2015) maintain that cost divergences are the prime cause of the Eurozone imbalances and that this is due to the lack of exchange rate adjustment imposed by the currency union.

At the other extreme, Storm and Naastepad (2014, 2015a, 2015b) argue that demand factors, due to differences in credit growth, and not (labor) costs, are the key drivers of current account imbalances.[5] Samarina, Zhang, and Bezemer (2015), though less polemical against the cost argument, provide econometric evidence for the role of credit in determining current account imbalances. Other PKs like Stockhammer and Sotiropoulos (2014) take a more balanced view and argue that both costs and demand factors are driving the external imbalances. Though there are disagreements on the determinants of the intra-Eurozone imbalances within PKE, PKs do find consensus on the policy front in calling for wage coordination with an emphasis on wage inflation in center countries (Stockhammer, Constantine, and Reissl 2015).

There is also some disagreement within PKE on the extent to which intra-Eurozone imbalances, regardless of their primary cause, are important factors in explaining the Eurozone crisis. Some PKs stress current account imbalances and interpret the Eurozone crisis as a balance-of-payments crisis (Cesaratto 2015), arguing that excessive current-account imbalances eventually led to a sudden stop in capital flows akin to those observed in classic examples of balance-of-payments crises (see Febrero, Uxo, and Bermejo 2016, for a summary of this debate). Others, as outlined below, put more emphasis on other factors, in particular, the Eurozone's fiscal and monetary policy framework.

The mainstream on current account imbalances and the Euro crisis

There are various points of view within the mainstream on the significance and cause of the intra-Eurozone current account imbalances, but there is no clear division of views along the lines of the NCM and NKM traditions. Nevertheless, there is a range of opinions in terms of economic policy recommendations which we discuss in the following paragraphs.

Wyplosz (2013) argues that fiscal deficits in the periphery caused demand booms, which induced trade deficits. Ergo, fiscal indiscipline and not cost divergence has caused external imbalances. It follows that fiscal austerity is needed to curb demand booms and chronic trade imbalances. Interestingly, the European Commission (2010) argues that the current account imbalances are due to different demand developments rather than cost divergences, and that credit booms and property bubbles played an important role in determining demand in member states. However, the main policy conclusion it derives centers on labor market deregulation in the deficit countries: "Member States which have accumulated large current account deficits and large competitiveness losses […] need to undertake the necessary relative wage and price adjustments and facilitate the reallocation of resources from the non-tradable to the export sector. In countries with fiscal imbalances, this adjustment should go hand-in-hand with sizeable fiscal consolidation" (European Commission 2010, 37). While wage divergence was not the root of the problem; wage cuts and fiscal austerity are regarded as the solution. The European Commission (2011, 14) argues that "[l]abour market reforms will spur job creation and increase wage flexibility."

Lane (2012) argues that intra-European current account imbalances prior to the crisis were primarily driven by international capital flows, while highlighting the limitations of the existing EMU policy framework in dealing with the crisis. While he argues for a greater degree of fiscal discipline at the national level, he also calls for the creation of a common fiscal policy. De Grauwe (2015) emphasizes that the depth of the crisis is related to the design flaws of the Eurozone and that the external imbalances are related to booms and busts in member countries rather than costs divergences. He posits that the absence of a lender of last resort to governments is the key reason for the crisis. As a general solution, he recommends further political integration to ensure that political will is present to address current and future crises.

Marxists on current account imbalances and the Euro crisis

Lapavitsas et al. (2012) argue that the Euro crisis is closely tied to the Eurozone's external imbalances, with the latter being primarily determined by cost divergences. Much blame is placed on mercantilist Germany and its wage suppression strategy. Moreover, Flassbeck[6] and Lapavitsas (2013) note that in a common currency, wages across member states must grow in line with the union's inflation target; any deviation leads to imbalances and crises—although the mechanism that triggers the crisis is left rather vague. Peripheral economies substantially overshot the defined wage target at the same time as core economies (especially Germany) undershot it before the crisis, meaning that both must adjust. Given this analysis, Lapavitsas (2015a, 2015b) calls for deficit countries to exit the Euro. Though this view on the causes of imbalances is similar to that of PKs like Priewe (2011) and Mazier and Petit (2013), it is in contrast to the majority view in PKE. Unlike the latter, Marxist explanations appear to implicitly assume a profit-led demand regime: stagnant wages in Germany produce profit-led growth dynamics, in particular export surpluses. One problem with this story is that even if one accepts the alleged primacy of relative unit labor costs in determining trade balances, the theory lacks an explanation of why economic growth in the deficit countries consistently *exceeded* that of the surplus countries.

Lapavitsas (2015a, 2015b) argues that the main purpose of the Euro project is to serve the European hegemon—Germany. Varoufakis (2016) extends this argument and notes that the US pushed for European integration to expand the market for German exports. He explains that this was part of US foreign policy after it was no longer a surplus country from the mid-1970s onwards. The principal argument is that if Germany is able to build up its external surpluses, it provides a pool of savings that can be recycled into the US economy. Given this line of reasoning, there is a hegemonic power dynamic to the Euro crisis and following Lapavitsas (2015a, 2015b), a Euro exit might reclaim some power, in particular, monetary control.

Overall, MPE focuses on the role of divergences in cost as an explanation for the intra-Eurozone imbalances. It correspondingly places less emphasis on the role of capital flows and credit growth as factors that lead to demand booms and trade imbalances. Fundamentally, the Euro crisis is seen as a balance of payments crisis due to the Euro, whereby persistent current account imbalances eventually become unsustainable and can no longer be financed, leading to an adjustment in the form of a deep recession. Consequently, the effects of the EMU policy framework feature less prominently.

