

RETHINKING THE EURO AS A COMMON CURRENCY FOR EUROPE: KEYNES'S PLAN REVISITED

Sergio Rossi¹

University of Fribourg, Switzerland

Received on December 24, 2018

Accepted on February 23, 2019

Abstract

This paper sets off from the monetary–structural origins of the euro-area crisis, which is not a sovereign debt crisis, but a crisis due to a lack of payment finality at international level. The first section explains that international payments across the euro area are not, to date, final for the countries concerned, as the European Central Bank does not operate as settlement institution for the national central banks involved thereby. The exploding TARGET2 imbalances observed in the aftermath of the euro-area crisis are an empirical evidence of this monetary–structural flaw. The second section suggests therefore that at the euro-area level there should be an international monetary institution issuing the euro as a common (instead of a single) currency for the euro-area member countries. Thereby those countries that are currently much in trouble within the euro area may reintroduce a national currency that allows them to recover monetary-policy sovereignty as a tool that can be used, together with fiscal policy, to steer the domestic economy in the country's own interest. The third section concludes with some policy-oriented remarks, putting to the fore the major merits of transforming the euro from a single into a common currency in order to contribute to European (monetary) integration for the common good.

Keywords: *euro area; financial crisis; Keynes's Plan; TARGET2 system*

¹ sergio.rossi@unifr.ch

INTRODUCTION

This paper sets off from the monetary–structural origins of the euro-area crisis, which is not a sovereign-debt crisis, but a crisis due to a lack of payment finality at international level. The first section explains that international payments across the euro area are not, to date, final for the countries concerned, as the European Central Bank does not operate as settlement institution for the national central banks involved thereby. The exploding TARGET2 imbalances observed in the aftermath of the euro-area crisis are an empirical evidence of this monetary–structural flaw. The second section suggests therefore that at the euro-area level there should be an international monetary institution issuing the euro as a common (instead of a single) currency for the euro-area member countries. In such a monetary–structural reform, the euro will be used by central banks only, allowing the residents of any euro-area country to use their own national currency for the settlement of both their domestic and cross-border transactions. Thereby, those countries that are currently much in trouble within the euro area may recover monetary sovereignty, hence monetary policy, which, together with fiscal policy, will allow national policy makers to steer the domestic economy in the country's own interest. The third section concludes with some policy-oriented remarks, putting to the fore the major merits of transforming the euro from a single into a common currency in the spirit of Keynes's Plan in order to contribute to European (monetary) integration for the common good.

THE EUROPEAN MONETARY UNION IS NOT A SINGLE-CURRENCY AREA

The euro-area crisis that erupted at the end of 2009 has shown a number of open issues as regards European Monetary Union (EMU). The original sin of the euro is indeed that the latter is "a currency without a State" (Padoa-Schioppa 2004: 35).² This means that the euro has no economic governance at the EMU level, since the monetary policy of the European Central Bank (ECB) has no parallel set of macroeconomic policies at the same institutional level. This concerns particularly fiscal policy, which remains at the country level, even though with a number of constraints imposed by the EMU and its institutions – which ignore the importance of co-ordinating economic policies across a currency area, as already pointed out by Kenen (1969: 45-46). As a matter of fact, the euro-area crisis showed dramatically that there is no co-ordination between monetary and fiscal policies across the EMU. Further, there are also no fiscal transfers between EMU member countries, which do exist in many countries like the United States and Germany in order to make the country's monetary union viable over the long run, as Draghi (2014) pointed out cogently.

In this regard, and in light of the tremendous damages elicited by the euro-area crisis, it is plain that the euro should be abandoned as a single currency for any EMU residents – as long as there are no permanent fiscal transfers between its member States and a truly European federal Treasury – to become a common currency for the euro-area national central banks only. This allows any country within the euro area to reintroduce its own currency in order to make it less prone to crisis and to contribute to financial stability and maximum employment across the euro area. All this will be much instrumental in curbing fiscal deficits with respect to GDP (we will expand on this in the next section).

To be sure, in its present form the euro area is not an optimum currency area (OCA), because the relevant criteria (see Mundell 1961) have never been met so far by euro-area member countries. The most difficult OCA criterion to respect refers to labour mobility across national borders: even after the eruption of the euro-area crisis at the end of 2009, workers' geographic mobility across the euro area remains weak compared to the United States (which also have a single currency for their member States). Indeed, the comparison between the euro area and the United States is interesting on various accounts. US fiscal and monetary policies are very different from those in the euro area on institutional grounds: they

² In fact, beyond the "original sin" pointed out by Padoa-Schioppa (2004: 35), there are other factors that explain the euro-area crisis, notably German neo-mercantilism as well as functional and personal income distribution both within and across euro-area member countries. See Stockhammer et al. (2009), Cesaratto and Stirati (2010), Simonazzi et al. (2013), and Cesaratto (2015).

consider notably unemployment across the US federation of member States, particularly since there are permanent fiscal transfers between them, in order to reduce unemployment in those US member States most suffering from it. The US Federal Reserve (Fed) is also part of this process, because (according to the Federal Reserve Act) it must "promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates" (Board of Governors of the Federal Reserve System 2018a, Section 2A). This "dual mandate" should inspire the ECB as well as European political leaders (particularly in so-called "peripheral" countries in the euro area) to revise the ECB's statutes, making sure the latter central bank has for the whole euro area a "dual mandate" similar to the Fed's. This will become necessary (at the latest) when the EMU sets up a European federal Treasury with the capacity to tax and spend, as clearly explained by Kenen (1969) and recalled by Bibow (2016). In the meantime, the ECB mandate must be rapidly revised, to include in it the obligation for the ECB to purchase (without any limits or conditions) the government bonds of those countries that are still most suffering from the euro-area crisis, to wit, the "peripheral" countries around the Mediterranean Sea.

