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Abstract	<p>The Economic and Monetary Union (EMU) cannot work at a full speed as it is still fragmented across countries. This is mainly mirrored by diverging performances in terms of competitiveness between surplus and deficit countries and culminated in a balance of payments (BoP) crisis with ‘sudden stops’ in private capital inflows. So far the ECB’s liquidity injections, necessary to avoid a disruptive BoP adjustments, have not been able to solve the credit crunch suffered by various deficit-countries, thus hampering the very transmission belt of monetary policy. These imbalances are clearly reflected in an asymmetric distribution of liquidity recorded by TARGET2 (T2), which itself tends to further amplify intra-EMU divergence.</p> <p>This paper proposes to create a subsystem of T2, called TARGET3 (T3), managed as a multilateral clearing system and devoted to commerce and direct investments. It aims at creating incentives for banks to channel the liquidity created by the ECB towards the real economy and to achieve a medium-term equilibrium in the external balance of each country.</p>

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Bringing Money Back to the Real Economy: Room for a TARGET3¹

Franco Bruni and Andrea Papetti*

Introduction

On May 2, 2013, when asked how he felt about the perception that the European Central Bank (ECB) seemed to have been supporting financial markets, but not doing much to help the real economy, Mario Draghi replied: «I would use the word ‘frustrated’». ² On that very same day, Draghi announced an interest rate cut of 25 basis points to a record low of 0.5%.

The source of the ECB’s frustration might go under the label “fragmentation”, which basically means that – despite more than a decade has passed from the inception of the single currency – member states within the Economic and Monetary Union (EMU) are still very different both economically and financially, which is somehow at odds with the convergence narrative as told in the early years of the euro. ³ On the *funding* side fragmentation manifested when Southern countries registered “sudden stops” ⁴ in private capital inflows, which were supported by the ECB’s liquidity injections and by the TARGET2 (T2) ⁵ system.

As noted by Cour-Thimann (2013: 43), T2 functioned as an “adjustment valve” that directed pressures away from the real economy: it allowed financial agents to invariably transfer funds from

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¹ An early version of the proposal was developed in Papetti (2013) – MSc thesis with advisors: Prof. Massimo Amato and Prof. Franco Bruni; discussant: Prof. Luca Fantacci. We are grateful to M. Amato and L. Fantacci with whom we share birth and development of the proposal. The basic idea underlying TARGET3 has been already mentioned by Leonardo Domenici, member of the European Parliament, on May 7, 2013, during the Economic dialogue and exchange of view with Jeroen Dijsselbloem, president of the Eurogroup. For Italian readers see also Fantacci and Papetti (2013) at *Costituzionalismo.it* (forthcoming).

² Cf. <http://www.ecb.int/press/pressconf/2013/html/is130502.en.html#qa>

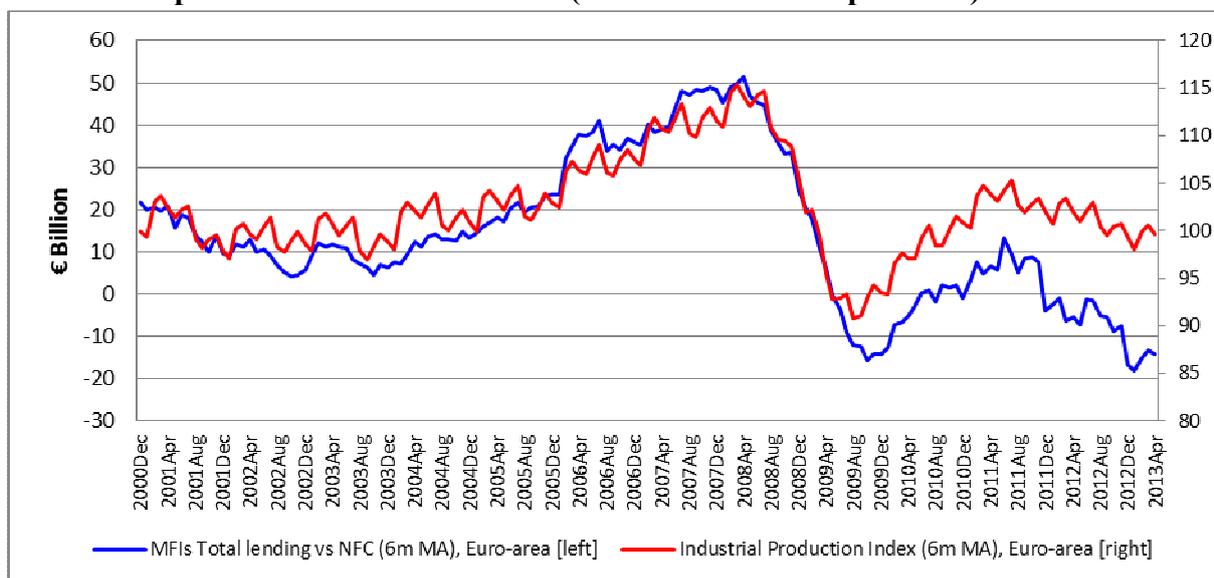
³ Cf. Blanchard and Giavazzi (2002).