The central finding is that there is no consensus on the causes of the Eurozone imbalances and the role they played in the Eurozone crisis. Table 1 groups the literature in terms of what is regarded as the main cause of the imbalances and corresponding policy suggestions.[7] Interestingly, most mainstream contributions identify different demand developments as the main cause of imbalances—these are often linked to financial factors. However, in some cases their policy recommendation is nevertheless internal devaluation, i.e., wage cuts, and fiscal austerity in the deficit countries (European Commission 2010). Other mainstream economists draw different conclusions from the strong role of financial factors. For example, Baldwin et al. (2015) also identify private debt booms as the primary cause of the crisis but warn against excessive austerity. Wyplosz (2013) is one of the few mainstream contributions that highlight fiscal profligacy as the cause of imbalances. Marxists along with some PKs have highlighted cost divergences as major factors for the imbalances.

Table 1. The determinants of current account imbalances and policy recommendations.

	Euro-exit for deficit countries or a dissolution of the Euro	Internal devaluation and fiscal austerity in deficit countries	Fiscal discipline at member state level, & Automatic stabilizers at Union level	Inflationary fiscal and wage adjustment in Center countries
Fiscal indiscipline as cause of current account imbalances		Wyplosz (2013)		
Cost divergence as cause of current account imbalances	Flassbeck and Lapavitsas (2013), Lapavitsas (2015a, 2015b)			Cesaratto (2015), Priewe (2011), Stockhammer and Onaran (2012)
Capital flows and credit booms as cause of current account imbalances		European Commission (2010)	Lane (2012), De Grauwe (2015)	Stockhammer (2016), Storm and Naastepad (2014, 2015a, 2015b)

Though the debate surrounding the causes of current account imbalances in the Eurozone is of interest in itself, the imbalances are in our view not the key explanatory factor for the crisis. Both the United Kingdom and US have experienced large current account deficits, debt-fuelled booms, and financial crises; yet, these did not lead to sovereign debt crises. The EMU policy architecture is what crucially differentiates the Eurozone from these economies. In particular, the constraints imposed on fiscal policy through the absence of monetary sovereignty and the lack of an effective lender of last resort to governments turned financial crises into sovereign debt crises. The pro-cyclical fiscal policy rules of the Euro area and the adjustment programs imposed by the Troika turned recessions into deep depressions in the periphery. Even if Eurozone member states had had balanced external accounts, the separation of monetary and fiscal policy authority and the EMU's pro-cyclical fiscal policy rules would severely hamper responses to a financial crisis and its propagation to the real economy. Current account imbalances as symptoms of the unstable pre-crisis debt-led and export-led growth regimes are important aspects of the Eurozone crisis and as such, gaining a good understanding of them is significant. However, we agree with the majority of PKs that the EMUs fiscal and monetary policy framework is the crucial element in understanding the crisis. This is a view which, as demonstrated in the next section, PKs share with parts of the NKM.

The effects of austerity and fiscal policy strategies

Fiscal policy features prominently in many analyses of the Eurozone crisis, both as an explanatory factor and in recommendations for reforms of the EMU. Prior to the crisis, fiscal balances within the Eurozone were fairly diverse, with some governments (Spain and Ireland) running budget surpluses and decreasing government debt to GDP ratios, and others running more or less sustained deficits and accumulating debt. When the US financial crisis reached Europe, European governments initially allowed budgets to move into large deficits. Coupled with decreases in GDP this led to increases in debt-ratios and the phase of expansionary policy soon came to an end. Economic policy-makers began to view government debt as a potential obstacle for a sustained recovery and financial markets began to question the solvency of certain Eurozone economies. Consequently, fiscal tightening aimed at decreasing budget deficits and debt-ratios followed, which was far more severe in the peripheral Eurozone countries caught in a sovereign debt crisis (see Stockhammer, Qazizada, and Gechert 2019).

A Post-Keynesian view on fiscal policy and the Eurozone crisis

PK economists have consistently argued, both before and after the introduction of the common currency, that the EMU fiscal policy regime is flawed (e.g., Godley 1992, 1997; Arestis, McCauley, and Sawyer 2001). The separation of monetary and fiscal sovereignty—the restrictions placed on fiscal policy through formal rules (the Maastricht criteria) and the absence of a monetary policy that supports individual countries' fiscal stances—are viewed as major shortcomings. This view is based on the PK understanding of money as a creation of state-authority, which implies tighter fiscal constraints for governments that do not issue their own currency. Given this tighter constraint, PKs have argued that the currency union was ill-prepared to combat serious downturns, especially since the pro-cyclical fiscal policy rules are likely to exert a deflationary bias on the Eurozone economies (Hein and Truger 2002). This aspect has been central to PK analyses and there exists a consensus within this paradigm that fiscal policy is an essential stabilization tool.

PKE views fiscal austerity as the key reason for the prolonged depression in the Eurozone periphery and contends that these depressions can only be brought to a conclusive end through sustained expansionary fiscal policy. Based on recent estimates of regime-dependent multipliers, Stockhammer, Qazizada, and Gechert (2019) show that a large share of the divergent performances of Anglo-Saxon and European core economies on the one hand and peripheral economies on the other hand, can be explained through their differing fiscal stances. The conditions imposed on those countries caught in sovereign debt crises are viewed as counterproductive, both in terms of reducing debt-levels and in producing a recovery. PKE rejects the claim that excessive government deficits prior to the GFC are to blame for the Eurozone crisis and rather highlights the role of private sector debt and inequality in driving credit-led booms (Stockhammer 2015).

