Conventional Direction to Unconventional Measures: Using Quantitative Easing to shape Eurozone Fiscal Capacity

by

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Perspectives on Federalism, Vol. 8, issue 2, 2016

Abstract

Eight years after the outbreak of the crisis, the Eurozone (EZ) fiscal policy remains fragmented at the national level. This paper fills the structural gap between the monetary and fiscal dimensions of EZ economic policy by suggesting a ‘conventional’ direction to the unconventional Quantitative Easing (QE) policy of the European Central Bank (ECB). We propose an evolution for QE to tackle the shortcomings of the current ‘decentralized’ fiscal policy in the EZ. In a nutshell, we suggest a change in the composition of QE asset purchases, focusing on buying European Investment Bank (EIB) bonds that, in turn, would be used to finance real investments through the Juncker Plan programme. The rationale of our proposal is legitimised by an overview of the gloomy macroeconomic conditions of the EZ, and the situation in ongoing policies. The mechanism is described in detail, with a discussion of both its strengths and possible limitations.

Key-words

Quantitative Easing, Eurozone, Juncker Plan, European Investment Bank, Fiscal Capacity, Euro Treasury

1. Introduction

The idea of fiscal capacity in the EZ is not new, and has often emerged in the European debate; it was presented in the 2012 Four Presidents' report (Van Rompuy, 2012) which refers to two kinds of mechanism: contractual arrangements, and an insurance-type unemployment scheme.¹ Both mechanisms have limited scope, given that European unemployment insurance would be a temporary tool, while contractual arrangements regard a restricted number of key micro-economic, sectorial and institutional weaknesses which hinder growth, employment and, in general, the smooth functioning of the EZ (Rubio, 2013).

Although Europe has been facing the consequences of a demand shock *par excellence*, caused by the deleveraging process of both public and private sectors after the bursting of the bank lending bubble (De Grauwe, 2014), the possibility of an EZ fiscal capacity focused on bridging the investment gap and the shortfall in overall aggregate demand has been neglected since 2012. The Investment Plan for Europe, widely referred to as the Juncker Plan (EC, 2014), is a good starting point to deal with the European shortage of investments and demand, but relies too much on private capital being forthcoming for its success. The idea behind the Plan is that using limited public funds is the best way to attract other investors – i.e. public intervention has to be limited enough to induce crowding-in, rather than crowding-out, of private investments. However, since the 1970s, financial deregulation and financial innovation have determined a move of private capital from long term investment in the real economy towards speculative investment in financial assets (Wray, 2011). Further, it is hard to reconcile the financial system's short-termism with the need for patient capital to nurture long term capital development projects that are too risky to be financed by the private sector (Mazzucato, 2013). The point here is not just the ability of the Juncker Plan to mobilize capital from a mere quantitative viewpoint (a point already subject to critical debate), but rather the nature of the financing and the role that the Investment Plan could have in the transition from setting individual national fiscal policies constrained by budget rules to one featuring a common fiscal policy supported by supranational tools.

The recent Five Presidents' report (Juncker, 2015) has revived the debate, with the proposal of an EU financed macroeconomic stabilization function, as an initial step towards a larger European budget. The report recommends that various additional sources of financing should be considered beyond the measures set out in the Juncker Plan. These additional sources of financing should neither lead to permanent transfers between countries, nor undermine the incentives for sound fiscal policy-making at the national level. In this perspective, a different approach to the way monetary policy and fiscal policy cooperate could be useful to provide the fiscal stimulus that Europe needs. With an expansive monetary policy by the ECB but neutral fiscal stance at the aggregate level, the EZ economic policy is not effective, given that growth remains weak, deflation is still a concern and unemployment is at record highs in some periphery countries.

In this paper we propose an unconventional evolution for the European Central Bank (ECB) asset purchasing programme (also known as Quantitative Easing – QE) to tackle the shortcomings of the current 'decentralized' fiscal policy in the EZ. While some authors (e.g. Turner, 2013) suggest complementing QE with forms of overt monetary finance, we propose to direct a significant share of QE asset purchases towards European institution-issued bonds, thus indirectly setting up the framework for the establishment of a truly supranational fiscal capacity. The additional public financial resources gained by the EZ from this proposal will increase the capacity to back ambitious Investment Plans where they are most needed. By establishing a link between monetary instruments, the fiscal dimension and interventions on the real economy, our proposal jointly contributes to several ongoing debates: discussing the interplay between monetary and fiscal solutions to the current state of recession, mainly focused on QE; and the Juncker Plan and the EZ's fiscal capacity (High level Group on Own Resources, 2014). The Juncker Plan could be the link between those countries that need more solidarity and public investments in order to ensure employment-friendly growth and other member states whose priority is fiscal discipline. In this paper we try to design an effective way to bring together these two positions, by making the Juncker Plan a supportive and distributive tool in the broader perspective of the ongoing European integration crisis. In a nutshell, we are taking a first step in what Berg et al. (2015) call the necessary alignment of the three 'policy stars' of Europe: the Capital Market Union, the Juncker Plan, and the QE. We focus on the alignment of the last two elements, providing a mechanism to ensure the channelling of

QE resources to the real economy through the Juncker Plan, with the help of the European Investment Bank (EIB).

The paper proceeds as follows. Section One offers a snapshot of the current EZ economic framework, analyzing the macroeconomic conditions under which our proposal is formulated. Section Two discusses the coordination problems emerging from the mismatch between monetary and fiscal policies and the ongoing measures undertaken at the central level from both sides. Section Three outlines our proposal, offering a discussion of its critical aspects, before we offer our concluding comments in the final section.

2. Current economic situation in the EZ

2.1. Macroeconomic conditions and fiscal consolidation

Since 2010, fiscal consolidation in the EU and especially in the EZ has been the preferred response to the growing risk of sovereign default. Theoretically, policies aimed at imposing consolidation (otherwise known as ‘austerity’), derive their rationale from the Expansionary Fiscal Contraction hypothesis (Giavazzi and Pagano, 1990) according to which a belt-tightening in government deficit will correct biases introduced by an oversized public debt, namely: i) the displacement of capital by debt, and ii) the distortions implied by the higher taxes needed to service the debt (Blanchard and Leigh, 2013). When the risk of being drawn into ‘bad equilibria’, whereby expectations of debt default lead to rises in debt interest rates premia, which in turn reinforce expectations of default, are added to the picture, there seems to be a good case for the implementation of austerity policies.

The Fiscal Compact, together with the EC packages (Two-pack, Six-pack) have been the main vehicles of fiscal consolidation, now enshrined in most European countries’ Constitutions, inspired by the ‘debt brake’ rule that Germany introduced in 2009. The new criteria on fiscal consolidation update those of Maastricht; while the latter were an indirect substitute for the lack of a European fiscal policy (read economic government), the new framework does not change the rules of the game: the levers of fiscal fine-tuning remain at the national level.

Unfortunately, expansionary contractions have performed quite poorly in the EZ, with results acutely overbalanced towards costs rather than benefits, especially for periphery countries. Figs. 1-2 show the trends in real GDP growth and in public debt stock as a share

of GDP for the EZ and the averages when countries are clustered by broad geographical group (labelled 'North', 'South', and 'East').¹¹ While growth seems to have gained momentum, especially for the countries in the 'South' group, and the dynamics of debt seems to have reached a peak in the period 2013-2014, one has to consider that part of the positive dynamics is either driven by the East block (which mostly experienced the effects of the financial crisis in 2009 and recovered faster afterwards) or is affected in GDP growth averages by some well-performing outliers (e.g. Cyprus, for the Mediterranean countries), and that the magnitude of the change in the direction of the macroeconomic trends is still far from impressive. The effect of austerity measures seems to slowly align with expectations, however years after the outbreak of the crisis and at high social (see below for unemployment) and political costs, the latter exemplified by the perceived drop in trust among EZ countries in particular (Eurobarometer, 2015).