⁴ Merler and Pisani-Ferry (2012a).

⁵ TARGET2 stands for *Trans-European Automated Real-time Gross-settlement Express Transfer* system, 2nd generation. It is the Eurosystem’s electronic operational tool through which national central banks (NCBs) of member countries provide payments and settle intra-euro-zone transactions denominated in euro. The second generation (introduced in November 2007) substituted the decentralized structure of TARGET adopting a single shared platform (SSP) that offers harmonized services. T2 allows settlement in central bank money, i.e. crediting or debiting the reserve account that each bank holds at its NCB. Whenever the banking system of a certain euro-zone country is a net recipient (sender) of central bank money, the NCB in question registers T2 claims (liabilities) which are multilateral balances with the ECB acting as the clearing house. This means that, thanks to the centralization provided by the ECB, T2 claims and liabilities are not owed or paid to single countries, bilaterally, but to all countries participating in the European System of Central Banks (ESCB). If a bank is out of reserves, the NCB in question can create reserves *ad hoc* through refinancing operations regulated by the ECB.

the South to the North and to avoid disruptive current account adjustments, thus reinforcing a

Figure 1. Monetary-financial institutions (MFI) loans to non-financial corporations (NFC) and industrial production in the euro-area. (December 2001 – April 2013).



Source: ECB. Note: blue series dataset name, within MFIs balance sheet items (flows) with counterpart Non-Financial Corporations (NFC): “Neither seasonally nor working day adjusted, MFIs excluding ESCB, Total, Euro area (changing composition)” [BSI.M.U2.N.A.A20.A.4.U2.2240.Z01.E]; red series dataset name, within Short-Term Statistics on Industrial Production Index [2005=100]: “Monthly, Working day adjusted, not seasonally adjusted, Total Industry (excluding construction) - NACE Rev2, European Central Bank, unspecified” [STS.M.I6.W.PROD.NS0020.3.000]

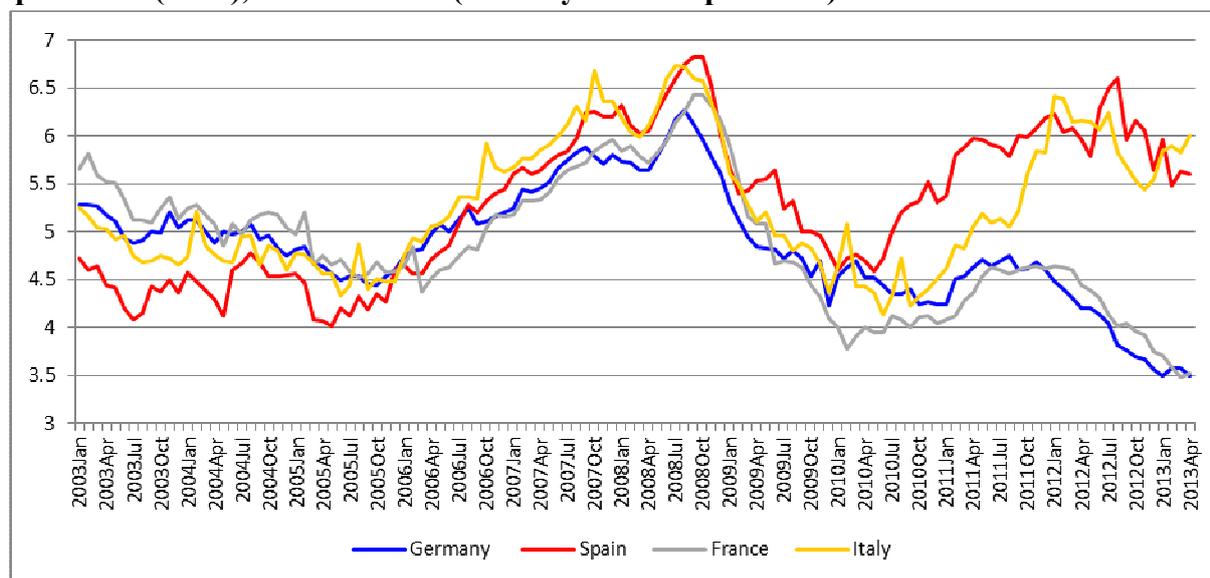
situation sharpened by (if not born with) the birth of the euro, in which “a competitive, moderately leveraged North and an uncompetitive, over-indebted South”⁶ coexisted. Since summer 2012, when Mario Draghi proved his willingness of doing “whatever it takes to preserve the euro”, and especially after the ECB announced the Outright Monetary Transactions (OMT) program, private capital inflows in the Southern countries have somehow regained momentum. However, such inflows might be of a dangerous kind, given they originate from within the circle of a self-referential financial system. As a matter of fact, if one looks at the *lending* side, fragmentation has not yet disappeared: despite the recovery of capital inflows, the real economy faces a strong credit contraction (cf. Fig 1), exacerbated by the fact that lending rates in the South, especially for small and medium-sized enterprises (SMEs), are still high, incoherent with monetary policy rates and highly diverse across the euro-area (cf. Fig 2).