Some PKs, in particular those close to Modern Monetary Theory, have well before the crisis highlighted that the EMU's institutional set-up would at some point lead to sovereign debt crises and force governments into austerity (Parguez 1999; Bell 2003; see also Lavoie 2013). These authors generally place less emphasis on the role of intra-Eurozone current account imbalances as a cause of the crisis and rather argue that the Eurozone's institutional set-up has increased the risk of financial instability, while restricting the possibility of responding to financial crises. As member states lost monetary sovereignty, they surrendered the sustainability of their public finances to the sentiments of private bond markets and were forced into austerity when these markets lost confidence. The monetary authority failed to provide sufficient support due to its statute and existing conventions regarding the support of fiscal policy through central bank actions (see Lavoie 2015). For PKs, this means that any reform of the EMU would have to enable the implementation of countercyclical and *discretionary* fiscal policy actions at the European and/or the national levels (Hein 2013; Stockhammer 2016; Sawyer 2018).

Mainstream views on fiscal policy: from the New Consensus to New Classicals versus New Keynesians

Whereas PK opinions of fiscal policy have been highly uniform, the dominant view on fiscal policy within the broadly-defined mainstream of economics has varied over time. Before the Eurozone crisis, much of the academic literature was focused on investigating how fiscal policy could best be constrained (Fatàs and Mihov 2003). As Mongelli (2002) notes, the costs of currency unions in terms of losses of policy autonomy featured less and less prominently in the OCA literature over time. The main problem, in the Eurozone and elsewhere, was held to be fiscal indiscipline (Afonso 2005). Additionally, fiscal stimulus came to be viewed as ineffective based on empirical research (Hemming, Kell, and Mahfouz 2002), and the idea of expansionary fiscal consolidations (Giavazzi and Pagano 1990) gained traction. Overall, these research programs contributed to a convergence between the NC and NK strands of mainstream economics, leading to the emergence of the New Consensus model in which macroeconomic stabilization was envisioned to be fully undertaken by monetary policy.

With the outbreak of the GFC and the Eurozone crisis, a divergence within the mainstream has emerged and two broad views can be distinguished. Some mainstream analysts, whom we characterize as New Classicals, regard the Eurozone crisis as arising from insufficient fiscal discipline. For instance, Wyplosz (2013) seeks to show empirically that European current account imbalances were largely caused by public deficits and argues that austerity is necessary to curb these imbalances. Feld et al. (2015) argue that a lack of fiscal discipline, which in their view also contributed to private debt build-ups, lies at the root of the crisis. While Sinn (2015) does not believe that the Eurozone crisis has fiscal roots, he nevertheless argues that austerity is now inevitable to restore competitiveness, provide incentives for structural reforms and ensure fiscal sustainability. The possibility of fiscal expansions financed at the European level would in this view create moral hazard and should be avoided (Merz et al. 2011). While the New Classical view does not represent a dominant strand in academic economics, it has been dominant in the policy response to the Eurozone crisis, which has primarily focused on attempts to reduce levels of sovereign debt through austerity.

A second view, which we term New Keynesian, argues that solvency issues of EMU member states are merely a symptom of the crisis. This strand generally regards austerity as damaging in the short run but sees fiscal consolidation as necessary in the medium to long run.[8] Many contributions in Baldwin and Giavazzi (2015) lament a lack of fiscal discipline prior to the crisis but none of them view the crisis as having fiscal roots. Tabellini (2015), whose research before the crisis highlighted reasons for fiscal indiscipline (e.g., Alesina and Tabellini 1990), now takes a position on the shortcomings of the EMU fiscal policy regime similar to arguments put forward by PKs, but remains more cautious regarding reform of the policy framework (Tabellini 2016). Similarly, the analysis of Bénassy-Quéré (2015) shares many similarities with PK arguments regarding the EMU fiscal policy framework.

De Grauwe and Ji (2013) seek to show that Eurozone austerity has been highly damaging and unhelpful in the short run. De Grauwe (2011) argues that the EMU's fiscal policy regime, particularly the fact that the ECB, unlike the Federal Reserve or the Bank of England, has not consistently acted as a de facto lender of last resort to governments is the key factor in explaining the Eurozone crisis. Shambaugh (2012) sees a fundamental connection between banking crises, sovereign debt crises, austerity and stagnation and advocates a holistic solution including a reform of the fiscal and monetary framework to prevent sovereign debt crises. Thus, while differences of analytical frameworks persist, there has been a convergence between the policy proposals advocated by PKE and certain parts of mainstream economics.

However, the NK literature contains surprisingly little application of recent research results on regime-dependent fiscal multipliers to discussions of the Eurozone crisis. Frankel (2015) is one exception. He emphasizes the effect the underestimation of fiscal multipliers documented by Blanchard and Leigh (2013) has had in the context of Eurozone austerity. But the literature contains no systematic connection between New Keynesian research on non-linear and regime-dependent effects of fiscal policy (Gechert, Hughes Hallet, and Rannenberg 2015; DeLong and Summers 2012) and practical policy recommendations for the Eurozone as there has been for the US (Ball, DeLong, and Summers 2014).

While PKs stress the need for discretionary fiscal policy actions to combat recessions, the NKM largely concurs with the Five Presidents' Report according to which automatic stabilizers at the European level would be sufficient (Reissl and Stockhammer 2016) and should be combined with enhanced fiscal discipline at the national level (e.g., Pisani-Ferry 2016; Tabellini 2016). More broadly, most neoclassically inspired economists share the view that any adverse effects of austerity will be contained to the short run and that fiscal consolidation will be beneficial at least in the long run.