As a matter of fact, the introduction of the euro led many financial market participants to speculate that a single currency is the best guarantee against exchange-rate risks. This gave rise to a mushroom growth of capital flows into some "peripheral" EMU countries during the first ten years of the EMU. Their country risk was thus ignored, considering that the euro area is too big to fail. Indeed, despite several "excessive public deficits" in a number of euro-area countries that did not respect the relevant Maastricht criterion during the first ten years of the EMU, all these countries' residents (in both the public and private sectors of the economy) continued to pay much lower interest rates than they should have paid normally (Rossi and Dafflon 2012). Hence, a credit bubble has inflated – notably in the private sector of "peripheral" countries like Spain and Ireland with regard to the housing market. In this framework, the single monetary policy carried out by the ECB aggravated the situation, since it contributed to inflate the credit bubble, which, once the euro-area crisis burst, ravaged a number of banks' balance sheets also in so-called "core" EMU countries like Germany. ECB interest rates were clearly too low for "peripheral" countries such as Spain, where they inflated a credit bubble that initially benefited their domestic economy as well as their foreign creditors, but later on induced a systemic crisis across the euro area. As Vernengo and Pérez-Caldentey (2012) noted, monetary union and financial deregulation allowed "core" EMU countries to put to practical use their export-led strategy for economic growth against the interest of their neighbours. In particular, German savings that reflect Germany's huge current-account surpluses have been lent to deficit countries, which have thereby financed their current-account deficits before the crisis burst. The resulting economic growth induced by the indebtedness of "peripheral" countries has strongly increased and sustained their domestic demand, thus allowing "core" countries such as Germany to record increasing current-account surpluses before the eruption of the global financial crisis in 2008 after the demise of Lehman Brothers in the United States (Rossi 2013, 2015).

Now, rather than supporting with permanent fiscal transfers those EMU countries most in trouble because of the crisis, the European institutions (influenced by Germany) have obliged the hardly-hit countries to adopt a series of "fiscal consolidation" policies that aggravated their macroeconomic situation eventually. These austerity policies in fact reduced public spending (first and foremost as regards health, education, and social security) and increased taxes (on consumption rather than on wealth and financial transactions). As a result, domestic demand weakened in both the private and public sectors of these countries, notably in those economies where the demand on the market for produced goods and services should have been increased to support economic growth and the employment level. The negative consequences of austerity policies hit also the labour market, because the downward pressure on the wage level aggravated the economic situation rather than increasing the country's competitiveness. Hence, financial market participants have been considering that countries implementing "fiscal consolidation" policies will not be in a position to reimburse their debts when the latter fall due, which increases the

spreads on their public debt with respect to Germany and the pressures on their own government to adopt further austerity policies in a never-ending vicious circle. This is so much so that an economic recession may distress the whole euro area, as intra-euro-area trade is affected negatively by "fiscal consolidation" (see Mastromatteo and Rossi 2015, 2019).

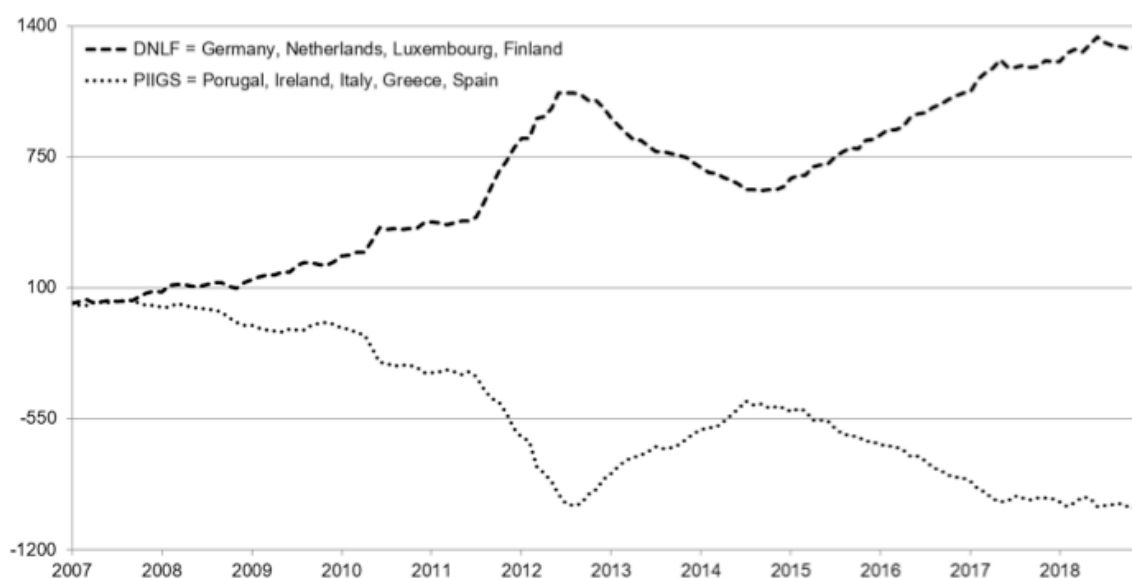
All in all, the neoliberal economic policies adopted before as well as after the bursting of the euro-area crisis cannot solve the problems that they have induced themselves. A monetary–structural reform of the euro area can be the right solution, provided that the logical and conceptual flaws of the EMU are eradicated. The next section expands on this in the spirit of the proposals that Keynes presented at the Bretton Woods conference in July 1944 unsuccessfully.