The transmission mechanism of monetary policy is impaired, and this is a major concern for the ECB. At the end of the G-7 meeting in London, on May 11, 2013, Draghi said that the main problem the ECB faced was to guarantee not only that banks got funds, but also that they managed to convert them into credit for the real economy. In other terms, rather than continuing to increase funding to the banking system indistinctly, on the basis of some quantitative easing scheme in the

⁶ Merler and Pisani-Ferry (2012b: 2).

wake of similar plans in the US, the UK, and Japan – something that the ECB had indirectly been

Figure 2. Monetary-financial institutions (MFI) interest rates on loans to non-financial corporations (NFC), new business. (January 2003 – April 2013).



Source: Eurostat. Note: Maturity: from 1 to 5 years. Value: 1 million euros or less.

doing since October 2008, adopting a *fixed rate tender procedure with full allotment* in refinancing operations – it has now become essential to innovate in the way such expansionary measures are structured.

The Bank of England, for example, already launched a *Funding for Lending Scheme (FLS)* in July 2012, explicitly addressing it to those economic actors that still had to benefit from quantitative easing. The initial lending potential had been estimated at around 80bn £. It should have ended in 2013, but it has recently been extended until 2014. Such scheme envisages a system of incentives according to which those banks that increase lending to the English real economy can raise their level of indebtedness with the Bank of England. Vice versa, banks that do not increase lending to the real economy are forced to pay higher interest rates and face tighter limits to their level of indebtedness. The adoption of such a scheme by the Bank of England constitutes an important precedent, as it testifies the willingness of a central bank to have an active role in managing specific problems of the real economy, introducing a certain degree of ‘quality control’ over liquidity injections.

Following the English example, the ECB is studying different alternatives in order to make the monetary policy transmission mechanism correctly functional, thus allowing credit to reach the real economy, and particularly the SMEs. The main proposal appears to revolve around the creation and support of an asset-backed securities (ABS) market. In the third section, we will advance a different proposal, but first it is important to shed some light on the main features of the Eurozone crisis.

Qualifying the Eurozone crisis

The Eurozone crisis is a financial crisis in which the balance of payments of each member state matters. Since the birth of the euro a divergence process across member states has started in real economic terms, just as any difference between them in financial terms seemed to have been shrinking. Some years ago, when financial markets also started to distinguish between countries, the disequilibrium in the balance of payments exacerbated, though being already evident (but, with rare exceptions,⁷ overlooked) on the current account dimension. The EMU faced something that it never thought could happen: a balance of payments crisis, triggered by sudden stops (or reversals) in private capital inflows.

For years, the idea that the external balance of each member state within the EMU was irrelevant, exactly like the surplus/deficit across regions within national countries, had been invariably accepted. The Maastricht treaty itself did not count balance of payments imbalances among its convergence parameters. For the same reason, art. 143 of the Treaty on the Functioning of the European Union (TFEU) envisages that only countries not yet in the euro area can receive medium-term financial assistance (MTFA) in case of balance of payments disequilibria.⁸ Not even the European Financial Stability Facility (EFSF), instituted in May 2010, or its successor, the European Stability Mechanism (ESM), created in October 2012, took this into consideration. Both the EFSF and the ESM are based on art. 122.2 TFEU, and they aim at helping countries that face difficulties in *refinancing public debts*. Nonetheless, neither makes explicit reference to problems in *repaying external debts*. Only towards the end of 2011 European authorities started to recognize that the external imbalances of each country within the EMU mattered, and launched the Macroeconomic Imbalance Procedure (MIP).

Leaving aside considerations about the effectiveness of the measures adopted so far, the very fact that they have been adopted by European institutions hints at a certain consensus that might have emerged on some main topics, among which one could consider the following:

- a) since the introduction of the euro, the EMU has experienced a divergence process in relative competitiveness (wage, productivity and inflation differentials) between surplus countries (Core) and deficit countries (Periphery), that culminated in a balance of payments (BoP) crisis;⁹
- b) for most Eurozone countries, the level of public debt was a consequence rather than a cause of the crisis. The level of private debt/credit and the current account trends are variables that explain *ab origine* many facts leading to the crisis;¹⁰
- c) the ECB's liquidity injections were made necessary by sudden stops in private capital inflows towards deficit countries and are now reflected in an asymmetric distribution of liquidity within the EMU, recorded by TARGET2 (T2) imbalances.¹¹

Here the consensus in the making ends. As observers and analysts, though, we still need to draw all the consequences from these three points, especially from the last. The asymmetric distribution of liquidity amplifies instead of reducing the divergence process mentioned at point a), as money lent

⁷ Cf. European Commission (2006).

