DOI: 10.1007/s10272-019-0799-y Forum

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The Euro at 20: A New Deal to Save the Euro

As the euro approached its 10th birthday, it was widely proclaimed to be a great success. But with the financial crisis that soon followed, the euphoria was quickly exposed as an error of judgement. Today, the euro at 20 looks frail. In its present state, it is unlikely to reach the age of 30. Only unconventional medicine can save it from a premature death. This paper proposes a 'New Deal' between the heavily indebted southern and less indebted northern countries to put the euro back on its feet. To do this, the northern countries have to agree to the one-off monetisation of public debt by the European Central Bank (ECB) and the southern countries need to accept a digital euro competing with other digital currencies.

The two functions of money

Money is an insufficiently understood social instrument created to facilitate economic transactions. In the course of history, money has acquired several functions. It has been used as a means of exchange, store of value and unit of account as well as a measure of debt. In the first three functions money can exist without a state. Even when anarchy rules and people do not trust each other, money will emerge spontaneously as a means of transaction. As such, it was generally derived from objects of intrinsic value and referred to as 'commodity money'.

Things are different when economic transactions are based on credit and debt. In this case, an authority is necessary to enforce creditor-debtor relationships when needed. The function of money as a measure of debt tends to emerge in societies that organise themselves as states. Credit money can be created out of commodity money such as gold through fractional reserve banking or it can be created on its own in association with fiat central bank money. States tend to take advantage of their role as enforcers of creditor-debtor relationships expressed in monetary terms by monopolising the issuance of money.¹ This allows states to issue new money to appropriate their citizens' goods, services and assets for them-

1 See also M. Rothbart: What has Government done to our money?, Auburn 2008, Ludwig von Mises Institute.

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selves. Thus, money becomes 'legal tender' or, as I call it, 'state money'. Today, money is created in a private-public partnership: commercial banks produce book money via credit extension as private debt money. The central bank manages the money production process and issues central bank money to the public in the form of bank notes, while the state guarantees the private debt money of banks and protects it from bank failures.

In general, the purchasing power of commodity money has been more stable over time than state money. This point can be illustrated by separating the history of British consumer price inflation from 1694 to 2016 into periods during which money was either set up as commodity money or as state money. Examples of the latter include the state funding of war expenses through money issuance and, in more recent history, money issuance used to fund the welfare state. Inflation averaged 0.4% during the periods of the commodity money regime, and four percent during the periods of the state money regime.

The two faces of the euro

The euro as a single currency for Europe had two characteristics at birth. On the one hand, it was designed as commodity money so as to be able to function without a single European state as an enforcer of creditor-debtor relationships. It was to be issued by an independent central bank mandated to secure only price stability without regard for other economic policy objectives. In a commodity money system, money supply is inelastic and the central bank does not intervene if states and banks are in danger of going bankrupt. On the other hand, the euro exhibited characteristics of state money. The ECB was allowed to create money by acquiring government debt. Moreover, public debt of members of the Economic and Monetary Union (EMU) was treated as 'risk free' in banking regulation and exempted from the backing with banks' equity and single credit limits. In a state money system, the supply of money is elastic and designed to achieve multiple policy objectives and the central bank acts as a lender of last resort for both banks and states.

While the single European currency enjoyed a happy childhood, its 10th birthday at the beginning of 2009 was overshadowed by the financial crisis in the wake of the bankruptcy of Lehman Brothers. This was seen, however, as a problem created by the US banking system. The EMU was considered to be a haven of stability in the storm surrounding global financial markets. In retrospect, this view

was completely wrong. In reality, the happy childhood of the euro was made possible by a period of cheap credit. Private household, company and government debt – regardless of how high – could be easily funded at rock bottom interest rates. Private and public debtors in several EMU member countries availed themselves excessively to this opportunity. Cheap credit was the glue that held the euro together in its first decade, and when that era ended, the euro came unglued. To avert the collapse of the EMU, the gap created by the sudden disappearance of private credit was filled by public credit from stronger states and the ECB.

To return the EMU to a stable base, the authorities had two choices. They could have either reinforced the euro's commodity money characteristics and accept that some Member States would have to leave the EMU as their governments and banks lacked the means to repay their debts in euro. This would also have strengthened the 'no bail-out' clause enshrined in the Maastricht Treaty, which intended that each Member State be held fully responsible for its financial decisions. Alternatively, they could have chosen to emphasise the irreversibility of the EMU membership, keep all member countries in the Union and make the euro state money with the ECB as lender of last resort to banks and states.