A MONETARY–STRUCTURAL REFORM TO ACHIEVE EUROPEAN MONETARY INTEGRATION

Paradoxically, the EMU is not a monetary union. This cannot be explained, as De Grauwe (2013) maintains, by the fact that the euro is a foreign currency in all EMU countries, since the latter have abandoned their monetary sovereignty to the ECB. The lack of monetary union across the euro area results from the fact that the payment and settlement system called TARGET2 still lacks a settlement institution between national central banks (Rossi 2013).

Before the bursting of the euro-area crisis, in 2009, the positive TARGET2 balances credited to net exporting countries (like Germany) were spent by their own residents, purchasing the (private or public) bonds that deficit countries (such as Greece) sold in order for them to finance their net imports. As a result, TARGET2 balances have been kept to a minimum before the bursting of the euro-area crisis. Since then, by contrast, surplus countries are much less prone to lend their positive TARGET2 balances to net importing countries. This explains the mushroom growth of TARGET2 imbalances since 2009 (Figure 1).³

FIGURE 1
THE EVOLUTION OF TARGET2 BALANCES, 2007–2018 (BILLION EUROS)



Source: www.eurocrisismonitor.com (author's elaboration).

³ For different explanations of TARGET2 imbalances, see Cecchetti et al. (2012), Cecioni and Ferrero (2012), Auer (2014), and Febrero et al. (2018).

TARGET2 imbalances are the empirical evidence of the fact that, to date, any euro-area country's foreign trade does not give rise to a final payment for the countries concerned when the TARGET2 system credits the relevant national central banks. Indeed, a final payment between the payer and the payee means that the latter has no further claims on the former (Goodhart 1989: 26). This amounts to saying that those payments that national central banks carry out in the TARGET2 system are not final, as they leave the exporting country with a claim on the importing country⁴ – each country being represented by its own central bank within TARGET2. To date, as a matter of fact, the ECB acts as a settlement *agent*, keeping the books of TARGET2, instead of being the settlement *institution*, which issues the means of final payment for the parties involved thereby (that is, national central banks in the euro area).

As pointed out by the European Central Bank (2007: 34), "[c]ross-border TARGET payments are processed via the national RTGS [Real Time Gross Settlement] systems and exchanged directly on a bilateral basis between NCBs [national central banks]". To be more precise in this regard, "[o]nce the sending NCB has checked the validity of a payment message and the availability of funds or sufficient overdraft facilities, the amount of the payment is debited irrevocably and without delay from the RTGS account of the sending credit institution and credited to the Interlinking account of the receiving NCB" (p. 35).⁵ This means that the ECB does not issue (central bank) money, contrary to what occurs within any national payments system, where the national central bank intervenes as settlement institution, issuing its own money units in order to make sure that the interbank payment is final for all banks concerned (see Rossi 2007a: 67-78).

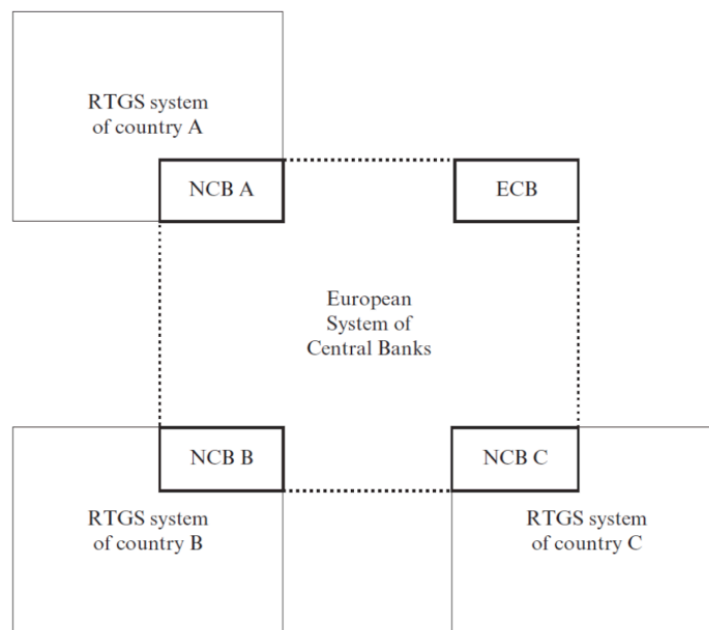
Indeed, the TARGET2 system is much different on structural grounds from the Federal Reserve Wide Network (Fedwire) that makes sure all interbank payments are final for the parties concerned in the United States. Fedwire is actually in charge of payment finality for all payment orders across the 12 Fed Districts in the United States. These payments are recorded in the Interdistrict Settlement Account (ISA) by a centralized accounting system. As the Board of Governors of the Federal Reserve System (2018b: 50) explains, "[t]he daily settlement between Districts is conducted by the centralized accounting system, which captures the data needed to conduct settlement. Once settlement has been effected, the appropriate entries are posted directly to each Reserve Bank's accounts", as a result of the final payment between the relevant Districts. Hence, "[p]ayments between commercial banks of different Districts [in the United States] are done via the Fedwire system and are settled via the accounts of the commercial banks at the corresponding District Fed. The payments are booked in the ISA, which is a real-time gross settlement system" (Sinn and Wollmershäuser 2012: 496).