⁸ As noted by Marzinotto *et al.* (2010) this deficiency of the Treaty has nothing to do with the *no co-responsibility principle*. The ineligibility of euro area members to mutual assistance in case of balance of payments problems was justified on a theoretical stance. That, within the EMU, balance of payments would have been irrelevant was simply considered a self-evident fact.

⁹ Cf. CESifo (2012); Cesaratto (2012); Merler and Pisani-Ferry (2012b); Pisani-ferry (2012);

¹⁰ Cf. Altomonte e Villafranca (2010); Alessandrini *et al.* (2012); Bagnai (2012);

¹¹ Cf. Abad *et al.* (2011); Cecioni e Ferrero (2012); Merler and Pisani-Ferry (2012a); Cour-Thimann (2013).

to peripheral countries by the ECB flows back to core countries. Here, instead of being newly spent abroad (thus contributing to rebalancing the balance of payments) or domestically (thus contributing to adjusting real exchange rates), it is deposited at the ECB.

T2 imbalances are the result of such a mechanism. They appear in official BoP statistics, roughly speaking, as if they were the net holding of gold and foreign exchange reserves claims or liabilities vis-à-vis the remaining 16 countries of the Eurozone in a fixed-exchange rate system *à la* Bretton Woods or *à la* European Monetary System (EMS). In a fixed-exchange rate system a BoP imbalance, e.g. a deficit, was financed by drawing on the official reserve account up to the limit of its complete depletion, and this financing was essential in order to preserve the pegged currency; in the EMU, on the other hand, a BoP deficit is financed by means of an *ad hoc* creation of base money, resulting in an increase in T2 liabilities, with the only limit of the availability of collaterals through which such creation occurs (in this case, financing is essential in order to ensure that one euro equals one euro throughout the Union). In other terms, the presence of T2 balances on the national central banks' balance sheets allows for BoP "temporary" disequilibria, financed by *ad hoc* reserves denominated in the single currency (the euro).¹²

As recently stated by Cour-Thimann (2013: 24): "The possibility of Target balances emerging thus allowed creditors in surplus countries to continue recovering their claims on foreign debtors, and firms to continue exporting goods and services. Reciprocally, residents in countries under strain could continue to service the domestic and external debts previously contracted, while solvent customers could continue to import goods and services, including those that are vital for production chains". Thus, in avoiding a sharp correction in current account and a disruptive deleveraging of deficit countries, through T2 the ECB allowed surplus countries both to sustain the export of their goods and services, and to sell their assets (*Bunds*, notoriously) at high prices, as well as to receive the pay back of private credit from deficit countries (when credit from surplus countries was null or insufficient). In short, irrespective of productivity, surplus countries have a *competitive advantage* ensured by an 'official mechanism' which gives them not only an outlet for their goods and services, but also a low cost of capital, as well as the reduction of credit risk for the private sector. Data show that T2 imbalances are mostly determined by private capital flows (in terms of portfolio investments, interbank loans, deposits and derivatives) from deficit to surplus countries. The current account balance is not the main determinant.¹³

Therefore, a question arises: *why should the ECB finance transactions of mostly speculative nature*, when its aim, according to its own statements, is to ensure that solvent banks do not face liquidity constraints so that their respective economies do not face credit restrictions when market mechanisms are not correctly functional? Of course, it should not. This is the source of ECB's "frustration". This is, however, a spillover effect of a system with perfectly free capital movements (although the Cyprus crisis seemed to question this point), in which the central bank is *de facto* willing to finance such movements, mostly when market mechanisms are impaired. To overcome such an effect, what can be done (without imposing capital controls) is prearranging incentives that encourage certain types of operations rather than others. That is why we deem appropriate to rethink the way the ECB manages its refinancing operations, starting from the technical system made available by T2, as we will show in the next session.

¹² Cf. CESifo (2012) and within it particularly Kohler (2012), De Grauwe and Ji (2012), Buiters and Rahabari (2012), Sinn and Wollmershäuser (2012).

¹³ Cf. Cecioni and Ferrero (2012).

Moreover, if the Eurozone crisis is frankly taken as a BoP crisis, it becomes clear that a solution can only be found when European authorities will manage to fill the gaps in economic policy coordination among countries within the EMU, *promoting the implementation of cooperative adjustment instruments*. The adoption of MIP is a first step, but much more can and should be done to let even surplus countries share in the necessary internal macroeconomic adjustment process, clearing the system from the “deflationary bias” (De Grauwe, 2012). This bias could lead Europe towards a long period of deflation and depression, disadvantageous for everyone at the economic level and dangerous for everyone at the political level.