Fig. 1 Real GDP growth

Source: Eurostat

Fig. 2 Government debt % of GDP

Beyond this picture, two further important aspects hamper growth in Europe. In 2015, the EZ unemployment rate stood at 10.9% while the youth unemployment rate (under 25) was 22.4% (figs.3-4). Among the member states, the highest unemployment and youth unemployment rates were recorded in Greece (24.9 and 49.8 per cent) and Spain (22.1 and 48.3 per cent). This has been accompanied by a rise in the rates of long-term unemployment (people not working for more than a year) (fig.5). All these people are more likely to become discouraged and leave the labour market resulting in an erosion of skills, a decline of capacity and a lower, if any, probability to find a new job when the labour

market begins to recover. Therefore, a less productive workforce will limit the economy's ability to grow its way out of a recession, which ends up lasting longer (Banerji, 2015).

Fig. 3 Unemployment rate (year average)

Fig. 4 Youth unemployment rate (% of youth)

Fig. 5 Long Term unemployment rate (% of total unemployment)

Source: Eurostat

The gloomy prospects for the EZ economy are also reflected in the trends of inflation, whose trajectory towards deflation seems to persist more than was expected by inflation forecasts, which have been systematically revised downwards over the years (Wolff, 2015).

Fig. 6 EZ Inflation and ECB inflation forecasts

Source: ECB inflation forecast

The persistence of low inflation, despite a return of economic growth, has shaped the debate on recent monetary policies and on the best action to be taken by Central Banks. In the most advanced economies, monetary authorities have reacted by pursuing unconventional policies of asset purchases, with the aim of enlarging the monetary base and encouraging some heating-up of the economy.^{III} QE policies have been introduced in

recent years by the Bank of England, the Bank of Japan, the Federal Reserve), and later by the ECB.^{IV}

The way major Central Banks have managed the crisis suggests two main lessons can be learned. Firstly, monetary policy makers have been endowed with the capacity to make hard choices, sometimes adopting exceptional measures required by the presence of a liquidity trap rather than only by the need to achieve price stability, in order to sustain growth and employment (Saraceno, 2015). Secondly, the creation of money by itself is not enough; new money must be spent by sectors of the real economy able to create inflation. In this respect, the very recent debate on ‘helicopter money’, is nothing but part of the search for the most effective way to channel financial resources to the real economy.^V

2.2. Public and private investment

Since the outbreak of the financial and sovereign crisis, the trend for both public and private investment has been decreasing in the EZ and similar patterns are also seen in other major countries (figs. 7-8). Before the crisis, public investment was fairly constant with a peak in 2005 at 3.5% of GDP, while private investment fluctuated between 18% and 19%. After the crisis, both public and private investment have been in decline. Neither has yet returned to its pre-crisis level, indicating that fixed capital formation in Europe may be in a low level trap, reinforcing the arguments suggesting ‘secular stagnation’ as the new normal for advanced economies.

Fig. 7 Public investment (% of GDP)

Fig. 8 Private investment (% of GDP)

Source: Ameco

The reasons for an investment gap, despite the favourable borrowing conditions created by QE, can be found in the inefficiencies of the capital market and banking system, and in the uncertainty and negative expectations produced by the crisis (BMfWWF, 2015). Different estimates quantify such a gap in a range between €190 billion for the EZ and €330 billion for the EU as a whole per year (Rubio et al., 2016). Whether the existence of such an investment gap should be a guiding principle for policy, and the actual composition of the gap have both been matters of debate. According to Gros (2014), the argument in favour of a return to pre-crisis levels is inappropriate since investment evolves according to the financial cycle. Before the crisis, some countries experienced excessive investments in sectors like real estate that rarely create conditions for sustainable growth while, during the ‘bust’, investment fell below pre-crisis levels. In any case, we consider a rise in capital formation as a necessary condition for economic recovery. What matters for our proposal is the following: if the investment gap is to be considered as the measure of the boost required for the European economy, then the initiatives underway at the moment are insufficient to bring the current investment levels up to the level potentially required.

When looking at the composition of the investment gap, a more thorough picture emerges when countries are analysed around different axes. We can first of all distinguish between those countries experiencing a large drop in investments (e.g. Greece, Spain), those with a smaller drop (e.g. Netherlands, Austria, Slovakia), and those that have experienced a slight growth in gross capital formation (e.g. Belgium, Germany). Secondly, following Rubio et al. (2016) and disaggregating expenditure by sector (in this case, construction, infrastructures and machinery), we find countries that have reduced all types of expenditures, and other countries subject to specific drops or increases. Such a constellation of differences has to be taken into account in order not to provide a ‘one-size-fits-all’ policy recipe that may underperform or fail.

Fig. 9 Investment (% GDP) pre and post crisis, investment gap (change 2001-2007 to 2008-2015)

Source: Ameco

3. (Lack of) Coordination between Monetary and Fiscal Policy

In macroeconomics, policy-makers can combine two kinds of tools to achieve sustainable economic growth in a context of price stability: fiscal policy, and monetary policy. Needless to say, within the EZ, the problem of coordinating macro policies is very complicated because the creation of the EZ constitutes a policy-making framework that is unique in history; for while monetary policy is oriented towards a Union-wide objective, fiscal policy remains the competence of national governments. There exists therefore a structural gap between the two sides, since the ECB has no federal treasury partner at all (Bibow, 2015). On the contrary, the idea has prevailed in the EZ that setting coordinated common fiscal rules is enough ‘to go a long way towards providing favourable conditions for economic growth and employment’ (Issing, 2002). The assignment of responsibilities has been clearly defined, where the maintenance of price stability is the primary objective of monetary policy (art. 127.1 of the Treaty on the Functioning of the EU) and pursuing sound public finances is the aim of the Stability and Growth Pact (SGP), which represents an ‘indirect’ surrogate for fiscal policy.

The opinion that, in the long run, there is no trade-off between price stability and economic growth, in accordance with the lines of the ‘New Consensus’ in macroeconomics (Arestis and Sawyer, 2005), has fuelled the independence of the ECB while reducing its

potential to inflation targeting, especially in comparison with the Federal Reserve in the United States (US).^{vi} The ECB is considered one of the most independent Central Banks, even more than the *Bundesbank*, not only because ‘neither the European Central Bank, nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Union institutions, bodies, offices or agencies, from any government of a Member State or from any other body’ (art. 130 TFUE), but also because its Statute can only be modified by revising the Treaties, which requires unanimous approval from all member states. Conversely, the German Parliament and the US Congress can amend their respective Statutes of the *Bundesbank* and the Federal Reserve by a simple majority (De Grauwe, 2007). Thus, despite its high degree of independence, the ECB does not have an equivalent level of political accountability. Indeed, the EZ organization is based more on an exchange of information than on identifying lines of actions for coordinating activities. This leads to uncooperative attitudes between the ECB, which gives priority to defending its freedom of action, and national governments that are unwilling to accept further reductions in their fiscal sovereignty (Von Hagen and Mundschenk, 2003).

The consequences of this lack of cooperation became evident in occasion of the euro crisis management. The slower economic recovery of the EZ compared to the US is explained by an insufficient macroeconomic response to a severe macroeconomic crisis (Bofinger, 2015; Watt, 2015). While the US tried to stimulate their economy by increasing the deficit and adopting a timely zero lower-bound interest rate policy, the EZ member states were subjected to restrictive fiscal measures along with a much more cautious approach to the monetary policy.

In this context, the ECB took actions that were considered to almost breach its mandate and which have been the object of political and legal scrutiny to assess their compatibility with the ECB mandate, with the European Treaties, and with member states’ sovereignty. In general, such actions represent attempts by the monetary institution of the EZ to signal the absence of the fiscal side of economic policy.

The optimal currency area theory suggests that whenever a union faces an asymmetric demand shock, the only two feasible fiscal initiatives are a national fiscal policy free to accommodate budget deficits or a centralized budget able to provide automatic fiscal transfers among states (Kenen, 1969). Notwithstanding the preference of the latter option with a view to an ‘ever closer union’, none of the possibilities is or seems to be achievable

in the very short term unless strong political determination makes an appearance in the EZ capital cities. An alternative, intermediate third solution must therefore be found. Given the nature of the crisis and the present political conditions, such a solution could be sought in a more cooperative attitude between existing institutions, focused on EZ macroeconomic policy. What we mean by coordination is the set of arrangements and activities aimed at creating a unified framework for monetary and fiscal policies and introducing commitments on policy decisions at national and supranational level (Panico and Vázquez Suárez, 2007). Such a path is not desirable *per se*, but could be functional to the development of a fiscal capacity in the long run.