Broadly from early 2010 to the first half of 2012, the EMU governments, in an effort led by Germany, initially concentrated on keeping the euro's commodity money characteristics. Adjustment funding was supposed to be temporary, the Greek public debt was restructured and Greece's departure from the EMU was seriously considered. However, the efforts to emphasise the nature of the euro as hard commodity money only deepened the crisis. Markets speculated that other countries in addition to Greece were also unfit to operate under a commodity money standard and drove up risk premia on their government and bank debt. Italy was particularly exposed as its debt was seen as too high to be supported by the newly established European Stability Mechanism (ESM).

After a change in the Italian government at the end of 2011 and a turbulent first half of 2012, ECB President Mario Draghi put an end to market speculation about a break-up of the euro by promising that the ECB would "do whatever it takes" to defend the single European currency. He conditioned this promise by adding "within its mandate", but markets understood that Draghi was in effect positioning the ECB as a lender of last resort for banks and governments without market access. Draghi's promise was later formalised in an ECB programme dubbed Outright Monetary Transactions (OMT), which was challenged by the German Federal Constitutional Court but subsequently

found to be within the mandate of the ECB by the European Court of Justice. Market tensions eased, but with this move ECB President Draghi had now defined unambiguously the euro as state money. This was a bold move with far-reaching consequences as efforts to create a European political union to back up the monetary union had failed some 15 years earlier.

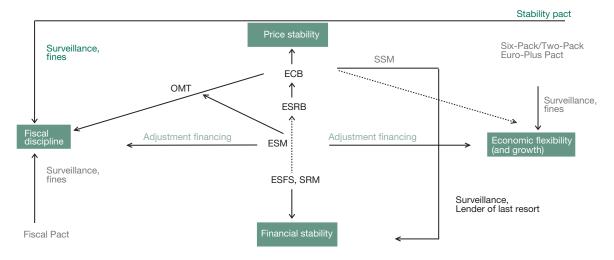
Half-baked state money

Due to Draghi's suspension of the use of market forces to discipline governments' inclinations to amass debt as well as the lack of a European state enforcing financial discipline by political means, European policymakers, led by an initiative of German Chancellor Angela Merkel, built a system of pacts and contracts to ensure financial discipline. Figure 1 gives a stylised overview of this system. Initially, the ECB was only tasked with achieving price stability, while the pursuit of other objectives that are important for establishing a solid monetary regime was left to national authorities. To nudge them towards fiscal discipline, a 'stability pact' – renamed to Stability and Growth Pact (SGP) due to French insistence during the negotiations – was concluded as an addendum to the original Maastricht Treaty.

In the course of the euro crisis, the ESM was created as a tool for emergency funding and crisis management. To strengthen crisis prevention, a number of legal acts were passed at the EU level intended to push countries toward fiscal discipline, budget coordination and structural reforms (Six-Pack, Two-Pack and Euro-Plus Pact). The topdown approach to strengthen fiscal discipline was complemented with a bottom-up effort by concluding the socalled Fiscal Pacts at the country-level. To round off crisis management, the OMT programme empowered the ECB to act as lender of last resort to governments - provided that they completed an adjustment programme with the ESM. In the context of the Banking Union, a Single Supervisory Mechanism (SSM) (under the roof of the ECB), a European System of Financial Supervision (ESFS) and a Single Restructuring Mechanism (SRM) for banks were created. Surveillance procedures were established and fines were envisaged to address violations of the agreements. Thus, a shadow state was built to make up for the missing European state that would act as a back-up for the euro.

Almost immediately after the system had been rolled out, it became clear that it did not work. Commitments were not respected, rules were broken and fines for fiscal policy misbehaviour were dodged. National governments failed to respect the shadow state and continued to show a lack of financial discipline and willingness to create the

Figure 1 **European shadow state for the euro**



Notes: Abbreviations in the diagram are as follows: European Central Bank (ECB), European Systemic Risk Board (ESRB), European Stability Mechanism (ESM), Outright Monetary Transactions (OMT), European System of Financial Supervision (ESFS), Single Restructuring Mechanism (SRM) for banks. Six-Pack denotes six regulations aimed at strengthening procedures to reduce public deficits and address macroeconomic imbalances. Two-Pack stands for two regulations for the coordination and surveillance of budgetary processes. In the Euro-Plus Pact, Member States of the European Union promise political reforms with a view to strengthening their fiscal position and competitiveness. In the Fiscal Pact, EU Member States embedded budget and debt rules into national laws.