Marxist views on fiscal policy

It is difficult to identify a uniform Marxist view on fiscal policy, particularly in the context of the EMU. Many Marxist-inspired analyses broadly agree with the PK case for fiscal policy and stress the adverse effects of austerity (Bellofiore 2013; Bellofiore, Garibaldo, and Mortagua 2015).[9] However, some Marxist authors doubt the general effectiveness of fiscal policy. For instance, Roberts (2012, 2016a) argues that Keynesian multipliers ignore the effects of different types of government activity and induced expenditures on the rate of profit. He contends that Keynesian multipliers should be replaced with Marxian ones, which take into account the effects of public spending programs on the rate of profit (see Carchedi 2012). Ivanova (2013) argues that the GFC is merely a symptom of a deeper structural crisis of accumulation manifested in global imbalances, which are outcomes of the processes of globalization and financialisation.

Marxian analyses of the GFC and the Eurozone crisis (e.g., Duménil and Levy 2011, 2013; Roberts 2016b) frequently put developments in the rate of profit at the center stage of their explanations. Consequently, discussions of possible resolutions revolve around ways to restore profitability. Roberts (2016b, Ch. 9) is a case in point. He frequently suggests that austerity, internal devaluation and labor market reforms in crisis countries should eventually restore profitability and thus spur a recovery. However, he remains critical of austerity policies whilst also rejecting the Keynesian alternative based on his assessment of expansionary fiscal policy.

As argued in the previous section, Marxian analyses more frequently emphasize current account imbalances and divergences in competitiveness, linking them to power relations between core and peripheral economies or uneven development (e.g., Lapavitsas 2015a; Flassbeck and Lapavitsas 2013;

Table 2. A summary of arguments on fiscal policy and the effects of austerity.

	Fiscal Policy cannot conclusively solve the Eurozone crisis	Austerity to curb excessive demand and/or lack of competitiveness in periphery	Enhanced discipline at member state level & some degree of fiscal policy at European level	Fundamental reform of EMU fiscal policy regime enabling discretionary fiscal policy
Fiscal indiscipline as cause of Eurozone crisis		Wyplosz (2013), Feld et al. (2015)		
Eurozone crisis is not due to fiscal factors	Roberts (2016b)	Sinn (2015)		
Austerity has exacerbated crisis in Europe	Lapavitsas (2015a), Flassbeck and Lapavitsas (2013)		Tabellini (2016), Pisani-Ferry (2016), De Grauwe (2015)	Hein (2013), Stockhammer (2016), Bellofiore et al. (2015)

Roberts 2016b). Detailed discussions of fiscal policy do not feature as prominently as in other paradigms.

Table 2 summarizes the views outlined above with regard to fiscal policy. PKs have consistently been critical of austerity and the abandonment of fiscal stabilization policy in mainstream economics prior to the crisis. They argue that a fundamental reform of the EMU's fiscal policy regime is necessary to enable expansionary policies and combat the crisis. The views among mainstream economists are today less uniform than they were before the Eurozone crisis and two broad views can be discerned.[10] One regards austerity as necessary to overcome the crisis while the other, to varying degrees, is in favor of some form of expansionary policy. Marxists reject the view that the Eurozone crisis was caused by fiscal indiscipline but are divided on whether a reform of the EMU's fiscal framework and fiscal expansion can provide a remedy, with some arguing that austerity should in theory be successful eventually.

Financialisation, credit booms and monetary policy

The period prior to the GFC and the subsequent Eurozone crisis was characterized by an increase in the perceived importance of monetary policy in macroeconomic stabilization. European monetary integration meant that a uniform monetary policy was applied to all Eurozone economies, with the ECB targeting inflation for the entire currency union. Furthermore, integration led to a convergence of interest rates across the Eurozone, with rates in peripheral countries converging toward the lower ones in core economies.

The period prior to the crisis was also characterized by rising levels of private sector debt throughout Europe, as well as asset price booms, particularly in housing (Stockhammer 2016). These phenomena coincided with what has been described as an "increasing importance of financial markets, financial motives, financial institutions, and financial elites in the operation of the economy and its governing institutions, both at the national and international levels" (Epstein 2005, 3), summarily termed financialisation (see e.g., Stockhammer 2012).

When asset price booms came to an end and the GFC began to impact on the real economy, central banks reacted through cutting interest rates,[11] but as rates approached their lower bounds, more wide-ranging measures became necessary (Joyce et al. 2012). Large scale asset purchase programs referred to as quantitative easing (QE) were instituted by the Federal Reserve and the Bank of England. The ECB was more hesitant (De Grauwe 2011). A full-blown QE program comparable to those of the US and the UK was not implemented until early 2015 and prior to this, the ECB focused on purchasing private sector assets rather than government debt (Cukierman 2013; Tabellini 2015; Micossi 2015) and on lending to the financial sector through the long term refinancing operation program.

Financialisation, credit booms, and the role of the ECB—a post-Keynesian view

PKE has been highly critical of the role of monetary policy in the mainstream "New Consensus" model (Fontana 2009; Bibow 2010) and has questioned mainstream accounts of the monetary policy transmission mechanism (e.g., Rochon and Rossi 2006; Hannsgen 2006; Forder 2006). Overall, PKs doubt that inflation-targeting monetary policy is an appropriate tool to dampen macroeconomic fluctuations and have highlighted that mainstream accounts do not sufficiently discuss the role of monetary policy in managing financial instability (Morgan 2009; Tymoigne 2009).