3.1. On the monetary side: the ECB's unconventional measures and the EZ financial structure

Any initiative to mobilize finance to increase investment in Europe requires first of all a good understanding of Europe's financial structure, which is also important for evaluating the way the ECB has faced the crisis.

In response to the crisis, all the major central banks resorted to various measures, whose nature, more or less conventional, differs substantially, depending on their internal structural and legal conditions. While the ECB and the Bank of Japan generously lent money to banks, the Fed and the Bank of England injected reserves into their respective economies by purchasing bonds. In normal times, the ECB passively accommodates any demand for liquidity, given the policy of interest rates being the decision of the governing council. In exceptional times, when the ECB can no longer control the transmission mechanism from lower interest rate to higher aggregate demand for investment and consumption, the ECB goes beyond the quantity demanded and tries to stimulate growth through a higher supply of liquidity to banks. The ECB has always considered unconventional monetary policies as complementary to, and not a substitute for, its usual inflation targeting strategy (Cour-Thimann and Winkler, 2013).

The problem observed during this unconventional phase was that money created by the ECB did not translate into credit demand. The large refinancing operation by the ECB in the 2008-2012 period helped compensate for the liquidity leakage from the periphery towards the core, inverting the direction prevailing in the period before the crisis. In practice, although not a direct aim of the ECB, its monetary policy provides funds to

finance current account balances (Cour-Thimann, 2013). In fact, since the launch of the Euro, demand booms associated with capital inflows from the core to the periphery, as well as the loss of export competitiveness in the periphery, contributed to the accumulation of large foreign debt in these countries, while the core accumulated sizeable surpluses. The external funding of a demand boom in the periphery almost exclusively relied on debt flowing through interbank lending from the core.

The specific bank-based financial structure of the EZ, where bank lending provides 70% of total financing to the non-financial sector, with financial markets providing the remaining 30%, is one reason explaining why the ECB's early crisis management approach was aimed at supporting the banking system, rather than providing a direct monetary stimulus to the economy (Cour-Thimann and Winkler, 2013). The fact, now officially recognized by economists (Baldwin et al., 2015), that the real causes of the EZ crisis were the large intra EZ capital flows from the core to the periphery, is another motive behind the unconventional ECB policy measures.

The financing through debt of non-financial corporations in Europe is dominated by bank lending. Loans to non-financial corporations have decreased since the crisis, and even more so since 2013, suggesting the ineffectiveness of the transmission mechanism of the ECB (Losch, 2015). This is explained by the deleveraging process of both the banking and the non-financial sectors, since European banks are reluctant to finance high-risk investment, and households and firms cut their consumption and investment decisions, giving priority to repairing their balance sheets. In addition, capital market financing has not been able to offset reduced bank lending whereas, in the US, corporate bond issuance is more developed and increased during the financial crisis, making up for the fall in bank loans (Berg et al., 2015).

Another important reason behind the ECB technique of intervention regards the EU legal framework^{VII} that explicitly prohibits the ECB from buying sovereign bonds on the primary market. However, the behaviour of the ECB changed during the crisis and, in retrospect, it was the only player capable of acting beyond its instruments and operations as envisaged by the Treaties (Micossi, 2015). As Lavoie (2015) observes, although outright transactions on secondary markets are allowed within the Statute of the Eurosystem and the ECB, it was understood that the ECB would never conduct such operations. However, the prolonged crisis changed this convention when the ECB resorted to a progressive

programme of assets purchasing.^{viii} The ECB has extended its role of lender of last resort from supporting only commercial banks to making unlimited advances to also provide a backstop to government debt.

3.1.1. *The state of play of the QE*

In March 2015 the ECB started its QE, the Public Sector Purchase Programme (PSPP) of €50 billion per month, to be added to private sector Asset-Backed Securities and Covered Bonds Purchase Programmes (ABSPP and CBPP3) of €10 billion, originally launched in September 2014. Two types of securities can take part in the PSPP: bonds issued by EZ governments and national agencies (88% of PSPP), and securities issued by European institutions (12%), among which is the EIB. The purchases are funded by central bank money, which the institutions can use to buy other assets and extend credit to the real economy. In setting the PSPP, the ECB Governing Council established a quantity limit on top of the eligibility criteria,^{ix} ensuring that the ECB does not breach the prohibition on monetary financing.

With regard to sharing hypothetical losses, the Governing Council decided that securities issued by European institutions (12%) will be bought by National Central Banks (NCBs), not the ECB, although they will be under a regime of full risk sharing, a sort of debt pooling. As regards central government and agencies securities, only a small fraction of them (8%) will be placed under the same sharing regime, for a total of 20%. The rest (80%) will be excluded by risk pooling (ECB, 2015).

Table 1. The allocation of securities within the PSPP (original version, March 2015)

Type of security	Security holder	Monthly purchase (bn €)	Annual purchase (bn €)	% of total PSPP	Risk regime
European Institutions	NCBs	6	72	12	Full sharing Risk on ECB
EZ governments and agencies	ECB	4	48	8	Full sharing Risk on ECB
	NCBs	40	480	80	Not full sharing Risk on NCBs
Total		50	600	100	

Source: ECB

The programme was expanded in March 2016, and will last until at least March 2017. Total purchases have been increased from an initial €60 billion to €80 billion, and the allocation between types of securities has changed, with an increase of purchases of government bonds and those from recognized agencies from 88% to 90% of the total, and a decrease of purchases of securities issued by international organizations from 12% to 10% (ECB, 2016).

The effects of QE monetary policies are hard to estimate, but many scholars agree that QE produces positive effects. Nonetheless, the long run effects of extending such unconventional policies have to be better understood, especially as regards the potentially deleterious effects on economic incentives and the decreasing returns over protracted periods of intervention (Joyce et al., 2012) and with respect to the international dimension, where countries compete to have the lowest interest rates, and potential spill-over effects may reverberate through trade and financial linkages (Georgiadis, 2015).

The effectiveness of the ECB's QE in solving the deflation problem is clearly questionable. The macroeconomic context in which QE policies are implemented matters, because the effect of deflation on debt may reduce the room for policy action (OFCE/IMK/ECLM, 2016).^x Other aspects are debated, in particular the fact that the Euro has been slowly appreciating since the beginning of QE, thus reducing demand stimulus from the external channel. There is also a risk of underutilization of the programme, caused by a clause of issue share limits. The ECB cannot buy more than 25% (increased to 33% in January 2016) of the total eligible debt securities of a country.^{xi} This rule, even with the later changes to the original design to expand the scope of the QE, will restrain the full potential of the program, with the risk that the primary mandate of price stability might not be fulfilled because of self-imposed limits (Claeys and Leandro, 2016).^{xii} Therefore the rule of allocation of asset purchases between countries based on the ECB capital keys forces the QE to be scaled up in order to seriously support small countries, like Greece and Portugal, that currently receive one tenth of what is due to Germany, which gets more than 20% of total purchases.

3.2. On the fiscal side: the Juncker Plan

The main question of the policy debate about investment in Europe is how to ensure the crowding in of the private sector in an exceptional moment of historically low interest

rates and weak euro exchange rates (BMfWWF, 2015). In this situation, the main driver for investment is (expectations of) growth, while interest rates play a secondary role; therefore monetary policy cannot be effective in stimulating investment. However, growth is endogenously driven by investment. The result, as supported by the figures in section 1.2, is a vicious circle between sluggish growth and weak investment which needs to be broken.

The Juncker Plan is supposed to bridge the gap between abundant savings, on one hand, and lack on investment, on the other.^{xiii} The financing of the Juncker Plan's investment projects critically depends on the degree to which the private sector matches the limited resources allocated by public institutions, the EC and the EIB, through the creation of a guarantee fund, the European Fund for Strategic Investments (EFSI). The existence of €21 billion public resources of the EFSI should stimulate additional financing from markets. It is explicit that the Juncker Plan is a purely private sector demand-driven mechanism, with no sectorial or geographical pre-allocation. The EIB makes risk-absorbing financing available but it cannot make the projects happen. Leaving the task to the private sector alone could lead to a suboptimal level of investment.