It should be clear that this is not about advocating and promoting an inversion in the direction of money flows from Core to Periphery, which *per se* would still allow a perpetuation of commercial imbalances and the same illusory absence of fragmentation which prevailed before the crisis. In different forms, each country has precise responsibilities that derive from its net unbalanced position, whether positive or negative: deficit countries need to recover their industrial competitiveness, while surplus countries have to spend their surpluses in order to avoid a deflationary pressure on the entire economy of the monetary union. It is not about rescuing single countries but starting to cooperate, each country together with the others, in order to foster the economic and political union. In this sense the first thing to do is to put in place mechanisms that allow the money created by the ECB to be effectively utilized to foster exchanges and productive investments, in the Core as well as in Periphery, rather than being used to hoard reserves or to refinance previous debts. The problem to solve can be summed-up in a formulaic question: how to put “credit where credit is due” (Swiston, 2008)? This is what the ECB means when it talks about making the transmission mechanism of monetary policy functional, and this is what the following reform proposal aims to do.

To complete the conceptual description of the problem, the current workings of the international payments system inside the euro area can be usefully compared with the abstract textbook case of an optimum currency area (OCA).

In an OCA, three well-known mechanisms can alleviate the costs of the absence of the exchange rate instrument: price and wage flexibility, factor mobility, and fiscal transfers. Their impact on the adjustment process can combine through different mixtures. They can also have substantially different social costs and economic consequences, according to different characteristics of the area’s markets, institutions and fiscal policies. In the absence of a federal central banking system where deficit and surplus regions of the area are serviced by regional central banks, there is no reason to imagine that central banking interferes with the adjustment process in a systematic way, with base money created to finance the deficit regions that on the opposite tends to be accumulated by the surplus regions, thus in fact delaying the adjustment. Therefore, even if the euro area were an optimum currency area, the current setting of its central banking and cross-country payment systems should be monitored in order to avoid that it amplifies divergences and imbalances instead of contributing to a smoother process of real convergence and financial rebalancing. Obviously, a robust mechanism of fiscal transfers could act as an automatic stabilizer, moderating both booms-cum-surplus and recessions-cum-deficit situations, and avoiding an excessive involvement of central banks in financing balance of payments disequilibria. The peculiar problem of the euro area is that the nature and features of the ECB involvement also depends on the fact that the region is still far from being an OCA.

To understand this, consider the actual workings of the internal adjustment process between different regions inside the individual countries that are members of the euro area. To the extent that a member country is an OCA, rebalancing occurs. When, on the contrary, OCA conditions are not met and prolonged structural disequilibria are a problem (as, e.g., in the case of Northern vs. Southern Italy or Eastern vs. Western Germany), the inadequate workings of the adjustment mechanism and the slowness of real convergence can be in part compensated by bank and non-bank financing without all the obstacles caused by the crossing of national borders that instead lead, in the euro area, to a disintermediation of private financing flows and to the creation of base money by the Eurosystem. Dealing with regional imbalances inside a non-OCA member country is not less painful than dealing with national imbalances in the euro area but, at least, inside an individual country central banking and the payments system do not tend to amplify the disequilibria and delay the adjustment process. At a minimum, if such a delay ever occurred, it was not due to the absence of institutional preconditions which makes the adjustment process itself possible. At the European level, instead, it is still necessary to create the right institutional preconditions that, due to the current geo-economic environment, are still lacking.

The problems that derive from a), b), and c) above are thus typical of geo-economic conditions in the euro area, and are especially the result of the organization of its central banking and payments system. They must be addressed with an eye to the specificity of the current institutional situation of the European single currency region. As Keynesian monetary theory suggests, the availability of monetary instruments that allow liquidity to stagnate, instead of financing real trades and investments, can amplify financial instability and hinder growth.¹⁴ In fact, when it came to designing a monetary system at Bretton Woods, Keynes proposed an International Clearing Union where money is a pure, immaterial, abstract unit of account that would not function as a store of value: «a quantum of international currency, which is neither determined in an unpredictable and irrelevant manner [...], nor subject to large variations depending on the gold reserve policies of individual countries; but it is governed by the actual current requirements of world commerce» (Keynes, 1943: 168). Consequently, «it is also necessary for it to have means of restraining improvident borrowers. But the Clearing Union must also seek to discourage creditor countries from leaving unused large liquid balances which ought to be devoted to some positive purpose. For excessive credit balances necessarily create excessive debit balances for some other party. In recognizing that the creditor as well as the debtor may be responsible for a want of balance, the proposed institution would be breaking new ground» (Keynes, 1943: 169).

¹⁴ Already in 1923, in *A Tract on Monetary Reform*, Keynes specifies what money ought to be: “It is not easy, it seems, for men to apprehend that their money is a *mere intermediary*, without significance in itself, which flows from one hand to another, is received and it is dispensed, and *disappears when its work is done from the sum of a nation’s wealth*” (Keynes, 1923, *emphasis added*; cited in Amato and Fantacci, 2012). So, according to Keynes, money ought to be a mere intermediary, not withheld as a store of value. For a deep analysis of the concept of money in Keynes see Amato (2010); Amato and Fantacci (2012); Fantacci (2013a, 2013b).