Now, TARGET2 is also a RTGS system, but this does not suffice to conclude that both the US and the EMU payments systems have the same monetary-structural architecture. Actually, these systems differ on a major point: in the United States, a District Fed must finally pay its yearly average increases of its ISA negative balances through a transfer of financial assets, whilst the euro-area national central banks have not such an obligation (yet). Hence, their negative TARGET2 balances may increase without any limitations, thereby increasing the positive balances of net exporting countries in the same system. This essential distinction between the Fedwire and TARGET2 systems stems from the fact that the ECB does not act as a settlement institution between the relevant national central banks, as already pointed out (Rossi 2013). Indeed, the TARGET2 system has two rather than three institutional levels: the first level is composed by the ECB and the national central banks of EMU countries, whilst the second level is made of banks and non-bank financial institutions in the latter countries (Figure 2).

⁴ This does not imply, however, that the paying resident does not pay finally. In fact, cross-border payments are final for the agents concerned, but are not so (yet) for the countries within which these agents reside (see Rossi 2009a, for analytical elaboration).

⁵ The "Interlinking account" is an account that each national central bank has within the Interlinking mechanism, which designates "the infrastructures and procedures which link domestic RTGS systems in order to enable the processing of inter-Member State payments within TARGET" (European Central Bank 2011: 58).

FIGURE 2
THE TWO-TIER PAYMENT INFRASTRUCTURE OF TARGET2



Let us point out in this regard that the ECB to date acts at the same institutional level of national central banks. This means that it is not their settlement institution, as it should be according to its specific role (Rossi 2012).

Now, the current monetary–structural disorder within the euro area must be eradicated, as it is a major factor of financial instability that can give rise to a systemic crisis. The solution to this problem may occur in two steps. In the first step, as we explain in this section, the euro must become a purely supranational currency, reintroducing national currencies in those EMU countries that are most in trouble, thereby allowing them to recover their monetary sovereignty in order for them to have an additional economic policy instrument to address the origins and consequences of the euro-area crisis. Later on, in a second step, which might take many years to occur owing to political reasons, the ECB must become a settlement institution within the TARGET2 system, issuing its own units of (central bank) money to make sure that all payments across the euro area are final for the national central banks involved thereby.

Before the ECB becomes the central bank of national central banks in the EMU, each of its member countries can reintroduce its own national currency and use the euro only for the settlement of international transactions. This recalls the Keynes Plan, which was put to the fore in the early 1940s to set up an International Clearing Union, on top of which Keynes put an International Settlement Institution (ISI) issuing bancor as supranational currency (see Keynes 1980, but also Schmitt 1973, and Rossi 2007b, 2009b).⁶ We do not discuss in this paper the merits and shortcomings of the Keynes Plan (see Rossi, 2007b: 100-103 for such a discussion), but focus on how it will be possible for EMU member countries to recover their monetary sovereignty and transform the euro into a means of final payment for all their international transactions across the euro area (and beyond it). The main point of the suggested reform is to make sure that all cross-border payments are final for the countries involved thereby – and not just for their own residents, as it occurs to date. This is essential to make sure an international monetary order

⁶ Lavoie (2015) argues that there exist some similarities between Keynes's Plan and the actual working of the TARGET2 system, whilst Barredo-Zuriarrain et al. (2017) put forward a proposal of reforming such a system in the spirit of Keynes's Plan.

exists as regards the euro area. An ancillary, complementary point of the monetary–structural reform that we propose in this paper is the recovery of monetary sovereignty by those euro-area member countries whose population has been most suffering from the "fiscal consolidation" policies adopted by their national governments in the aftermath of the crisis that burst at the end of 2009 across the EMU.

Let us suppose, for instance, that the government of country A (in the euro area) decides to reintroduce its national currency (money A, MA) for the settlement of its residents' domestic transactions. If so, then the euro will be used only for paying the cross-border transactions of its residents, who nevertheless will pay and be paid in MA for them. The euro will be used only by the central bank of country A, which represents this country as a whole within the international monetary space. In such a case, every cross-border payment concerning this country will imply two currencies, MA and the euro, the latter being the "vehicle" of the former in the international monetary space (Table 1).

TABLE 1
THE RESULT OF A CROSS-BORDER PAYMENT FROM A NON-EURO EMU MEMBER COUNTRY

Central Bank of Country A			
Domestic Department		External Department	
Assets	Liabilities	Assets	Liabilities
Bank B1 (importer)	External Department	Domestic Department	Central Bank of Country B
+x MA	+x MA	+z euros	+z euros

with $x \text{ MA} = z \text{ euros}$.

When an importer in country A sends a payment order (for an amount of z euros) to the paying bank (B1), the latter will not carry out this order as it does to date, that is to say, through the payee bank (B2) in the exporting country (see previous section). The cross-border payment will occur through the national central bank, which to this end needs to split its book-keeping in two departments: the domestic department records in money A every payment concerning the rest of the world, whilst the foreign department records the same payment in euros, to make it final at the international level as noted by Keynes (1980: 168).⁷ Thereby, country A can replace the euro with its own national currency and recover its monetary sovereignty, that is, the possibility to implement its monetary-policy decisions in order to steer the domestic economy according to its own needs. If also country B replaces the euro with its own national currency (money B, MB), the book-keeping entries in its banking system are analogous (*mutatis mutandis*) to those recorded in Table 1 for country A. By contrast, if country B sticks to the euro, its cross-border payment is carried out as it occurs to date, to wit, by crediting the commercial bank (in which the exporter has an account) through the TARGET2 system.