To sum up, liquidity is available, also thanks to the ECB's accommodating attitude, but a lack of risk-taking capacity and a general uncertainty about the economic outlook prevents it from being translated into aggregate demand. The initiative by the EC remains a private sector dominated mechanism, interested in financing more secure projects that probably could have been financed in any case by normal EIB operations. This vicious circle reminds us of what Draghi said in 2014, when he recognized that 'the risks of doing too little outweigh those of doing too much' (Draghi, 2014). Introducing a limited guarantee in the hope of leveraging additional funding from the private sector is not enough to ensure that additional riskier projects are started, and is certainly not enough to bridge the EZ investment gap. The Juncker Plan should be put at the centre of the European crisis management strategy, but linked with the ECB's current expansionary monetary policy. Instead of devoting all QE liquidity issuance to the purchasing of sovereign bonds, the ECB could directly link its programme with the Investment Plan, to better serve the needs of the European economy, as Valla et al. (2015) clearly suggest.

3.2.1. *The state of play of the Juncker Plan*

When discussing investment, it is usually assumed that ‘more is always better’, regardless of the quality of the investment. In our view, the challenge for Europe and the EZ is not just the quantity of investment (the gap), but also the ‘quality’ of investments in terms of geographical allocation and targeted sectors. In this respect, one of the crucial points of the existing Juncker Plan is the ‘additionality principle’, according to which the selection committee should be able to identify new projects that would not have happened without the subsidy of the EFSI.

The results of the Juncker Plan are regularly published by the Commission. The latest data (April 2016, tab. 2) show that there is a total of 222 projects approved (or under assessment) by the EIB Management Committee and the EFSI Investment Committee which, on the basis of €11.2 billion provided under the EFSI, will receive additional funding of €82.1 billion.

Tab. 2 Current situation of the Juncker Plan (April 2016)

	Number	Financing under the EFSI	Total expected investment triggered
Infrastructure and innovation projects	57	€7.8 billion	€82.1 billion
SME financing agreements	165	€3.4 billion	

Source: ec.europa.eu

The Commission also provides further details about the main beneficiaries of the EFSI guarantee (fig. 10) and the state of play of projects in the main countries (tab. 3). Data shows that the main recipients are Italy, France, Germany and the United Kingdom, proving that the geographical distribution of funding is not coherent with the major drops of investment across Europe, as shown in fig. 9.

Fig. 10 Distribution of project and SME agreements within Europe (March 2016)

Source: ec.europa.eu

Tab. 3 Details of progress in projects (by selected countries)

	INFRASTRUCTURAL PROJECTS						SMEs		
	total	signed	approved	under assessment	EFSI financing	private sector	total	EFSI financing	private sector
BE	2	1		1	100	653	6	58	685
DK	2	1		1	75	2,000	1	4	68
FR	12	4	7		465	2,005	10	286	3,600
DE	4		3		455	1,100	21	274	5,100
IT	8	3	2	3	1,400	4,800	21	318	7,300
NE	2	1	1		100	200	3	28	279
PL	1			1	n.a.	n.a.	4	19	658
ES	7	3	1	3	615	2,500	5	114	3,400
UK	7	3	2	2	1,400	6,700	7	214	2,900
	45	16	16	11	4,610	19,958	78	1,315	23,990

Source: ec.europa.eu

According to Rubio et al. (2016), different reasons may lead to a geographical concentration under the EFSI regime, to the detriment of periphery countries: i) the tendency of the EIB to approve projects ready and complete in order to easily prove itself consistent with the '315 billion target'; ii) the specific political and economic uncertainty affecting some countries; iii) having developed National Promotional Banks strongly involved in the EFSI scheme; and iv) the possibility to co-finance the EFSI and at the same time deviate temporarily from fiscal consolidation rules only applying to countries in the preventive arm of the Stability and Growth Pact. The last point is exacerbated by the fact

that the contribution to EFSI announced by nine countries^{XIV} will be in the form of co-financing to EFSI projects, not contributions to set up the EFSI (ECB, 2016). This means that such contributions will only support investment projects in their own countries and not flows to the common pool or resources of the EFSI. This highlights the difficulty to overcome the ‘juste retour’ principle which prevails in discussions on the EU budget.

To sum up, the Juncker Plan and the EFSI institution rightly enter the territory of European fiscal policy and allocation of resources to the real economy. However, the size of the mobilized resources is not enough to compensate for the EZ investment gap. Hence, a more systemic way to mobilize resources has to be introduced. The proposal that follows, by combining QE purchases with EIB/EFSI investment capacity, goes in this direction.

4. The Proposal

The principle element of our proposal is to substantially increase the amount of QE asset purchases by the ECB from the EIB in order to finance supranational investments. In this way, an unconventional monetary policy will produce conventional fiscal effects and prepare the ground for the establishment of a fiscal union. The proposal is inspired by previous contributions, from both academia (Stiglitz et al., 2014; Varoufakis et al., 2013; Watt, 2015; Wolff, 2014; Bibow, 2015) and political impetus. Recent proposals in this direction include the debated ‘People’s Quantitative Easing’ that the leader of the Labour Party Jeremy Corbyn has promoted for UK (Skidelsky, 2015). The justification for our proposal builds on two pillars. On the one hand, the direction and size of the ECB QE seems to not be producing the expected effects on inflation or to have put the EZ back on track as regards the other main macroeconomic indicators. On the other hand, QE is unable to provide the necessary boost to the EZ, but neither can the quantity of the Juncker Plan that, even in the best scenarios of additionality and crowding-in effects, won’t cover Europe’s investment gap. A combination of the two policies may achieve the desired investment threshold and produce the inflationary pressure that QE is currently seeking to produce.

4.1. Conditions and Features

The overall picture that emerges from the analysis conducted up to now can be summarized in the following remarks.

1. *Ease the original sin of the EMU.* The ability of the EZ to achieve an optimal policy is severely constrained by its structural deficiencies. The ECB lacks a federal treasury partner, thus missing the crucial Treasury-Central Bank combination that forms the basis of power in sovereign states.
2. *Macroeconomic conditions have changed.* The main challenge today arises from the deflationary effect of private sector deleveraging, as households and corporations seek to restore their balance sheets, resulting in a collapse in credit demand. In this context, a zero lower-bound interest rate situation has very limited ability to stimulate credit creation, since spending and investment decisions are driven by balance sheet considerations.
3. *There is an alternative.* European growth-oriented public finance is seen as alternative to austerity policies, as is a Europe-wide fiscal stimulus to national initiatives under fiscal constraint. A recent study (Rannenberg et al., 2015) argues that the fiscal consolidation over the 2011-2013 period is responsible for between one third and one half of the decline of the EZ output gap. A different approach to the crisis – had it been acknowledged that low growth determines high debt and not the contrary – would have avoided the depressing consequences on growth and unemployment many countries are facing.
4. *‘Agli stati l’austerità, all’Europa lo sviluppo’.* This famous statement by Tommaso Padoa-Schioppa (roughly translated as ‘national governments have to deal with austerity, while Europe has to deal with growth’) establishes the compromise between budgetary rules compulsory for EU member states on one side, and a European investment plan, on the other. If the objective of strict debt sustainability is to hold, an investment-led growth path must only be initiated at central level, since national governments are constrained by fiscal rules.
5. *Debt is not bad in itself.* What makes the difference are the nature and the aim of debt, rather than such debt’s absolute or relative size. Notwithstanding that, our proposal does not consider a mutualisation of pre-existing national government debts (as in the case of ‘Eurobonds’) but features a pooling of forward-looking debt, with *new*

common debt funding *new* public investments that serves the common interest of the Union. Unlike with other proposals, in this case member states would continue to be responsible for their level of earlier debt.