Rising financial fragility due to financial deregulation and rising income inequality have been central to PK explanations of the GFC and its aftermath in the Eurozone (Palley 2013; Stockhammer 2016; Samarina, Zhang, and Bezemer 2015). The origin of financial bubbles is viewed firmly in private markets rather than in government interventions, drawing on the work of Minsky (1986). PKE argues that financial stability must become a primary goal of central bank policy, to be achieved e.g., through targeted interventions in markets exhibiting bubble-like dynamics (Palley 2004).

PKs also argue that unconventional monetary policies such as QE are suboptimal tools for curing recessions (Fullwiler 2013). While it is accepted that asset purchase programs have been successful in depressing long-term interest rates, PKE has long argued that low rates during a depression are unlikely to lead to an increase in borrowing and expenditure (Sawyer 2009). However, PKs do note that conventional or unconventional monetary policy may provide maneuvering space for Eurozone countries through depressing rates on government bonds (Lavoie 2015; Stockhammer 2016).

In the PK view, the ECB has been a lender of last resort only to the private sector. Its failure to credibly ensure the solvency of all Eurozone national governments led to a sovereign debt crisis in some Euro area member states. The US and the United Kingdom were spared as their central banks acted as *de facto* lenders of last resort to their governments through large-scale asset purchase programs. A reform of the EMU policy framework along post-Keynesian lines would entail a reorientation of central bank policy toward financial stability objectives and an adjustment to the ECB's mandate, which allows it to support national and/or supranational fiscal policies.

Mainstream: from EMH to undertheorised QE

Before the GFC, the mainstream held that monetary policy can affect the real economy in the short run (Woodford 2009); that it should be the primary stabilization tool, and that it should be used to target inflation (IMF 2013). Importantly, the main task of monetary policy was to target variables in the real economy rather than stability in financial markets. Following the move toward unconventional monetary policy in the wake of the GFC, disagreement persists among neoclassical-inspired economists about its efficacy, particularly in terms of stimulating real economic activity (cf. e.g., Joyce, Tong, and Woods 2011; Martin and Milas 2012; Hausken and Ncube 2013)

Analyses of QE or, more broadly, of the appropriate tools and goals of monetary policy during and after financial crises raise several thorny issues for the neoclassical paradigm. In this field policy has proceeded ahead of conventional economic theory. Such analyses require both a theory of money creation and a theory of the functioning and stability of financial markets. Before the GFC the view that financial markets are efficient and stable was commonplace in macroeconomics. However, there has since been a substantial amount of research that demonstrates the link between build-ups of private debt, often associated with real estate bubbles, and economic crisis (e.g., Schularick and Taylor 2012; Drehmann, Borio, and Tsatsaronis 2012). But this research is typically empirically driven rather than theory-guided and has a broad historical sweep which is not focused on the Euro crisis. Thus, while Baldwin et al. (2015) argue that the private debt and in particular private cross-border lending is an important factor in explaining the Euro crisis, the theoretical aspects of such arguments in conventional economics remain underdeveloped. A debate has also emerged regarding theories of money creation and their importance in macroeconomic arguments. Since the crisis, various publications have come close to the theory of endogenous money—long advocated by PKE—but there continues to be disagreement regarding the importance of this issue (McLeay, Radia, and Ryland 2014; Krugman 2014).

Regarding the role of credit booms and monetary policy in the Eurozone crisis one can discern a rift among neoclassically inspired authors. A New Classical camp argues against the measures that the ECB has taken to date. Their criticisms of unconventional monetary policy have mostly focused on warnings about a conflation of fiscal and monetary policy, which is perceived as a threat to central bank independence. Issing (2012) contends that unconventional monetary policies could compromise central banks' focus on price stability. Sinn (2010) argues that Eurozone QE creates moral hazard and might endanger reforms and austerity. Drudi, Durré, and Mongelli (2012) concur, arguing that Eurozone QE should be tied to strict conditionalities.

In the NK camp several authors have argued that unconventional monetary policy measures by the ECB are necessary to promote recovery (Levy 2014; Giavazzi and Tabellini 2015) and that these can be designed so as to avoid moral hazard (De Grauwe and Ji 2015). Additionally some exponents of New Keynesian views have begun to stress the implications of the ECB's monetary policy for national fiscal policies, which are also highlighted by PKs (De Grauwe 2011). NK contributions also frequently stress the role of credit booms in explaining the Eurozone crisis. Some have come close to PK positions in arguing that financial instability is a basic feature of capitalist economies (Baldwin and Giavazzi 2015, 54) and that the Eurozone crisis is at its root a crisis of private finance (Shambaugh 2012). However, they stop short of calling for a comprehensive reorientation of monetary policy in light of these arguments.

Monetary policy and financial crises in Marxist analysis

The lack of a unified Marxist theory of money and finance makes it difficult to identify a uniform Marxist position on monetary policy. Indeed, there are few publications that explicitly discuss this topic at all. One exception is Roberts (2016a) who discusses the responses to the GFC and invokes Keynesian arguments to claim that monetary policy is likely to have little effect in promoting a recovery. Roberts (2015) maintains that "in a slump or crash, capitalists try to hoard and avoid investment. If profitability stays low, then even a low rate of interest or mountains of "liquidity" will not release that hoard." With particular reference to the Eurozone, Roberts (2016b) argues that ECB policy can do little to provide

Table 3. Credit booms and monetary policy positions.