Let us now suppose that a resident in country A receives a payment from a resident in country B for an amount of z' euros. Table 2 shows the relevant entries.

⁷ The creation of these two departments within the national central bank is not necessary in order for our monetary–structural reform proposal to be successful, because its objectives can be achieved even if the national central bank keeps its actual single-department book-keeping. In the latter case, however, each commercial bank must keep two accounts with its central bank: one in national currency and another one in euros. This solution gives rise to a problem, nevertheless, as it does not avert the possibility that a bank uses the euros deposited with its central bank, submitting thereby the country's residents to the monetary policy decisions of the ECB (as this occurs to date).

TABLE 2
THE RESULT OF A CROSS-BORDER PAYMENT TO A NON-EURO EMU MEMBER COUNTRY

Central Bank of Country A			
Domestic Department		External Department	
Assets	Liabilities	Assets	Liabilities
External Department	Bank B1 (exporter)	Central Bank of Country B	Domestic Department
+x' MA	+x' MA	+z' euros	+z' euros

with $x' \text{ MA} = z' \text{ euros}$.

Similarly to Table 1, Table 2 shows that any cross-border payment concerning country A is recorded twice in the central bank ledgers: there is a double-entry in money A and an equivalent double-entry in euros simultaneously. This is indeed necessary in order to separate the circuit of MA from the euro circuit. If the latter does not interfere with the former, then country A recovers its monetary sovereignty, becoming simultaneously a member of the international monetary space defined by the circuit of euros involving national central banks only.

In our stylized example, at this stage there exists a current-account imbalance, because the payment of country A's imports ($x \text{ MA}$ or equivalently $z \text{ euros}$) is not of the same amount as the payment of this country's exports ($x' \text{ MA}$, that is, $z' \text{ euros}$). Let us thus suppose that country A records a trade deficit for an amount of $x - x' \text{ MA}$ ($z - z' \text{ euros}$). In fact, this is also a *payment* deficit, which then must be settled to avoid international monetary disorder. This disorder affects the actual working of TARGET2: contrary to the Fedwire system – in which (let us recall it) each District Bank must settle, once a year, the yearly average increase of its negative balance through a transfer of financial assets – the national central banks participating to the TARGET2 system have not (yet) such an obligation. As a result, their negative balances can go on increasing without any limitations, thereby increasing also the positive balances of those national central banks whose countries record a trade surplus like Germany. This, as we already pointed out, stems from the fact that the ECB does not act as settlement institution for the national central banks in the TARGET2 system.

Hence, if EMU member countries reintroduce their national currencies, their central banks must be obliged to settle (at least once per year) their negative balances within TARGET2 through a transfer of financial assets to the central banks of those countries that have a positive balance within that system. Let us analyse this with an example.

Suppose that the central bank of country A must sell financial assets for an amount that corresponds to this country's trade deficit (worth $x - x' \text{ MA}$, that is, $z - z' \text{ euros}$). This financial-market transaction may occur with the central bank of country B or with any other market participant. The important point in this regard is that the central bank of country A is credited with an amount of $(z - z')$ euros corresponding to this country's trade deficit, which is thereby paid finally in the international monetary space. If such a transaction occurs between countries A and B, the relevant entries are those recorded in Table 3.

TABLE 3
THE RESULT OF THE SETTLEMENT OF A NON-EURO EMU MEMBER COUNTRY'S TRADE DEFICIT

Central Bank of Country A			
Domestic Department		External Department	
Assets	Liabilities	Assets	Liabilities
Financial assets	Central Bank of Country B	Central Bank of Country B	Domestic Department
-(x-x') MA			+(z-z') euros
External Department			
+(x-x') MA			

with $(x-x') \text{ MA} = (z-z') \text{ euros}$.

Let us point out that the sale of financial assets by the central bank of country A (that will occur once the monetary-structural reform that we propose in this paper is carried out) does not boil down to the sale of government bonds that deficit countries have been doing during the decade preceding the bursting of the euro-area crisis. The central bank of the deficit country, in fact, will have to dispose of these assets in its own portfolio. In this case, the deficit country will be obliged to export more during the relevant year – at the end of which the negative balances within TARGET2 must be settled, in real terms, through a transfer of financial assets between the participating national central banks.⁸ To be sure, the payment for financial exports will occur similarly to any payments for commercial exports: the national central bank will record the relevant entries in its two book-keeping departments to finalize the payment order and to make sure that the euro circuit does not interfere with the circuit of its national currency.

All in all, the current-account deficit of country A will be finally paid at international level through an export of financial assets that transfers a purchasing power from A to the rest of the world, settling thereby the external debt of the foreign department of this country's central bank (Table 4).