6. *A gradual transition towards fiscal union.* The current political environment in the EZ makes an acceleration of the process towards the realization of a true fiscal union quite complicated. While a political will to proceed in the direction of an ‘ever closer union’ is taking shape, a ready-to-implement proposal, based on existing institutions and coherent with the Treaties, would be effective and acceptable in the short term.
7. *Investments plan must be Europeanized.* European wide investment projects encompassing education, health, and renewable energy must be labelled as European public goods, embodying a high value added. As a consequence, part of the borrowing for investment planned at national level could be converted into European borrowing.

4.2. Operational Details

4.2.1. Phase one

The first phase of the proposal regards a mechanism based on existing institutions (the ECB and the EIB) and ongoing policies (the QE and the Juncker Plan). The scheme is largely inspired by the contribution of Watt (2015), who proposes a conditional monetary financing of public investment for the EZ. We apply a similar programme to specifically address the flaws in current tools, one year after their launch. The scheme can be better understood through a stock-flow consistent visualization, which uses sector-based balance sheets in order to trace monetary transactions between sectors (Godley and Lavoie, 2007). Fig.11 shows the mechanism.

1. The EIB issues new bonds (i.e. ‘investment bonds’) and sells them on the markets. At present, the EIB issues additional bonds to the extent of three times the guarantee of the EFSI (from €21 to €60 billion), while the remainder (up to €315 billion) is collected through private financing. Our proposal involves increasing this ‘internal multiplier’ well beyond 3, and reducing the external multiplier, since the private sector will be attracted by secure projects that do not require additionality. The private sector buys them on the basis that

this new issuance is guaranteed within a specific programme of the ECB, which could be a new design of the present QE. Therefore, no speculation would emerge to undermine the rating on EIB bonds.

2. The ECB is ready to buy ‘investment bonds’ on the secondary markets within a QE2.0. The purchasing of bonds is financed through an increase of base money on the liabilities side of the ECB’s balance sheet. This operation changes the essence of debt, from debt – that carries an interest rate and has a default risk, – to base money – that is default free but is subject to inflation risk. A risk, however, set aside by present deflationary forces. Liabilities still exist in the ECB’s balance sheet, but ‘now they do so in the form of money’ (Watt, 2015).
3. Funds made available in circulation are then passed on the EFSI, which should expand, going beyond a basic guarantee fund to a ‘distributional fund’ giving support to states according to certain equity criteria (see section 3.3.2).
4. Both on bonds issued by the EIB and on grants received by national governments, an interest rate flow is generated. The ECB will receive interest payments from the EIB on bonds, while national governments will bear debt service on grants provided by the EIB.

The distributions of grants to national governments would not be a ‘free lunch’, as criticized by Tober (2015), as various conditionalities could be applied in order to balance the agreed financial support with investment.

Firstly, in order to avoid behaviour of moral hazards by national governments, a strict conditionality could be attached to the scheme, similar to that required by the European Stability Mechanism in order to obtain emergency financial assistance. Thus, the investment grants are bound to compliance with the EZ fiscal regime, meaning that they will be automatically withheld whenever structural budget rules still effective for current spending are not fulfilled. Such a conditionality would ensure a Fiscal Union that delivers ‘both fiscal sustainability and fiscal stabilization’ as the Five Presidents’ report recommends.

Secondly, the risk that the ECB would overshoot its target of inflation, close to 2%, could be avoided through an explicit heuristic or ‘rule of thumb’ process that would scale up or down purchases of ‘investment bonds’. In a sense, we suggest a sort of Taylor rule for the purchase of investment-boosting bonds. In a period of deflation, instead of looking

to real GDP (nominal GDP/price level), as Central Banks normally do, it would be better to monitor the nominal GDP (Varoufakis, 2016). When prices are falling faster than nominal GDP – a situation found in some periphery countries – the resulting real GDP would seem to rise, a ‘statistical illusion’, underestimating the fact that money income is decreasing. A ‘rule of thumb’ appropriate to a deflationary period would require an expansionary policy which adjusts to the effective monetary capacity, since the latter is what really matters when indebted actors heavily involved in a deleveraging process have to repay their debts.

Fig. 11 A stock-flow configuration of the proposal

As regards the size of the programme, different proposals have been suggested. Wolff (2014) states that a ECB-EIB bond buying programme of €400 billion for a period of two years would be the best way to overcome the crisis. Bibow (2015) suggests an increasing scale, with 3% of GDP (€300 billion) as the initial volume of public investment to be increased to a 5% rate in the following years. On the contrary, Watt (2015) considers a decreasing scale, with a five-year programme where a starting issue of €250 billion in the first year is followed by €50 billion each year.

We suggest that, in the first instance, the size and duration of the scheme should be adjusted in order to meet actual investment needs, namely the investment gap discussed

earlier in the paper. This amount could be collected within the existing QE framework.

For the purpose of our proposal, in order to be of significant magnitude, the purchasing of EIB bonds which are part of the investment programme should be: i) held by the ECB, not NCBs; and ii) increased within the 20% risk sharing regime, which is possible – *ceteris paribus* the amount of monthly asset purchase – through a corresponding decrease of the share of other European institutions securities and government and agencies bonds.

4.2.2. Phase two

Both the Juncker Plan and the QE should last until 2017 (excepting further extensions), while ‘stage two’ of the Five Presidents’ Report for a common macroeconomic stabilization function built on the EFSI is expected to begin after June 2017. Therefore, it makes sense to think of the EFSI as the starting tool for change. In fact, the EFSI should perform the function of provision of public goods, and not only be focused on short-term interventions in favour of growth, as envisaged by Rubio et al. (2016).

In this second phase the EFSI should become a sort of Euro Treasury, like the one proposed by Bibow (2015).^{xv} In his proposal, new common debt is devoted exclusively to grant public investment to governments. Thanks to the golden rule of public finance (Musgrave, 1959), while governments still obey EZ fiscal rules only for current public expenditures, capital expenditure is financed through common debt. The EFSI, once equipped with enough funding, could start issuing investment bonds by itself on the market, improving its scope from a mere guarantee fund. It would thus provide the safe assets the financial system needs, while the ECB continues to play its role of lender of last resort, thus maintaining low interest rates. After the scheme has taken off, the EFSI could be changed by regulation into a Euro Treasury on the basis of two strict rules: first, the above mentioned golden rule on investment; and second, the no discretion rule in spending decision-making. Thus, the Euro Treasury will only finance capital spending and will not undertake investment spending itself, but will give grants to member states according to a distributional criterion, delegating the political decision on spending to national governments.

In the future, the scheme could be further extended with a shift in spending decision-making from national governments to European institutions or agencies in charge of the

EU's 'missing policies' i.e. industrial policy. As Pianta (2015) observes, in the longer term there will be the need for a dedicated institution coherent with the mandate of reshaping economic activity in Europe, accountable to the European Parliament and engaged in consultation with European political, economic and social actors, avoiding the 'revolving door' between the institution and the private and banking sectors. Such an institution could be the EIB itself, but this would change its nature from an intermediary tool between those who have money and those with a project to becoming a more proactive player.

4.3. Discussion of critical aspects

4.3.1. *Fear of fiscal transfers*

When talking about EZ fiscal capacity the main source of concern regards the possibility that it would mix monetary and fiscal policy and ultimately imply fiscal transfers between member states. Such concerns have emerged with both the Outright Monetary Transaction (OMT) programme and with the QE (see, among others, Sinn, 2014, who criticizes the ECB's decision). However, a deeper analysis of the way bond-buying programmes work reveals that such a fear is not economically justified, and the same reasoning applies to our proposal.

As De Grauwe and Ji (2015) explain, the misunderstanding is based on considering central banks as private agents. First, central banks and governments are two branches of the same public sector. Therefore, their balance sheets could be consolidated. In our scheme the EIB, the ECB and national governments are branches of the same public sector. This means that bonds issued by the EIB and held by ECB are just a claim of one branch of the public sector (ECB) against another branch of the public sector (national governments). Second, central banks are not-for-profit agents because, at the end of the year, they distribute profits to governments. Basically, what walks out the door of national government re-enters through the window.