In the *General Theory*, Keynes reaffirms the concept. Here an insightful passage: “The only radical cure for the crises of confidence which afflict the economic life of the modern world would be to allow the individual no choice between consuming his income and ordering the production of the specific capital-asset which, even though it be on precarious evidence, impresses him as the most promising investment available to him. It might be that, at times when he was more than usually assailed by doubts concerning the future, he would turn in his perplexity towards more consumption and less new investment. But that would avoid the disastrous, cumulative and far-reaching repercussions of its being open to him, when thus assailed by doubts, to spend his income neither on the one nor on the other. Those who have emphasised the social dangers of the hoarding of money have, of course, had something similar to the above in mind. But they have overlooked the possibility that the phenomenon can occur without any change, or at least any commensurate change, in the hoarding of money” (Keynes, 1936: 12, VI).

T2 balances already represent a pure unit of account money within a clearing system; still, they are not endowed with two desirable features identified by Keynes: first, they are not properly commensurate to commerce (as strictly financial flows mostly determine them); second, they are not subject to rules that prevent their accumulation (so that, for example, creditor countries' behavior can exercise a deflationary pressure on the Union as a whole). Along these lines we think that Europe should enter a *new ground of collective responsibility*, allowing each member state to find a lively balance of payment equilibrium against all other member states. This is why we present a reform proposal which aims at questioning an idea that could possibly be improved.

A reform proposal

We think that the ECB should introduce appropriate distinctions in its main refinancing operations (MROs): banks shall continue to get funding from the ECB through already-existing channels, but they shall be able to do it at *more convenient conditions* if they use the funds so raised to *finance commercial exchanges and direct investments within the EMU*.¹⁵ It is therefore essential to create a parallel type of MROs, which would discount 'commercial loans' at an interest rate systematically lower than that prevailing on the current MROs, thus putting banking activity under an '*end-use constraint*'. For this purpose it is necessary to build a system of incentives/sanctions that not only avoids moral hazard behavior, but that also allows the EMU to really reinforce internal adjustment processes.

The aim of the proposal is thus twofold: on the one hand, it aims at guaranteeing a funding source to commerce and real investments which would be *independent* from speculative capital movements, and therefore more stable and less burdensome; on the other hand, it aims at creating the right incentives so as to guarantee the achievement of a medium-term equilibrium in the external balance of *each country* within the Eurozone, by means of a cooperative mechanism of imbalance adjustments.

In order to meet this twofold objective, the proposal we submit to debate is to create a subsystem of T2, called e.g. TARGET3 (T3), which exclusively records commercial exchanges and direct investments within the EMU, managed as a multilateral clearing system with symmetric rules for participants.¹⁶ The basic principles of the proposal are the following:

- (1) National central banks (NCBs) shall open a credit line to private banks (at an interest rate smaller than the one defined in the ECB's main refinancing operations (MROs)), focused only on the financing of cross-countries commercial exchanges and direct investments against precise types of collaterals;¹⁷

¹⁵ We stress that when we talk about EMU we do not exclude the so-called "countries with derogation" not participating to the third stage of EMU, i.e. those not yet in the euro-area. Our proposal is not meant to hinder the single market.

¹⁶ The basic principles that underlie such a proposal are inspired by the plan for an International Clearing Union developed by J. M. Keynes for reshaping the international monetary system after the second world war (Keynes, 1943) and recently resumed in its theoretical and practical implications by Amato and Fantacci (2012), also in relation with T2 imbalances (Amato and Fantacci, 2013; Fantacci, 2013). To the same plan is also inspired a proposal, very different from ours, promoted by two members of the German parliaments (Paus and Troost, 2011).

¹⁷ Direct investments are investments done for acquiring a management responsibility or for stabilizing a lasting (medium/long term) relationship with an enterprise which operates in a different country than that of the investor. The acquisition of a controlling interest is done here by means other than the outright purchase of shares. It generally involves a purchase of a physical asset which does not take the form of a loan (i.e. the counterparty does not have to pay