	Monetary policy reform will not solve the Eurozone crisis	ECB policy produces moral hazard	ECB policy action necessary for recovery	QE & reform of ECB necessary to support fiscal policy
Financial bubbles a major factor for the Euro crisis		Feld et al. (2015)	Giavazzi and Tabellini (2015), De Grauwe and Ji (2015)	Lavoie (2015), Stockhammer (2016)
Euro crisis caused by real factors	Flassbeck and Lapavitsas (2013)	Sinn (2010), Drudi et al. (2012)		

breathing space to crisis countries, instead arguing that emigration has served as a "safety valve" for capitalism. Ivanova (2013) holds similar views. Further, Lombardi (2014) warns about potential inflationary effects of QE, thus adopting a conclusion rather akin to what a monetarist might argue.

With the exception of Roberts (2016b), there do not appear to be any Marxist-inspired contributions about monetary policy in the context of the Eurozone crisis. Although some Marxist authors have written extensively on financialisation (e.g., Lapavitsas 2011), there is no systematic Marxist treatment of financial instability and credit booms in the context of the Eurozone crisis. Flassbeck and Lapavitsas (2013) is a partial exception in that it contains an extensive discussion on private credit growth in the Eurozone periphery. Nevertheless, the focus remains squarely on real factors, especially divergences in unit labor costs, which are viewed as the fundamental cause of the crisis (see also Lapavitsas 2015a, 2015b). Bellofiore, Garibaldo, and Mortagua (2015), however, agree with the point, most prominently associated with PKE, that the design flaws of the EMU and the lack of an effective de facto lender of last resort for governments must play an important role in explanations of the Eurozone crisis.

Table 3 provides a brief overview of the different views on monetary policy, quantitative easing, and the role of credit booms and financial instability. PKs view monetary and fiscal policy as closely connected in that monetary policy regimes and practical policy decisions can exert strong influences on fiscal policy space. Since PKs contend that fiscal policy measures are necessary to combat the Eurozone crisis, they argue that these must be supported by ECB action. Furthermore, they question the primacy of monetary policy in stabilizing output fluctuations and argue that central bank policy should be used to prevent excessive growth in private credit. The views expressed by mainstream authors are varied, with differing views on the importance and causes of financial instability in explaining the Eurozone crisis. A clearer division emerges with respect to the desirability of QE, with many analysts opposing it on the grounds of moral hazard and others supporting it. The Marxist position, if any can be discerned, seems to be that financial instability is less important than real factors in

Table 4. Policy strategies for the Euro area.

	Progressive Exit	European Orthodoxy	Moderate Reform	Keynesian New Deal/ Social Europe
Current account imbalances	Euro-exit for deficit countries or a dissolution of the Euro.	Internal devaluation and fiscal austerity in deficit countries to restore competitiveness.	Restoration of competitiveness is necessary but should not be accompanied by austerity.	Inflationary adjustment in Center countries: higher wages and fiscal expansion.
Fiscal Policy	Either siding with PKE or holding fiscal policy to be ineffective in solving crisis viewed as structural.	Austerity and enhanced fiscal discipline at national level. European fiscal policy produces moral hazard.	Fiscal discipline at national level but introduce automatic stabilizers at European level.	Refom EMU policy framework to allow discretionary fiscal policy at national and/or European level.
Monetary Policy & Financial Markets	As above.	Unconventional monetary policy action must be tied to conditionalities (moral hazard).	QE to stimulate economic activity.	QE important to support fiscal policy. Reform of ECB mandate. Monetary policy to promote financial stability.
Labor market policies	Currency devaluation as substitute for internal devaluation, restoring competitiveness	High priority for labor market reform	Labor market flexibilisation desirable, but may have negative short term effects	Opposed to LM flexibilisation; Wage-led growth strategy

explaining the Eurozone crisis and that monetary policy can do little to resolve the crisis.

Economic paradigms and economic policy strategies for the Euro area

This paper has surveyed a large range of different views on the Eurozone crisis. Contrary to what the title of Baldwin and Giavazzi (2015) suggests, there is no consensus view on the causes of or remedies for the crisis. Table 4 summarizes the different policy conclusions which have emerged from this survey. We identify four policy strategies and evaluate to what extent they can be mapped to the four theoretical paradigms.

The *Keynesian New Deal/Social Europe* policy package calls for a thorough reform of the EMU's fiscal and monetary policy framework. First, the ECB must reliably act as a *de facto* lender of last resort to ensure sufficient liquidity provision to governments that need to undertake expansionary policies. This would necessitate changes to the legal framework (Bonizzi et al. 2015) and would constitute a substantial change in the conventions that determine acceptable monetary policy actions for the ECB (Lavoie 2015). Second, it would involve orienting fiscal policy toward full employment and requires coordination of fiscal policies as well as a substantial fiscal capacity at the European level. Proposals range from overt monetary financing of the European Investment Bank to the establishment of a European Finance Ministry (e.g., Palley 2016; Watt 2015), but they all have in common some mechanism whereby appropriate fiscal stances are at least partly decided at the European level. Such a fiscal policy strategy would no longer have fiscal discipline as commonly defined as its main goal and would not target any specific level of government debt or public deficits. This too would require treaty changes. Third, financial market regulation would lean against the wind in terms of macro-prudential regulation and controls of credit growth. Fourth, to the extent that current account imbalances reflect divergences in productive structures or cost competitiveness, they should be combated through large scale public investment programs in the periphery. Fifth, a European wage policy should aim at stable wage growth, recognizing the key role of wages for consumption expenditures and reducing inequality. Fundamentally, demand management rather than supply-side policies is the main tool to achieve the employment target. Hein and Truger (2011), Stockhammer (2016) as well as Sawyer (2018) provide more details on policy packages along these lines. Analytically, such proposals correspond most closely to the PK paradigm of economic thought, notwithstanding heterogeneity among PK policy proposals to resolve the crisis.