Let's suppose that the ECB buys €1,000 of 'investment bonds' on the secondary market (tab.4). and this amount is distributed to national governments according to a given distribution criterion ('shares'). On such bonds held by the ECB each government will pay the same interest rate (3% for example). At the end of the year, the ECB will return the interest payment to national governments using the same distribution criteria. This way, there will be no fiscal transfer between governments, since the amount received

(‘investment grants’ and ‘interest rate redistribution’) and paid (‘interest rate payment’) are in the same proportion.

Tab. 4 An example of the neutrality result

	DE	FR	IT	SP	others	TOT
shares	30%	25%	20%	15%	0.1	1
investment grants	300	250	200	150	100	1000
interest rate payment	9	7.5	6	4.5	3	30
interest rate redistribution	9	7.5	6	4.5	3	30

What Germany pays as interest service on its grant is what Germany receives at the end of the year, as with other countries. Tab. 4 shows this neutrality result, which represents a crucial aspect when designing a distribution tool. That said, the choice of one distribution criterion or another is a separate aspect, which does not affect the neutrality result.

4.3.2. Distribution criteria

One of the main aspects of the Juncker Plan that attracts criticism regards the risk of geographical concentration away from countries where the investment gap is pronounced. For those countries, the capacity to attract financing may also be the lack of advanced financial markets and on unfavourable political and economic situations. Further, an analysis of the activity of the EIB since the beginning of the crisis reveals that, in spite of two previous increases in the Bank’s subscribed capital in 2009 and 2012, the lending activity has slightly missed the EIB’s stated goals, and such activity has not necessarily targeted countries most in need of resources (OFCE/IMK/ECLM, 2016).

Fig. 12 Increase in EIB’s lending since pre-crisis period

Source: OFCE/IMK/ECLM (2016)

The EFSI regulation consider the possibility of adjustment in the mix of projects as regards countries ‘on the basis of an ongoing monitoring of the developments of market conditions in the Member States and of the investment environment to help overcome market failures and sub-optimal investment situations’ and, in any case, ‘when carrying out that adjustment, the Steering Board shall avoid an approach which would be riskier than necessary’.^{xvi} Such criteria to mitigate the risk of concentration ends up corresponding to the definition of ‘additionality’, which is the eligibility criterion in order to activate the EFSI, defined as ‘the support by the EFSI of operations which address market failures or sub-optimal investment situations’. The regulator has not provided for a clear recognition of the potential problem of geographical concentration, while the latest data related to the Juncker Plan shows the risk that, without a strong correction mechanism, it could amplify existing gaps.

The QE programme allocates purchasing of bonds according to the ECB capital keys,^{xvii} which gives more per capita to countries with higher income. However, an alternative (read ‘fairer’) way to allocate ECB funding is possible. Of course, the precise definition of distribution criteria has to meet both economic and political rationales. But given that fiscal neutrality will depend on whether or not the same criteria are applied to both the distribution of grants and redistribution of profits, regardless of the precise definition of the criteria, ideally any rule could be implemented. In practice, however, if this scheme were to meet opposition by some EU countries, a ‘variable geometry’ approach could be envisaged, excluding those countries that do not wish to participate, or an ‘opt-in’ basis could be followed in line with countries’ specific needs.

In his proposal for a basket-Eurobond, Bofinger (2015) promotes a GDP weight, defined as the GDP share of each member state in the EZ GDP or a debt weight, deriving from the debt share of each member state in the EZ consolidated debt, as distributional keys, recommending also that a large German share would be beneficial for the credibility of the programme. On the one hand, we partly agree with Bofinger (2015) in that a ‘fair reward’ for the EZ’s most important economies is a condition to ease the acceptance of any proposal that directly or indirectly introduces fiscal elements at supranational level.

However, the purpose of our proposal – and, in general, of any fiscally-inspired policy – is to guarantee sound resources to those countries that need them most, in line with the solidarity principle. We suggest that a parameter of distribution taking into account the fair reward of the most important and the neediest economies may include (alone, or as a part of a more complex weighting scheme) *national* investment-to-national GDP (I/GDP) share; this would be more consistent with the spirit of the proposal and actually fairer, because countries will be granted resources in proportion to their ‘capability’ to invest. Countries with a lower I/GDP ratio will be receiving higher shares of resources, if one assumes that a lower national I/GDP share measures a country’s ‘difficulty’ to engage in capital investments.^{XVIII}

4.3.3. *Contravening the ECB mandate*

The political independence of the ECB is affirmed twice in the TFEU. Firstly, it is affirmed by the explicit prohibition on conducting any type of credit facility in favour of (art. 123) and to seek or take instructions from (art. 130) any political institution or body at any level, thus eliminating any risk of direct financing of public sector deficit. Secondly, it is guaranteed by the establishment of a primary single mandate of price stability, without any connection to budgetary policy (art. 127). These premises derive from considering monetary policy as a *technical* function, where inflation is the only variable that a central bank can fix since, in the long run, money is neutral for the real economy (Micossi, 2015). However, the crisis and the following period of recession have stressed the importance of endowing monetary policy with the capacity to also fulfil a *political* function, especially given the reluctant reactions of national governments that called for more resolute action by the central bank. Indeed, this was acknowledged with interventions in the sovereign bonds market in 2010 with the Securities Market Programme (SMP) and in 2012 with the OMT, both directed to intervene in order to lower the spreads on bonds. With the OMT announcement, the ECB, ready to buy unlimited amount of sovereign bonds in the secondary market, *de facto* sets itself as a lender of last resort for the EZ.

In ascertaining whether our proposal could contravene the Treaties, we refer to a recent judgment by the European Court of Justice (ECJ) on the OMT programme. In 2014 the legality of the OMT programme was questioned by the Federal Constitutional Court of Germany (*Bundesverfassungsgericht*), claiming that OMT exceeds the ECB’s monetary policy

mandate and asking the European Court of Justice (ECJ) to strike down the measures as *ultra vires*. The ECJ roundly rejected this view, asserting once and for all the principle of the supremacy of EU law (Fabbrini, 2015). In considering whether the ECB violated the prohibition on direct financing (art.123 and art.130), the ECJ maintained that the OMT programme fell within the scope of the ECB. In more detail, the ECJ, in an historical interpretation of the Treaties, acknowledged that ‘it is apparent from the preparatory work relating to the Treaty of Maastricht that the aim of Article 123 TFEU is to encourage Member States to follow a sound budgetary policy’ (ECJ, 2015). Thus, the features of the OMT ‘exclude the possibility of that programme being considered of such a kind as to lessen the impetus of the Member States to follow a sound budgetary policy’ (ECJ, 2015). The fact that OMT intervention is accompanied by the condition that a country concerned has to sign up to a memorandum of understanding on adjustment measures ‘precludes the possibility of a programme [...] acting as an incentive to those States to dispense with fiscal consolidation’ (ECJ, 2015).

By analogy, our proposal could be judged the same way as OMT when considering the ECJ’s interpretation of art.123. Since ECB purchases are directed to newly issued EIB bonds supporting real investment, there would be no incentives for member states to elude fiscal consolidation. On the contrary, while national governments would remain responsible for their respective national debt, European institutions would embark on a programme that, if anything, will put a virtuous cycle in place where an increase in growth will reduce the burden of fiscal consolidation. The debt originally issued by EIB is bought and kept by the ECB. What governments receive from the EIB is a grant on which they have to pay an interest flow, which will eventually return. In principle, member states are indebted to the ECB but, in practice, this debt is not relevant as the ECB can always finance its debt with zero cost money base (Watt, 2015). The only side effect would be inflation which – as discussed before – is the aim of the programme (as a consequence of economic growth).

5. Conclusions

The outlook of the EZ economy, eight years after the beginning of the economic crisis and after five years of macroeconomic consolidation, looks quite gloomy. The story of the

crisis however is not a boring one; the highest expectations from expansionary fiscal contraction policies turned into a depressive incapacity to restart growth and boost aggregate demand. The binding constraints on the actions of the monetary authority led to sympathizing with unconventional policies. Intervening in what is the real European moral hazard – the one between the few institutions that try to maximize European welfare and national governments slow to engage in reforms and cessions of sovereignty – the ECB has launched its QE and the EC has started its Investment Plan.