TABLE 4
THE RESULT OF PAYMENT FINALITY FOR A TRADE DEFICIT NON-EURO EMU COUNTRY

Central Bank of Country A			
Domestic Department		External Department	
Assets	Liabilities	Assets	Liabilities
Bank B1		0 euros	0 euros
(x-x') MA			
Financial assets			
-(x-x') MA			

Now, if no financial-market participant buys those financial assets that a deficit country (like A) needs to sell (through its central bank) in order to pay this deficit finally, there must be an international financial intermediary – such as the ISI – which intervenes in this respect. Indeed, although country A might be

⁸ The ISI could verify, for instance on a quarterly basis, that each national central bank has enough financial assets in its own portfolio, in order to settle the current-account deficits of its country's balance of payments. To do this, the ISI may consider the criteria adopted by the European Commission with regard to the macroeconomic imbalance procedure, which has set a limit of 6 per cent of the country's GDP for its trade surplus and a limit of 4 per cent for its trade deficit. This implies that a country like Germany will prefer to import more goods and services rather than buying financial assets, in order for it to avert to be sanctioned within that framework. See Rossi (2017) for analytical elaboration.

asked to reduce its imports and/or to increase its exports to balance its foreign trade over time, any trade deficit must be paid finally, to avoid international monetary disorder. It is at this stage that the ECB must intervene, as explained in the previous section, to make sure that the government bonds of country A are considered as eligible financial assets for monetary-policy operations. If so, then the government bonds of deficit countries in the euro area will be demanded again by financial-market participants, since the latter may dispose of these bonds when they want to obtain liquidity from the Eurosystem. This should be enough to make sure that the ECB is not under political pressure to purchase these government bonds (on the primary market), even though this purchase should be possible once the ECB's statutes are revised to adopt the "dual mandate" of the Fed (as explained above).

In the meantime, the lender-of-last-resort role of the ECB as regards the governments of the EMU member countries can be carried out by the ISI, which would thereby act as an international financial intermediary as far as it would lend to deficit countries (like A) the positive balances denominated in euros that are saved by surplus countries (like B, in the above stylized example). To reject the critiques of those economists who refuse a lender of last resort for national governments in the euro area, it is enough to consider that, in fact, no central bank grants a credit from scratch to any government that would ask it for a loan. As a matter of fact, any national central bank that, to date, intervenes as a lender of last resort – be it for the government or any financial-market participants – merely transfers to deficit agents the savings recorded in the bank accounts that other agents possess. Let us show this with regard to our stylized example (Table 5).

TABLE 5
AN INTERNATIONAL FINANCIAL INTERMEDIARY IS NOT A LENDER OF LAST RESORT

Central Bank of Country A			
Domestic Department		External Department	
Assets	Liabilities	Assets	Liabilities
Financial assets sold to the ISI	ISI	+(z-z') euros	Domestic Department
-(x-x') MA			+(z-z') euros
External Department			
+(x-x') MA			

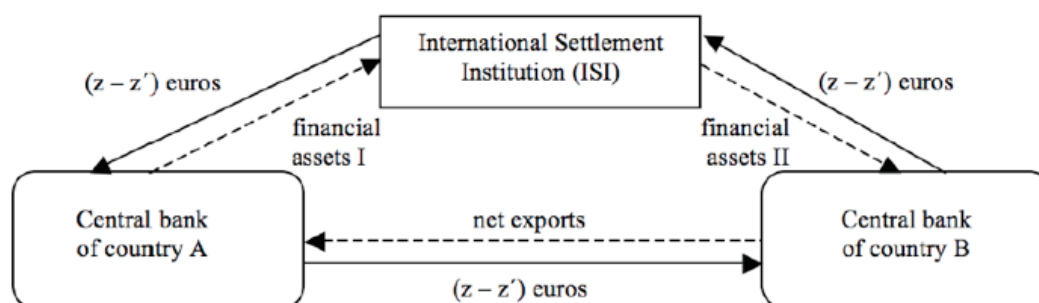
International Settlement Institution	
Assest	Liabilities
	Central Bank of Country B (External Department)
	-(z-z') euros
	Central Bank of Country A (External Department)
	+(z-z') euros

Central Bank of Country B			
Domestic Department		External Department	
Assets	Liabilities	Assets	Liabilities
Financial assets bought from the ISI	External Department	Domestic Department	ISI
+(y-y') MB	+(y-y') MB	+(z-z') euros	+(z-z') euros

with $(x-x') \text{ MA} = (z-z') \text{ euros} = (y-y') \text{ MB}$.

As Table 5 shows, the central bank of country B (a surplus country) spends the amount corresponding to the trade surplus of this country in the payment of the financial assets that it purchases from the ISI, which transfers thereby to the central bank of country A (a deficit country) the purchasing power that the latter needs to pay finally its net imports by selling financial assets to the ISI. Figure 3 illustrates the relevant flows.

FIGURE 3
THE TWO CIRCUITS INVOLVING THE INTERNATIONAL SETTLEMENT INSTITUTION



As Figure 3 shows, the ISI intervenes merely as an international financial intermediary, that is, it does not originate the credit that it provides to the central bank of country A. This credit is eventually financed by the income that country B earns owing to its net commercial exports, which is recorded for an amount of $(z - z')$ euros by this country's central bank. All in all, it is the surplus country (B) that acts as a lender of last resort indirectly, to wit, through the ISI as an intermediary, in order to grant a credit to deficit countries like A for the amount necessary to settle their current-account imbalances and with a payment that is final not just for all agents concerned but also for their countries.