European Orthodoxy pursues a strategy that combines austerity with labor market reforms in order to achieve internal devaluation. Adjustments must take place in the deficit countries. Any support on the fiscal side (via the Troika) or by the ECB has to be tied to strict conditionality. That is the policy package of the European Commission and the German Finance Ministry. Theoretically, it roughly corresponds to the views of New Classical economics, which strongly emphasizes moral hazard problems in monetary and fiscal policy, and regards any negative effects of austerity as short lived. Academic voices that closely correspond to this policy paradigm include Sinn (2010) and Feld et al. (2015).

The *Moderate Reform* strategy argues for expansionary fiscal policy typically through a European fiscal facility (e.g., Euro bonds). It regards labor market reforms as desirable but acknowledges the possibility of negative demand effects and thus recommends a combination with expansionary policies. This can most closely be mapped to what we have summarized as New Keynesian views. Comprehensive statements of the Moderate Reform view can be found in Baldwin et al. (2015) and also among the contributions in Baldwin and Giavazzi (2015).

The *Progressive Exit* view holds that a reform of the Eurozone's economic policy regime is not possible, because neoliberalism or German hegemony is too deeply ingrained in European institutions. In order to gain room for domestic economic policy and to improve competitiveness, peripheral countries in crisis must exit the Euro. Costas Lapavitsas, a renowned Marxist economist, is a well-known proponent of this argument (Lapavitsas et al. 2012; Flassbeck and Lapavitsas 2015). By contrast, Stiglitz (2016), a New Keynesian economist, argues for a Progressive Exit of Germany. He contends that Germany's exchange rate will appreciate and erode its trade surplus and return the wider European Community to balance. Additionally, as outlined below, there are also various PK authors who have argued in favor of Euro exits. This indicates that *Progressive Exit* proposals cannot be mapped directly onto MPE. Indeed, it is difficult to distill Marxist contributions to a particular policy paradigm since there are few Marxist works that discuss the Eurozone crisis in great detail, particularly with regard to fiscal or monetary policy.

The main dividing line between the European Orthodoxy and Moderate Reform is the issue of austerity. This closely corresponds to the theoretical and empirical positions of NCM and NKM about the effectiveness of fiscal policy and the relative importance given to considerations of moral hazard. This split between NCM and NKM is an important development within mainstream economics.[12] The dividing line between Moderate Reform and Keynesian New Deal is on the one hand the issue of labor market reform and the other hand the role of the ECB in supporting fiscal policy. Labor market reforms do not play a central role in the Moderate Reform policy package but NK academic economists tend to view flexibilisation of labor markets as desirable. The Keynesian New Deal views labor market institutions as desirable and wage flexibility as destabilizing. Things are less clear cut as regards ECB policy. The Keynesian New Deal makes an urgent call for the ECB to take on the role of lender of last resort to governments but NKs or Moderate Reformers have also called for central bank interventions in government debt markets. The dividing line of the Progressive Exit is that national rather than European solutions are sought. Ultimately, the Progressive Exit view is based on the political assessment that a Keynesian reform of the EU is impossible rather than on arguments that such a progressive reform would not work in principle.

The *Modest Proposal* (Varoufakis, Holland, and Galbraith 2013), authored by one post-Keynesian (Galbraith) and two Marxist-inspired (Varoufakis and Holland) writers, represents a policy program that is difficult to place theoretically. It outlines policies to alleviate the Eurozone crisis without fundamentally redesigning the Eurozone. The proposal identifies four European crises; namely an under-investment crisis, a social crisis, a banking crisis and a public debt crisis. It maps these to four policy proposals. To arrest the social crisis a food stamp program financed by interest on TARGET2 imbalances accumulated within the European System of Central Banks and profits from bond-purchase programs is proposed.

The banking and public debt crises are to be addressed through the recapitalization of banks by the European Stability Mechanism and the conversion of Maastricht-compliant public debt into ECB-bonds respectively. It proposes a substantive investment program financed by the European Investment Bank and ECB support to reduce the structural asymmetries within the EMU. The *Modest Proposal* remains purposefully less radical than the wide-ranging Keynesian New Deal. It avoids overtly Keynesian terminology and instruments (deficit spending) but suggests demand-side stimulation in a nonstandard but treaty-compliant fashion. In this sense, the proposal is compatible with a PK perspective as well as NK analyses and strands of MPE that are closer to PKE. In contrast to the Keynesian New Deal, the Modest Proposal offers a series of ad hoc measures rather than a coherent economic policy architecture that averts future crises.

Several other academic contributions similarly cannot be mapped one-to-one to our stylized policy paradigms. For instance, some of the contributors to Baldwin et al. (2015) such as Corsetti (e.g., Corsetti and Müller 2012) have at times put great emphasis on the benefits of fiscal consolidations, bringing them closer to NCM positions. On the other hand, De Grauwe (2010, 2011, 2013) while adopting a NKM analytical framework puts forward arguments and policy conclusion that come closer to the Keynesian New Deal. Among the Marxist-inspired contributions, Bellofiore (2013) is close to Keynesian New Deal proposals. Other scholars like Duménil and Levy (2013) and Roberts (2016b) make no clear policy recommendation regarding the Eurozone at all.