Despite such institutional innovations, not much has changed yet. The EZ has a unique, single monetary policy, while fiscal policy remains fragmented at national level. In the short run, the proposal outlined in this paper fills the structural gap between the monetary and fiscal dimensions of European economic policy. In the long run, instead, it builds the basis of a true Euro Treasury endowed with fiscal capacity.

In the paper we have discussed the feasibility and the limits of the proposal. Many of the potential critiques can be easily overcome. In particular, risks of accelerating inflation, fears of fiscal transfers and concerns on the financial sustainability of the proposal and on its legal standing with respect to the contents of the treaties do not hold up after an in-depth analysis.

In addition to that, the current situation offsets any possible fear regarding unintended effects of the proposed policy. The prospects for the EZ economy – given the evolution of the main macro prices and of inflation expectations – and for the world economy – with the end of the BRICS dream and the slowdown in Chinese growth – call for direct intervention by the public sphere to lift economic activities from a situation of stagnation and recession. Cracks are already appearing in the current model of salary cap and push towards export activities – well represented by Germany – while coordination failures put at risk the entire European construction.

Our proposal does not represent a new model per se, but a contribution to the establishment of a fully-fledged European fiscal policy. Many issues remain to be explored, for example the targeting of resources for investments on sectors/projects with high expected multiplier effects. In any case, as often happens in European integration, it is only as a result of temporary dis-equilibria that new policies and powers are invented and assigned at the supranational level of government. By giving a new scope to QE, we hope to have contributed to a new disequilibrium.

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^I Contractual arrangements are a conditional aid policy to be agreed between the individual EZ countries and the European Commission (EC), in which the member states would commit to various structural reforms while receiving financial support; they are embedded in the European Semester and serve to implement the Country Specific Recommendations, mainly in case of a Macroeconomic Imbalances Procedure; their rationale is that if all EZ members develop reforms, a convergence process within the euro area will follow. The European unemployment insurance scheme is an absorption mechanism involving unemployment subsidies and transfers between member states.

^{II} 'North' countries are Belgium, Germany, Ireland, Finland, Luxembourg, Netherlands, Austria. 'South' countries are Greece, Spain, France, Italy, Cyprus, Malta, Portugal; 'East' countries are Slovenia, Slovakia, Latvia, Lithuania, Estonia.

^{III} The reduction of interest rate on government bonds produced by purchases by the central bank increases returns on other assets. This should stimulate investors towards riskier assets linked to the real economy (portfolio effect) and should induce households holding assets with increased value to consume more (wealth effect).

^{IV} See Gros et al., 2015 for a comparison and for a description of the type and size of the interventions

^V See Baldwin (2016) for a review. The idea has been touched upon even by European policy makers, not least Mario Draghi, although he considers direct printing and distribution of money to citizens a measure too difficult to be implemented.

^{VI} Of course, the different monetary approach between the ECB and the Federal Reserve is explained by the nature of the mandate of the two institutions, where only the Federal Reserve has been endowed with a 'dual mandate' that comprises the pursuit of price stability and full employment.

^{VII} These provisions include, in particular, the prohibition of monetary financing by the central bank (art. 123 of TFUE), the prohibition on privileged access by public institutions or governments to financial institutions (art. 124), the 'no-bailout' clause (art. 125), the fiscal provisions for avoiding excessive government deficits (art. 126).

^{VIII} Lavoie (2015) also stresses that art. 123 of the TFUE mentioned by the German Federal Constitutional Court to oppose the OMT programme has no reference at all to secondary market purchases. This makes a 'constitutional challenge' hard to see, where the OMT is a purchasing programme of government securities on the secondary market for EZ countries after precise conditions set by the ECB have been accepted.

^{IX} To be eligible a bond must i) have a remaining maturity of 2 to 30 years, ii) be denominated in euro, iii) be eligible as collateral for ECB monetary policy operations, iv) yield more than the deposit rate (-0.4% in March 2016).

^X Under deflation, like in Japan, real debt increases and this encourages the government to resume more fiscal consolidation, reducing the possibilities to resort to a mixed (not only monetary, but also fiscal) policy response.

^{XI} This clause has been imposed to prevent the ECB from having a block minority in a debt restructuring involving collective action clauses, applied to the procedure for restructuring public debt. This means that the ECB does not want to be in a position in which it has the power to block a potential vote on the restructuring of debt of EZ countries, because not blocking such a procedure could be considered as a monetary financing of a EZ country, since the ECB will not recover the money used to buy bonds.

^{XII} The total amount of EZ sovereign debts purchased between March 2015 and September 2016 will be € 799.71 billion, significantly less than the potential € 836 billion that the ECB could have bought without predefined limits (Claeys et al., 2015).

^{XIII} As a result of the economic crisis, investments have decreased in most European countries, down by as

much as 20% between 2008 and 2009 and, after briefly stabilising in 2010, reduced by another 6% in the period 2011–2013. However, this situation has been going on for far longer; over the last thirty years, both private and public investment has shown a disturbing trend. Calculating the estimated trend of total investments in the EZ in the period 1970–2014 at 2014 prices, there can currently be seen a difference of about €260 billion (Claeys et al., 2014).

^{XIV} Bulgaria, Germany, Spain, France, Italy, Luxembourg, Poland, Slovakia and the United Kingdom.

^{XV} Recently the French and German governors of central banks jointly proposed a Euro Treasury, under the control of the European Parliament (Weidmann and Villeroy de Galhau, 2016).

^{XVI} Regulation (EU) 2015/1017 of the European Parliament and of the Council of 25 June 2015 on the European Fund for Strategic Investments, the European Investment Advisory Hub and the European Investment Project Portal and amending Regulations (EU) No 1291/2013 and (EU) No 1316/2013 - the European Fund for Strategic Investments.

^{XVII} The capital keys reflect the respective country's share in the total population and GDP of the European Union.

^{XVIII} The criteria suggested above will fraction the financial resources collected by the EIB in a quite even manner, given that the distribution of national shares of investment on GDP is not very much dispersed. If this allocation rule is considered not fully able to satisfy the need for a fair reward of bigger contributors to the EZ economy and to ECB equity, more complex allocation criteria can be created combining different indices, the investment gap included (calculations are available on request from the authors). However, for the scope of our paper, what matters is that the distribution of the funds obtained from the implementation of our proposal has to respect the needs of the member states that contribute the most and of those that need the most.

References

- Arestis Philip and Sawyer Malcolm, 2005, 'What is wrong with the euro area monetary model', in Fontana Giuseppe and Realfonzo Riccardo, *The Monetary Theory of Production. Tradition and Perspectives*, Palgrave Macmillan, Basingstoke, 231–242.
- Baldwin Richard, 2016, 'Helicopter money: Views of leading economists', <http://voxeu.org/article/helicopter-money-views-leading-economists>, April.
- Baldwin Richard et al., 2015, *Rebooting the Eurozone: Step 1—agreeing a crisis narrative*, CEPR Policy Insight No. 85, November.
- Banerji Angana, 2015, 'Jobless in Europe', *Finance & Development*, LII(1): 26–28.
- Berg Jesper, Clerc Laurent, Garnier Olivier, Nielsen Erik and Valla Natacha, 2015, *From the Investment Plan to the Capital Markets Union: European Financial Structure and Cross Border Risk-sharing*, CEPPI Working Paper No. 34, December.
- Bibow Jörg, 2015, *Making the Euro Viable: The Euro Treasury Plan*, Levy Institute Working Paper No. 842, July.
- Blanchard Olivier and Leigh Daniel, 2013, 'Fiscal consolidation: At what speed?', <http://voxeu.org/article/fiscal-consolidation-what-speed>, May.
- BMFWF (2015), Investing in Europe's Future. Restarting the Growth Engine, June.
- Bofinger Peter, 2015, 'With Basket-Eurobonds the ECB could act like the FED', *Journal for a Progressive Economy*, November.
- Claeys Grégory, Hüttl Pia, Sapir André and Wolff Guntram, 2014, 'Measuring Europe's investment problem', Bruegel Blog Post, November.
- Claeys Grégory, Leandro Alvaro and Mandra Allison, 2015, *European Central Bank quantitative easing: the detailed manual*, Bruegel Policy Contribution No. 2, March.
- Claeys Grégory and Leandro, Alvaro, 2016, *The European Central Bank's quantitative easing programme: limits and risks*, Bruegel Policy Contribution No. 4, February.
- Cour-Thimann Philippine, 2013, 'Target Balances and the Crisis in the Euro Area', CESifo Forum 14, April.
- Cour-Thimann Philippine and Winkler Bernhard, 2013, *The ECB's non-standard monetary policy*