- (2) Every time there's a euro payment outflow (inflow) concerning commercial exchanges or direct investments, NCBs shall have a T3 liability (claim) which is a multilateral balance centralized at the ECB, which would act as the clearing house;¹⁸
- (3) T3 balances, both claims and liabilities, shall be subject to symmetric charges. Such charges shall be at the expense of each NCB and have the function of discouraging the accumulation of imbalances in either direction;
- (4) All the revenues from charges paid by NCBs to the ECB shall go into a guarantee fund, managed by the ECB itself, designed to cover potential losses on T3 credits. The ECB shall also have the power to channel part of such revenues towards the European Investment Bank (EIB) or the European Investment Fund (EIF);
- (5) T3 balances, both claims and liabilities, shall be subject to quotas (linked to the value of trade of each country with all other Eurozone members). If the quota is exceeded, the implied charges shall increase progressively. Member countries whose imbalances persist shall be directed by the ECB and by the European Commission to the “corrective arm” of the Macroeconomic Imbalance Procedure (MIP), namely to adopt real exchange rate adjustment policies. Such policies could require not only the commitment of the “unbalanced” country but also the joint commitment of the main commercial partners of that country. The ECB and the European Commission shall have the power to outline the adjustment policies, albeit in a framework of predefined policies, within different disequilibrium situations;
- (6) All the measures mentioned above shall be applied to the new flows that would be created under T3. For each country, T3 would start from zero.

This proposal aims at *indirectly* constraining banking activity. In short, refinancing operations that will be used to finance commerce and direct investments (i.e., ‘commercial MROs’) would be subject to a lower interest rate, compared to those accruing to existing MROs (i.e., ‘portfolio MROs’). The latter would continue to exist, but would be limited to financing banks’ portfolio requirements,¹⁹ which in turn would be easily distinguishable from commercial assets.

In this scenario, the principle of competition would be strengthened *even in the financial sector*. It would not be a policy planner that *top-down* imposes a certain distribution of capital flows. On the opposite, commercial banks would face *bottom-up* a new opportunity cost induced by a prerogative of the ECB, which pertains to the *refinancing cost differentiation according to the end-use*. In this perspective, it would no more be necessary to introduce capital controls, nor to deeply overhaul banking governance. Banks would simply have access to a new form of funding: transnational intra-euro payments concerning commerce and direct investments would be eased in funding and would have to pass through the new, specialized TARGET3 system; meanwhile, banks would still be able to make portfolio investments at the current market rules, but it would be costlier (in relative terms).

back any amount). It involves a sharing of the risk of a real activity, as it happens for example with a joint-venture. We do not go into details about how identifying the actual type of transaction. It is clear that the implementation of a Banking Union, as currently designed, could improve the process of transactions identification as well as enhance further the monitoring of collaterals (the latter indeed is something the ECB, necessarily, already manages accurately).

¹⁸ Concerning T2, the ECB acts already as a clearing house. Cf. note 5.

¹⁹ We refer to the definition provided by Banca d’Italia (2004) of *portfolio investments*: “All the investments in securities not intended to assume a management responsibility and establish a lasting relationship with an enterprise, but exclusively realized for *speculative purposes*” (our own translation, *emphasis added*).

The ECB would act as a clearing house, as already happens for T2. The originality of this system consists on the fact that, through T3, we would be able to distinguish commercially what seems to be the true nature of T2 balances: pure booking entries which express the ‘right / duty of purchase’ in the case of a claim, and the ‘right / duty to sell’ in the case of a liability. Today, express rules that encourage the exercise of such rights-duties are absent, so that a country can potentially ‘accumulate rights’ without using them, with serious consequences for the macroeconomic equilibrium of the EMU as a whole. From the standpoint of macroeconomic stability, those rights (precisely because they are duties at the same time) need a symmetric rule that could guarantee their practice in a spirit of cooperation among member states. The latter, as anyone would probably acknowledge, constitutes a stronger and sounder motive for unification than any unidirectional imposition of adjustment measures.

The adoption of a single currency has certainly increased the interdependence among euro area countries. Much data could be used to prove this intuitive result, including the whole central banks apparatus used by the Eurozone in order to coordinate payments mechanisms inside the euro area. The potential to accumulate debts and claims of some newly created “monetary base” can have destabilizing effects, and these can only be avoided through the adoption of a cooperative attitude, which combines efforts of readjustment by deficit and surplus countries alike. *Cooperation* can be a natural reaction to the externalities descending from greater *interdependence*, and it can express itself through some form of *solidarity*.

It is often recognized that *fiscal* solidarity is an essential ingredient for solving the Eurozone crisis (Bruni 2012); that it is not based on “generosity” but on common interests and interdependencies;²⁰ that it is strictly complementary to the centralization of economic policy decisions. Incentives, commitments and institutions to exercise a certain degree of fiscal solidarity, like the European Stability Mechanism, are now being established in order to enhance the strength of European economic governance.

Cooperation through *limiting the disequilibria of internal balances of payments* is an equally important element of solidarity that must support monetary and economic integration, and it is perhaps politically more feasible than fiscal solidarity. MIP already constitutes an official recognition that this form of solidarity is a requirement for financial and economic stability. But the incentives and sanctions associated with MIP have a weaker and slower impact than is possibly needed in crisis situations. It is easy to suspect that an effective implementation of MIP cannot but rely on some degree of voluntarism by member countries. Stronger and more timely incentives could be built into the payments mechanism system, exploiting the fact that it is operated by a federal central banking system, with supranational and clearly centralized rules and powers, possibly enhanced by the likely implementation of the banking union.