CONCLUSION

The monetary-structural reform of the euro-area payment system that we propose in this paper has two objectives. On the one hand, it aims at transforming promises of payment into final payments for the countries concerned by the cross-border transactions of their residents. On the other hand, it intends disposing of "fiscal consolidation" that, at the time of writing, affects negatively both the economic situation and the life of much of the euro-area population. The first objective is a factor of financial stability, because it limits the possibility that banks inflate a bubble when opening credit lines in the current monetary system. Actually, the TARGET2 system does not make sure that a payment is final for the countries concerned by it. The second objective, by contrast, is meant to induce surplus countries, like Germany, to contribute reducing imbalances across the euro area, by increasing their commercial imports from deficit countries within it. This does not only rebalance austerity policies in those EMU countries most suffering from the euro-area crisis: it also induces the creation of new jobs, hence also of fiscal revenues, both of which are extremely necessary in all these countries.

In spite of the fact that this reform is certainly very difficult to put into practice, owing to the power relations between EMU countries as well as between social groups in each of them, such a reform can gather a large political consensus both within these countries and at the EU level, considering the increasing risks of a euro-area implosion when, for instance, a country like Italy or Spain has to leave the EMU without a valid solution like the monetary-structural reform proposed in this paper. As Machlup (1963: 259) put it, "bank managers and others with practical experience ought to stop regarding anything that has never been tried as impractical, and the theorists ought not to give up attempts to advance their favorite schemes just because the bankers refuse to listen." By the way, the monetary-structural reform proposed in this paper

has some similarity with the European Payments Union (EPU) that existed in the 1950s. As Triffin (1978: 15) noted in this regard, "[t]he EPU agreement was a remarkably clean and simple document, embodying sweeping and precise commitments of a revolutionary nature, which overnight drastically shifted the whole structure of intra-European payments from a bilateral to a multilateral basis." The merit of the EPU was to give a multilateral character to those international payments that were recorded by the Bank for International Settlements (BIS). Now, the problem of the EPU was indeed related to the BIS, which acted just as a settlement *agent* (recording the results of these transactions in its own unit of account) instead of operating as settlement *institution* (issuing the means of final payment for the EPU member countries). In fact, no foreign deficit can be paid finally with a simple unit of account: a truly international money is necessary for this purpose (see Rossi 2009c for analytical elaboration on the EPU).

REFERENCES

- Auer, Raphael (2014): "What drives TARGET2 balances? Evidence from a panel analysis", *Economic Policy*, vol. 29, no. 77, pp. 139–197.
- Barredo-Zuriarrain, Juan, Molero-Simarro, Ricardo and Quesada-Solana, Alejandro (2017): "Euro-dependence – A peripheral look beyond the monetary union: a proposal of reform of the TARGET2", *Review of Radical Political Economics*, vol. 49, no. 3, pp. 375–393.
- Bibow, Jörg (2016): "Making the euro viable: the Euro Treasury Plan", *European Journal of Economics and Economic Policies: Intervention*, vol. 13, no. 1, pp. 72–86.
- Board of Governors of the Federal Reserve System (2018a): *Federal Reserve Act*, Washington, Federal Reserve System, available online at www.federalreserve.gov/aboutthefed/fract.htm (last accessed on 24 December 2018).
- Board of Governors of the Federal Reserve System (2018b): *Financial Accounting Manual for Federal Reserve Banks*, Washington: Federal Reserve System, available online at www.federalreserve.gov/monetarypolicy/files/BSTfinaccountingmanual.pdf (last accessed on 24 December 2018).
- Cecchetti, Stephen, McCauley, Robert and McGuire, Patrick (2012): "Interpreting TARGET2 balances", *Bank for International Settlements Working Paper*, no. 393.
- Cecioni, Martina and Ferrero, Giuseppe (2012): "Determinants of TARGET2 imbalances", *Bank of Italy Occasional Paper*, no. 136.
- Cesaratto, Sergio (2015): "Balance of payments or monetary sovereignty? In search of the EMU 's original sin", *International Journal of Political Economy*, vol. 44, no. 2, pp. 142–156.
- Cesaratto, Sergio and Stirati, Antonella (2010): "Germany and the European and global crisis", *International Journal of Political Economy*, vol. 39, no. 4, pp. 56–86.
- De Grauwe, Paul (2013): "The European Central Bank as lender of last resort in the government bond markets", *CESifo Economic Studies*, vol. 59, no. 3, pp. 520–535.
- Draghi, Mario (2014): "Stability and prosperity in monetary union", Speech at the University of Helsinki, Helsinki, 27 November, available online at https://www.ecb.europa.eu/press/key/date/2014/html/sp141127_1.en.html (last accessed on 24 December 2018).
- European Central Bank (2007): *Payment and Securities Settlement Systems in the European Union*, Volume 1: *Euro Area Countries*, Frankfurt: European Central Bank.
- European Central Bank (2011): *TARGET Annual Report 2010*, Frankfurt: European Central Bank.

Febrero, Eladio, Uxo, Jorge and Bermejo, Fernando (2018): "The financial crisis in the eurozone: a balance-of-payments crisis with a single currency?", *Review of Keynesian Economics*, vol. 6, no. 2, pp. 221–239.

Goodhart, Charles Albert Eric (1989): *Money, Information and Uncertainty*, London and Basingstoke: Macmillan, second edition (first published 1975).

Kenen, Peter Bain (1969): "The theory of optimum currency areas: an eclectic view", in Robert Alexander Mundell and Alexander Swoboda (eds), *Monetary Problems of the International Economy*, Chicago: University of Chicago Press, pp. 41–60.