- measures. *The role of institutional factors and financial structure*, ECB Working Paper Series No. 1528, April.
- De Grauwe Paul, 2007, *Economics of monetary union*, Oxford University Press, Oxford, UK.
 - De Grauwe Paul, 2014, 'Yes, it's the economy, stupid, but is it demand or supply?', CEPS Commentary, January.
 - De Grauwe Paul and Ji Yuemei, 2015, 'Quantitative Easing in the Eurozone: It's Possible without Fiscal Transfers', <http://voxeu.org/article/quantitative-easing-eurozone-its-possible-without-fiscal-transfers>, January.
 - Draghi Mario, 2014, *Unemployment in the euro area*, Annual central bank symposium in Jackson Hole, 22 August.
 - EC (2014), An Investment Plan for Europe, COM(2014) 903 final, November.
 - ECB (2016), Public investment in Europe, Economic Bulletin, Issue 2.
 - ECB (2015), Introductory statement to the press conference, Frankfurt am Main, 22 January.
 - ECJ (2015), Case C-62/14 Gauweiler, judgment of 16 June.
 - Eurobarometer (2015), Public opinion in the European Union, First results, Standard Eurobarometer 84, Autumn.
 - Fabbri Federico, 2015, 'After the OMT case: The Supremacy of EU Law as the Guarantee of the Equality of the Member States', *German Law Journal*, XVI(4): 1003-1024.
 - Georgiadis Georgios, 2015, 'Determinants of global spillovers from US monetary policy', *Journal of International Money and Finance*, XXX(2): 309-336.
 - Giavazzi Francesco and Pagano Marco, 1990, 'Can severe fiscal contractions be expansionary? Tales of two small European countries', *NBER Macroeconomics Annual*, V: 75-122.
 - Godley Wynne and Lavoie Marc, 2007, *Monetary economics. An integrated approach to credit, money, income, production and wealth*, Palgrave Macmillan, Basingstoke.
 - Gros Daniel, Alcidi Cinzia and De Groen Willem Pieter, 2015, *Lessons from Quantitative Easing: Much ado about so little?*, CEPS Policy Brief No. 330, March.
 - Gros Daniel, 2014, *Investment as the key to recovery in the euro area?*, CEPS Policy Brief No. 326, November.
 - High level group on own resources (2014), First assessment report of 17.12.2014
 - Issing Otmar, 2002, 'On Macroeconomic Policy Co-ordination in EMU', *Journal of Common Market Studies*, XL(2): 345-58.
 - Joyce Michael, Miles David, Scott Andrew and Vayanos Dimitri, 2012, 'Quantitative Easing and Unconventional Monetary Policy—an Introduction', *The Economic Journal*, Vol. CXXII, Issue 564: 271-288.
 - Juncker Jean-Claude, 2015, *Completing Europe's Economic and Monetary Union*, in close cooperation with Donald Tusk, Jeroen Dijsselblom, Mario Draghi and Martin Schulz, June.
 - Kenen Peter B., 1969, 'The Theory of Optimum Currency Areas: An Eclectic View', in Robert A. Mundell and Alexander K. Swoboda (eds), *Monetary Problems of the International Economy*, The University of Chicago Press, Chicago and London, 41-60.
 - Lavoie Marc, 2015, *The Eurozone: Similarities and differences with Keynes's Plan*, IMK Working Paper No. 145, January.
 - Losch Michael, 2015, 'Introduction: The economic policy debate on investment', in BMFWF, (op. cit.).
 - Mazzucato Mariana, 2013, *The Entrepreneurial State: Debunking the Public vs. Private Myth in Risk and Innovation*, Anthem Press, London
 - Micossi Stefano, 2015, *The Monetary Policy of the European Central Bank (2002-2015)*, CEPS Special Report No. 109, May.
 - Musgrave Richard A., 1961, *The Theory of Public Finance. A Study in Public Economic*, McGraw-Hill, New York.
 - OFCE/IMK/ECLM (2016), independent Annual Growth Survey 2015.
 - Panico Carlo and Vázquez Suárez Marta, 2007, *A Scheme to Coordinate Monetary and Fiscal Policies in the Euro Area*, PERI Working Paper Series No. 143.
 - Pianta Mario, 2015, 'What is to be produced? The case for industrial policy', *Intereconomics*, 130-137.
 - Rannenberg Ansgar, Schoder Christian and Stráský Jan, 2015, *The macroeconomic effects of the Euro*

Area's fiscal consolidation 2011-2013: A Simulation-based approach, IMK Working Paper No. 156.

- Rubio Eulalia, 2013, *Which financial instrument to facilitate structural reforms in the euro area*, Notre Europe Policy Paper No. 104.
- Rubio Eulalia, Rinaldi David and Pellerin-Carlin Thomas, 2016, *Investment in Europe: making the best of the Juncker Plan. With case studies on digital infrastructure and energy efficiency*, Notre Europe Studies and Reports No. 109, March.
- Saraceno Francesco, 2015, 'The case for a dual mandate for the Ecb', *Journal for a Progressive Economy*, November.
- Sinn Hans-Werner, 2014, 'Ifo President Hans-Werner Sinn criticizes decision of the ECB', 2 October.
- Skidelsky Robert, 2015, 'Taking Corbynomics seriously', *Social Europe*, 25 August.
- Stiglitz Joseph E., Fitoussi Jean-Paul, Bofinger Peter, Esping-Andersen Gosta, Galbraith James K., Grabel Ilene, Griffith-Jones Stephany, Inotai András, Katseli Louka T., Pickett Kate, Rubery Jill and Vandenbroucke Frank, 2014, *A Call for Change. From the Crisis to a New Egalitarian Ideal for Europe*, Progressive Economy, April.
- Tober Silke, 2015, 'Monetary Financing in the Euro Area: A Free Lunch?', *Intereconomics*, L(4): 214-220.
- Turner Adair, 2013, *Debt, Money, and Mephistopheles: How Do We Get Out of This Mess?*, Group of Thirty Occasional Paper No. 87.
- Valla Natacha, Berg Jesper, Clerc Laurent, Garnier Olivier and Nielsen Erik, 2015, *A holistic approach to ECB asset purchases, the Investment Plan and CMU*, CEPPI Policy Brief No. 7, April.
- Van Rompuy Herman, 2012, *Towards a Genuine Economic and Monetary Union*, in close collaboration with José Manuel Barroso, Jean-Claude Juncker and Mario Draghi, December 13-14.
- Varoufakis Yanis, 2016, 'Lies, Damn Lies, And European Growth Statistics', *Social Europe*, March.
- Varoufakis Yanis, Holland Stuart and Galbraith James K., 2013, *A Modest Proposal for Resolving the Eurozone Crisis*, Version 4.0.
- Von Hagen Jürgen and Mundschenk Susanne, 2003, 'Fiscal and monetary policy coordination in Emu', *International Journal of Finance and Economics*, VIII(4): 279-295.
- Watt Andrew, 2015, *Quantitative easing with bite: a proposal for conditional overt monetary financing of public investment*, IMK Working Paper No. 148.
- Weidmann Jens and Villeroy de Galhau François, 2016, *L'Europe à la croisée des chemins*, Banque de France, February.
- Wolff Guntram, 2015, 'Inflation expectations and global risks: the need for ECB action', *Bruegel Blog Post*, October.
- Wolff Guntram, 2014, 'Europe's fiscal wormhole', *Project Syndicate*, 23 October.
- Wray L. Randall, 2011, *Minsky Money Manager Capitalism and the Global Financial Crisis*, Levy Institute Working Paper Series No. 661.