Finally, while advocates of euro-exit are strongest in MPE, that paradigm cannot be uniquely identified with such proposals. Indeed, some PK authors have advocated Euro exits (e.g., Bagnai 2013, 2017), with the choice between exit and reform often being seen as a political one. Mitchell (2015, Ch. 22), after giving an explanation of the Eurozone crisis drawing on Modern Monetary Theory, ultimately recommends exit from the common currency and argues that the sovereignty thus gained will enable countries to mitigate the costs of exit. Jeffers, Le Héron, and Plihon (2013) present a very similar analysis of the crisis but ultimately recommend a package of reforms very close to the Keynesian New Deal rather than exit. Mazier, who strongly emphasizes current account imbalances in his analysis of the crisis, has made various proposals for modifying the Euro, for instance through the introduction of a "Euro-Bancor" or the reintroduction of national currencies and the exclusive use of the Euro for external transactions (see e.g., Mazier 2013; Mazier and Valdecantos 2014). Ergo, it is clear that while the European Orthodoxy and Moderate Reform positions are closely associated with NCM and NKM respectively, and while the Keynesian New Deal is analytically derived from PKE, the split between exit and reform does not run clearly along the lines of division between different economic paradigms.

We view PK explanations of the Eurozone crisis and consequent proposals for its resolution as the most coherent. The policies advocated by those analysts whom we have summarized under the heading of New Classical economics have been applied throughout the periphery for years without success. The New Keynesian strand of mainstream economics questions some of these views but does not present a comprehensive challenge to them. The Progressive Exit may be an appropriate strategy if current account imbalances are the prime cause of the crisis, but only a second best solution if fiscal and monetary policy are key. Furthermore, it appears that no Eurozone government (or indeed the population of any Eurozone country) is willing to leave the common currency, thus there is need for a European progressive strategy to reform the EMU.

Notwithstanding the powerful policy package presented by PKE, we should be clear that some weaknesses in the PK literature on the Eurozone crisis exist. Chief among these is the continued disagreement within PKE on the causes and consequences of intra-European current account imbalances. We argue that current account imbalances and intra-European capital flows are important aspects for explaining how financial fragilities were built up within Europe but that the fiscal and monetary policy framework is the more crucial element in understanding the crisis (cf. Bibow 2016). Only the separation of monetary and fiscal sovereignty implied by the EMU allows us to understand how imbalances and the associated build-ups of financial fragility transformed into a sovereign debt crisis. Despite these disagreements, this paper demonstrates that there exists a powerful policy response to the Eurozone crisis that PKEs at large can agree on. This response would not only provide a conclusive resolution of the single currency's ongoing troubles but also put it on a sustainable footing in the long run.

Notes

1. This analysis of money has great similarity with that of economic sociologists like Ingham (2004), anthropologists like Graeber (2011) and the Legal Theory of Finance (Pistor 2013).
2. While the use of the term hysteresis in economic research is often associated with neoclassically inspired authors (Blanchard and Summers 1986), PKE clearly contains a longer and more general tradition of emphasising path-dependency which goes beyond the sense of the term used in conventional research.
3. A similar argument can be made for mainstream economics. New Keynesian economics has a short-run role for aggregate demand, but asserts the dominance of supply-side factors in the long run, and it is usually silent on the possibility of wage-led growth.

Indeed, a downward-sloping labour demand function, i.e. a profit-led demand regime, is routinely assumed.

4. MPE has theorised constellations that PK would characterise as wage-led demand regimes under the heading of underconsumption. However, these constellations create a tension to the Marxist theory of exploitation, because they allow for increased wages to have a positive effect on profitability. The link between exploitation and profitability thus gets broken.
5. There is an empirical debate regarding the size and significance of cost and income elasticities of demand for exports and imports. Storm and Naastepad (2015a) estimate import and export equations for selected Eurozone countries and find that the effects of differences in unit labour costs are numerically small and statistically insignificant. However, these findings are difficult to reconcile with other studies. For instance, Carlin, Glyn and Reenen (2001) investigate the relationship between export market shares and real unit labour costs (RULC) using a panel of twelve manufacturing industries for fourteen OECD countries. They conclude that RULC are important determinants even if they cannot fully explain changing export positions. Stockhammer and Sotiropoulos (2014) find for a panel of Euro members from 1999 to 2011 that unit labour costs have statistically as well as economically significant effects.
6. Heiner Flassbeck, who has been a very vocal commentator on the Eurozone crisis, should be characterised as an (old-) Keynesian economist, rather than a Marxist. His work has frequently emphasised the shortcomings of the EMU fiscal framework (e.g. Flassbeck 2012), but his work with Lapavitsas in particular is more in line with Marxist views in that it has strongly highlighted the role of current account imbalances and divergences in cost-competitiveness and is sceptical about the possibility of a reform of the EMU policy framework along the lines advocated by PKs.
7. It should be noted for this as well as for subsequent tables that in many cases, any individual listed contribution may not exhibit all the positions attributed to the cell in which it is placed. However, we believe that the sets of contributions in each cell taken together do represent the respective opinions on causes of and solutions for the Eurozone crisis in a fairly coherent fashion.
8. Seccareccia (2012), discussing policy responses to the financial crisis in Canada, refers to this re-emergence of fiscal policy as a short-run stabilisation tool as New Fiscalism.
9. Riccardo Bellofiore is quoted here as a Marxist, but he regards himself as both a post-Keynesian and Marxist. Theoretically he tries to square a Marxist labour theory of value and a PK theory of endogenous money and financial instability.
10. While there obviously exists some heterogeneity even within these two groups, we do think that the similarities are sufficient to justify our categorisation.
11. The ECB's response was notably more tardy than those of other central banks since it kept rates at levels more appropriate to conditions in core economies and even raised them twice in 2011.
12. Arguably the split is even more pronounced in American academia, where several NKM have more sharply and more systematically criticised the NCM positions (DeLong and Summers 2012; Romer 2016).

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