Source: Author's elaboration.

economic flexibility needed for a single currency regime. The original architecture of the euro was faulty and corresponding amendments have not corrected this. If the EMU were a building, civil engineers would conclude that it will collapse sooner or later. In its present set-up, the EMU could be expected to follow its historical predecessor, the Latin Monetary Union, which was founded in 1865 and ended in 1914. Then as now, it was impossible to coerce sovereign states to follow the rules needed to establish a single currency.

TARGET2 to hold the euro together

Perhaps the most crucial missing element in the present set-up of the EMU is a common deposit insurance. For now, only the central bank money issued to the public in the form of banknotes (and the coins issued by governments) is of equal quality throughout the euro area. Whereas the quality of book money, which is created through credit extension by commercial banks, depends on the quality of the credit portfolios of banks and, more importantly, on the financial capacity of the respective euro area states to guarantee the book money in case of bank defaults in their area of responsibility. Since the financial capacity of euro area states to support book money when needed varies greatly, the quality of book money can also vary among states. Few people under-

stand that the EMU is only a cash-union and not a full monetary union.

If book money of different countries is of different qualities and people are free to bank where they want, money created by credit extension in financially weak countries tends to flow to the stronger countries. The illusion of a full EMU would collapse when banks in the stronger countries refused to recycle the book money via interbank loans. During the euro crisis, the euro area money market ceased to function and it has not fully recovered since then. But, with the exception of Greece and Cyprus, the illusion of a full EMU could still be maintained in all Member States. The reason for this was the cleverly designed interbank payments system TARGET2, through which risks of bank and sovereign defaults can be transferred from financially weaker to stronger countries.²

To understand how the risk transfer works, it is important to keep in mind that a bank losing deposits to other banks has two options to rebalance its balance sheet. First, it can retrieve the missing funds by borrowing from banks with excess deposits. Second, it can 'pay' the other banks

² TARGET stands for Trans-European Automated Real-time Gross Settlement Express Transfer System. The current system is called TAR-GET2 and replaced TARGET between November 2007 and May 2008.

for accepting the deposits in central bank money bought with marketable assets under a repurchase agreement. In the first case, the bank's balance sheet size remains unchanged, in the second it shrinks. When the money market does not function properly, deposits can move only in the second scenario. In this case, the special architecture of the interbank payment system ensures that deposits can continue to be transferred across borders within the euro area.

In TARGET2, payments are first aggregated at the national level and then settled between countries by the respective central banks at the EMU level. Thus, for a deposit to move, say, from Italy to Germany, the Italian bank would need to acquire central bank money from the Bank of Italy and then send the deposit together with the central bank money to Germany. A German bank would get a new liability in the form of the deposit together with a new claim in the form of central bank money. The Italian bank would lose both central bank money and the deposit. As the central bank money moves from Italy to Germany, the Bank of Italy receives a liability and the Bundesbank gains a credit towards the Eurosystem of central banks. In the end, the participants in these transactions have the following positions:

- 1. Italian depositor has a claim on a German bank.
- 2. The German bank has a claim on the Bundesbank (in the form of central bank money in its account).
- 3. The Bundesbank has a claim on the Eurosystem.
- 4. The Eurosystem has a claim on the Bank of Italy.
- The Bank of Italy has a claim on Italian debtors, which it acquired against central bank money from the Italian bank where the transaction started.

Thus, the Italian depositor has exchanged an Italian against a German bank risk, the Bundesbank has acquired a risk exposure to the Eurosystem, which now has a risk exposure to the Bank of Italy, which in turn has a risk exposure to Italian debtors. Should the Italian debtors default and the Italian state leave the euro, the Italian depositor would have euro book money safely in Germany while the Eurosystem – with the Bundesbank as its largest creditor – would have to bear any losses resulting from Italy's euro exit. As Figure 2 shows, the imbalances of Germany and Italy in the TARGET2 system have massively increased since the beginning of the euro crisis in 2010.

The first round of increases in Italy's TARGET2 liabilities in 2010-2012 reflected to a large degree a flight of deposits from Italy (see Figure 3). The second round in 2015-2018

Figure 2 **TARGET balances of Germany and Italy**



Note: To clarify, 'TARGET' in this figure refers to both TARGET and TARGET2.

Source: Macrobond.

largely reflected foreign investors' selling of Italian government bonds in the context of the ECB's programme of Quantitative Easing (QE) in Germany rather than in Italy. By choosing Germany, investors could exchange an Italian sovereign risk against a German bank risk and transfer the Italian sovereign risk to the Eurosystem and, eventually, to the Bundesbank.