By proposing the T3 system, we aim at placing incentives for the management of cooperative rights and duties included in T2 balances in the field of commercial exchanges and direct investments. We want to stress the fact that a country with a positive T2 balance has received more money from all

²⁰ As written by Mario Monti and Sylvie Goulard in their latest book, *On democracy in Europe. Looking ahead* (published in French and in Italian), Italy contributed to save Greece in the name of an “enlightened egoism” not in the name of a “solidarity ... [which] appeals to the good heart”. Indeed, Europe needs the institution of a shared space in which everybody recognizes that it is convenient to give up some short-term pay-offs for higher medium/long-term pay-offs. The reason why such cooperative solution does not prevail has to be found, logically, in the prevalence of an “unenlightened egoism” that, for the way we are accustomed to think the debtor/creditor relationship (it is an institutionalized habit!), just benefits the creditor.

other member countries than it has spent towards them, benefiting from the ECB's liquidity injections. The origin of the current divergence partly originates from the fact that surplus countries, i.e. countries with a positive T2 balance, do not use their purchasing power (as testified by the growing use of the deposit facility). Because of this, the recovery of intra-Eurozone exchanges is constantly impaired and deficit countries, i.e. countries with negative T2 balances, experience more problems to repay their debts. In other terms, the surplus countries' behavior exercises a deflationary pressure on the entire Eurozone, with deflationary effects in the medium term bearing even on surplus countries themselves.

Indeed, even in the short term, surplus countries may already lose because of their behavior. To see this, one should consider how much they benefited from the ECB's interventions and how much they compensated the reduction of exports in the Eurozone with an increase of exports towards the rest of the world. Aside from economic effects on single countries, the fact remains that a similar behavior goes against the economic and political endurance of the Eurozone, and for this reason it needs to be reoriented. T3 aims at achieving this goal by means of the introduction of symmetric charges, i.e. at the expense of surplus and deficit countries alike.²¹

Finally, it's worth noting that in the absence of easy-liquidity policies from the ECB, automatic factors would have come into play to restrict the volume of surplus countries' export after the conventional means of receiving payments have been exhausted. Those people that fear the accumulation of T2 claims²² should acknowledge that without those claims surplus countries' exports would have been involuntarily reduced. It is the failure to recognize this fact that makes the T2 system subject to the most unsubstantiated critiques.²³ Indeed, T3 aims at recognizing that the EMU is equipped with a mechanism that allows for the removal of those factors that would cause an involuntary reduction in trade. Such acknowledgment should lead to institutionalize new forms of incentives that apply to debtors and creditors alike.

As we already noted at the start of the paper, the Bank of England has already put in place a similar scheme that discounts commercial loans (loans to non-financial corporations and households) at favorable conditions, the Funding for Lending Scheme (FLS). Latest data show that, in the first year from its inception, the FLS has favored real estate mortgages more than loans to SMEs. It is thus clear that the mechanism of incentives needs to be addressed carefully. The ECB can learn from the Bank of England's mistakes. However, on one crucial aspect the ECB's plan should move away from the English plan. While the FLS has as its sole aim the internal funding of the economy, the ECB should favor a funding which is of course intra-EMU, but that is also 'external' from the point of view of each single member state within the EMU. Given that for the Eurozone crisis balance of payments matters, the ECB should prioritize the external balance of each member state. For this reason we advanced the T3 proposal: precisely because it would rely on the technical apparatus already provided by T2, T3 would benefit from the proper structure and become operative in a very short time.

²¹ Note that the imposition of charges on positive balances may seem vexatious, but actually it is contemplated even by Mario Draghi since, as stated in the conference of May 2, 2013, he is evaluating the possibility of imposing a negative interest rate on the deposit facility.

²² Cf. Sinn (2011); Sinn and Wollmershäuser (2012).

²³ As that of imposing a settlement mechanism for T2 balances on the basis of a misinterpreted copy of the settlement mechanism of the Federal Reserve System in the US (Sinn, 2012; Sinn and Wollmershäuser, 2012). On the misinterpretation cf. Cour-Thimann (2013: 29-34).

The solution to the Eurozone crisis does not require external capital flows. On the opposite, it calls for the creation of a space that allows European countries to restart responsible lending and borrowing between them. The monetary system that typifies that space should be arranged so as to allow the continuous convergence of all balances of payments. The hope, eventually, is to build an institutional structure that does not necessarily bear countries to converge, to conform, but rather to balance themselves within a single unified market, making the constraints on external balances ever more binding. An effort towards equilibrium, and not necessarily towards convergence, seems to be the ideal precondition to render the closure of the debtor-creditor relationship conceivable and feasible, to simplify due payments procedures, and hence, as the Italian etymon of the word “to pay” (*pagare*) suggests, to preserve enduring peace in Europe.

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