Keynes, John Maynard (1980): *The Collected Writings of John Maynard Keynes*, vol. XXV, *Activities 1940–1944. Shaping the Post-War World: the Clearing Union*, ed. by Donald E. Moggridge, London and New York: Macmillan and Cambridge University Press.

Lavoie, Marc (2015): "The Eurozone: similarities to and differences from Keynes's Plan", *International Journal of Political Economy*, vol. 44, no. 1, pp. 3–17.

Machlup, Fritz (1963): "Reform of the international monetary system", in Herbert G. Grubel (ed.), *World Monetary Reform: Plans and Issues*, Stanford and London: Stanford University Press and Oxford University Press, pp. 253–60.

Mastromatteo, Giuseppe and Rossi, Sergio (2015): "The economics of deflation in the euro area: a critique of fiscal austerity", *Review of Keynesian Economics*, vol. 3, no. 3, pp. 336–350.

Mastromatteo, Giuseppe and Rossi, Sergio (2019): "The mirage of expansionary fiscal consolidation to resolve the euro-area crisis", in Kate Power, Tanweer Ali and Eva Lebduskova (eds), *Discourse Analysis and Austerity: Critical Studies from Economics and Linguistics*, London and New York: Routledge, forthcoming, pp. 253–265.

Mundell, Robert Alexander (1961): "A theory of optimum currency areas", *American Economic Review*, vol. 51, no. 4, pp. 657–665.

Padoa-Schioppa, Tommaso (2004): *The Euro and Its Central Bank: Getting United after the Union*, Cambridge, MA: MIT Press.

Rossi, Sergio (2007a): *Money and Payments in Theory and Practice*, London and New York: Routledge.

Rossi, Sergio (2007b): "The monetary-policy relevance of an international settlement institution: the Keynes plan 60 years later", in Alberto Giacomini and Maria Cristina Marcuzzo (eds), *Money and Markets: A Doctrinal Approach*, London and New York: Routledge, pp. 96–114.

Rossi, Sergio (2009a): "Wechselkursschwankungen als Folge einer Währungsunordnung: Neugestaltung des internationalen Währungssystems im Sinne von Keynes", in Jürgen Kromphardt and Heinz-Peter Spahn (eds), *Die aktuelle Währungsunordnung: Analysen und Reformvorschläge*, Marburg: Metropolis Verlag, pp. 175–208.

Rossi, Sergio (2009b): "International payment finality requires a supranational central-bank money: reforming the international monetary architecture in the spirit of Keynes", *China–USA Business Review*, vol. 8, no. 11, pp. 1–20.

Rossi, Sergio (2009c): "A common currency for Middle Eastern and North African countries? Lessons from the European Monetary Union", in David Cobham and Ghassan Dibeh (eds), *Monetary Policy and Central Banking in the Middle East and North Africa*, London and New York: Routledge, pp. 226–245.

Rossi, Sergio (2012): "The monetary–structural origin of TARGET2 imbalances across Euroland", in Claude Gnos and Sergio Rossi (eds), *Modern Monetary Macroeconomics: A New Paradigm for Economic Policy*, Cheltenham and Northampton: Edward Elgar, pp. 221–238.

Rossi, Sergio (2013): "Financialization and monetary union in Europe: the monetary–structural causes of the euro-area crisis", *Cambridge Journal of Regions, Economy and Society*, vol. 6, no. 3, pp. 381–400.

Rossi, Sergio (2015): "The euro-area crisis: structural origins and possible exit strategies", in Aristidis Bitzenis, Nikolaos Karagiannis and John Marangos (eds), *Europe in Crisis: Problems, Challenges, and Alternative Perspectives*, Basingstoke and New York: Palgrave Macmillan, pp. 143–154.

Rossi, Sergio (2017): "A structural-reform proposal for a two-speed European monetary union", in Nazaré da Costa Cabral, José Renato Gonçalves and Nuno Cunha Rodrigues (eds), *The Euro and the Crisis: Perspectives for the Eurozone as a Monetary and Budgetary Union*, London and New York: Springer, pp. 33–46.

Rossi, Sergio and Dafflon, Bernard (2012): "Repairing the original sin of the European Monetary Union", *International Journal of Monetary Economics and Finance*, vol. 5, no. 2, pp. 102–123.

Schmitt, Bernard (1973): *New Proposals for World Monetary Reform*, Albeuve: Castella.

Simonazzi, Annamaria, Ginzburg, Andrea and Nocella, Gianluigi (2013): "Economic relations between Germany and southern Europe", *Cambridge Journal of Economics*, vol. 37, no. 3, pp. 653–675.

Sinn, Hans-Werner and Wollmershäuser, Timo (2012): "Target loans, current account balances and capital flows: the ECB's rescue facility", *International Tax and Public Finance*, vol. 19, no. 4, pp. 468–508.

Stockhammer, Engelbert, Onaran, Özlem and Ederer, Stefan (2009): "Functional income distribution and aggregate demand in the euro area", *Cambridge Journal of Economics*, vol. 33, no. 1, pp. 139–159.

Triffin, Robert (1978): "Gold and the dollar crisis: yesterday and tomorrow", *Princeton University Essays in International Finance*, no. 132.

Vernengo, Matías and Pérez-Caldentey, Esteban (2012): "The euro imbalances and financial deregulation: a post Keynesian interpretation of the European debt crisis", *Real-World Economics Review*, no. 59, pp. 83–104.