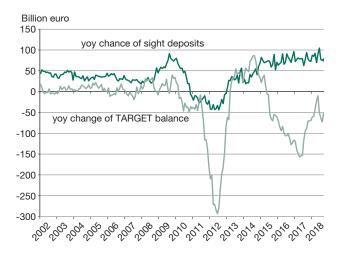
Theoretically, TARGET2 ensures that even in case of a countrywide bank run associated with the flight of deposits to other countries, euro book money is protected. In practice, however, central banks of the financially stronger countries would be likely to block the transfer of all bank and sovereign risks from another country by shutting down TARGET2 and forcing the country to impose restrictions on deposit transfers and cash withdrawals.³ This happened in 2015 at the peak of the crisis in Greece.

A 'New Deal' to save the euro

Under current circumstances, a safe deposit and completion of the monetary union is only possible by changing the monetary system from credit money to bank money fully backed by central bank reserves – and eventually to digital central bank money. A first step on the road to system change would be to create a safe, non-interest bearing euro bank deposit as an alternative to the usual bank deposits created by lending. The latter would carry a positive interest rate and eventually be traded like other

³ See S. Homburg: Speculative Eurozone Attacks and Departure Strategies, Hannover Economics Paper No. 640, 2018, Leibniz University of Hannover.

Figure 3 **Sight deposits and TARGET balance in Italy**



Note: To clarify, 'TARGET' in this figure refers to both TARGET and TARGET2; 'yoy' stands for year-over-year.

Source: Macrobond.

bank debt at variable prices relative to the safe deposit. Security of the safe deposit would be achieved through full backing with reserve money held at the ECB. Even if the bank that holds the deposit were to go bankrupt, the deposit would remain intact. The customers would only need to provide the bank resolution authority with the name of another bank of their choice to which this deposit could be transferred.

The ECB has already opened the door to the creation of a safe bank deposit through its bond purchase programme. It would only have to continue with these purchases until the central bank reserves of the banks were equal to M1 minus the amount of cash in circulation (i.e. the sight deposits of the banks). By the end of 2018, deposits of central bank money held by banks with the ECB rose to around two trillion euro as a result of bond purchases, making up a little less than one-third of banks' sight deposits. In order to fully cover the banks' sight deposits of about seven trillion euro with reserve money held at the ECB, it would be necessary to create around five trillion euro in additional reserve money through further bond purchases by the ECB.

As already stated in the Chicago Plan of 1933, the full coverage of sight deposits at banks with central bank money not only allows the security of deposits, but also gives the state the possibility of one-off debt relief.⁴

4 I. Fisher: 100% Money and the Public Debt, in: Economic Forum, Spring Issue, 1936, pp. 406-420.

If all of the reserve money to cover seven trillion euro in sight deposits came from the acquisition of government bonds and these were held indefinitely on the balance sheet of the ECB, the remaining market debt of the euro area states would fall by around seven trillion euro to around three trillion euro (or 25% of GDP). However, debt relief would have to be carried out in such a way that a renewed rescue of over-indebted states by the central bank could be completely ruled out in the future. The best way to achieve this is for the euro to compete with other currencies.

The safe deposit described above offers the possibility of using the euro as a digital currency in competition with other digital currencies. Instead of the centrally organised transfer of money by bank transfer or the personal delivery of paper banknotes, money in the safe deposit could also be transferred peer-to-peer using distributed ledger technology. Money in the safe deposit would therefore become the virtual counterpart of paper bank notes. To get there, digital central bank money could be created on the ECB's balance sheet by consolidating the safe deposits with the reserves held for their backing. The digital euro created this way would be covered by the ECB's claims on the euro area countries in the form of the government bonds purchased (which would then be transformed into non-interest bearing instruments with indefinite duration). The government bond portfolio of the ECB could grow with the potential growth rate of the economy so that the money supply could increase correspondingly.

The repositioning of the euro as a digital currency would have three advantages. First, the euro, in its current form, could be protected from what is likely to be an eventually uncontrolled disintegration associated with high political and financial costs. Second, a digital euro as an optional medium of exchange and unit of account could provide guidance to the market for private digital currencies (which are presently progressing from pure payment tokens to asset tokens). Third, in the competition between private and public digital money - with the latter issued as public initial coin offerings by states needing alternative funding sources - the best money may come from competing for users.5 Money would be created for the citizens rather than for politicians pursuing their own purposes. Demand management by monetary policy would no longer be possible. Given its track record, however, we can do without it.

⁵ F.A. Hayek: Denationalisation of Money, London 1976, The Institute of Economic Affairs.