

Monetary Transition

The Case for Money serving the Common Good

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Many recent proposals for monetary reform have argued the need to create a new mode of money issuance, in which the central bank or an issuing institution would decide, within the framework of renewed democratic governance, to issue the amount of central bank money required to pursue given objectives—for example, certain investments in the ecological transition where conventional financing would prove insufficient—by allocating it to a particular sector: the government, households, companies, etc.

This note echoes these ideas, and proposes a “voluntary” mode of central bank money creation. The term “monetary transition” refers to the transition to this new mode of issuance, which could coexist with traditional bank credit money.

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Jézabel Coupey-Soubeyran & Pierre Delandre

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SUMMARY

The monetary landscape is turbulent. Alongside monetary innovations such as cryptocurrencies and local currencies, various proposals are being developed aimed at reforming the monetary system, on either an ad hoc or a structural basis. These proposals include concepts such as “helicopter money”, the cancellation of public debts held by central banks, monetary “donation”, and Modern Monetary Theory. In response to the financial and pandemic crises, central banks are, for their part, pursuing “unconventional measures” at odds with their normal mode of action, providing unprecedented amounts of money to banks and financial markets.

In some respects, this monetary turbulence resembles the turmoil of the 19th century, when the innovators of the time, heralds of the “banking principle”, called for a monetary system adapted to the needs of a fast-growing economy, freed from the gold standard, while the conservatives, defenders of the “currency principle”, clung to the traditional metallic definition of money.

In the eyes of today’s critics, the deterioration of living conditions and social and environmental degradation are the consequences of financial and commercial hypertrophy supported by the monetary system. In the wake of this observation, their proposals aim to put central bank money at the service of the common good, the ecological and social transition, or public investment.

Although they have their differences, most of the proposals for reforming the monetary system agree on the need to develop a new mode of money creation, in which the central bank—or an issuing institution—decides, within a framework of democratic governance, to issue the amount of central bank money required to achieve stated objectives by allocating it to a particular sector (the government, households, companies, etc.) and assigning it to a specific purpose (support for household income, business activity, public investment, ecological transition, etc.). In this note, we refer to this as the “voluntary mode of central bank money creation”, and we define the transition to this new mode of issuance as the “monetary transition”.

This form of money issuance would be different from current ones in two key aspects:

- it would not be associated with any repayable loan or credit, or with any purchase of securities that could be resold, and would therefore be “without counterpart”;
- and since no counterpart due in the form of reimbursement would cause the money created to return to the central bank, it would be “permanent” rather than temporary.

The debate begins. In our view, it is part of a historical pattern: whenever society has needed to, it has transformed the monetary system to suit its needs. As such, the “banking mode of money creation”, which stems from the banking principle, has supplanted the “feudal mode of money creation” and has responded, in turn, to the rising power of the market. Times have changed. Repairing social injustice, accelerating the ecological transition, guaranteeing employment and ensuring a minimum standard of living are all priorities and needs to which the market-based system is unable to respond. Proponents of this reform argue that transforming the mode of money issuance would do.

Based on our analysis, we argue this transformation has already begun. It started with quantitative easing, one of the unconventional monetary policy measures that involves central banks buying up financial assets. At present, the central bank creates more money by purchasing financial securities than by lending to banks. This transformation supports the financial sector, boosting its power by financialising money. The line between money and securities has never been so thin: issuers of securities now know that by issuing securities they are issuing quasi-money. However, quantitative expansion has shown that it is possible to move away from the banking mode of money creation; that debt is not necessarily the inevitable counterpart of money.

By being totally released from this counterpart, money could be used to serve the common good, oriented towards the spending needs of the real economy, of households, of companies, and of governments in particular, to support them and allow them to make the investments that are essential for the ecological transition. This new, voluntary mode of money issuance would not replace but complement current modes of money creation involving the granting of loans (banking mode) or purchase of securities (acquisitional mode). This coexistence would enable better distribution of monetary power and protect against its monopolisation by the financial sector.

We argue that this proposed reform would also involve adapting some central bank accounting rules to allow for the accurate recording and control of “permanent central bank contributions to public objectives”. Similarly, this new mode of money creation should be accompanied by new monetary tools for managing the volume of money in circulation and the absence of reflux. Finally, in our view, this method of issuance would lead to a more or less radical transformation of the independent and technocratic central bank into a democratic monetary institution, whose governance would involve all stakeholders.

In conclusion, societal transformations have always involved transformations of the monetary system. From our point of view, this means that society will not achieve its new objectives, first and foremost the ecological and social transition, without a monetary transition. More than ever, society needs money, once again, to be put at its service.

CONTENTS

CONTENTS	6
1. Introduction	7
2. Brief history of the banking mode of money creation	11
2.1. The development of bank money to meet merchants' needs.....	11
2.2. A two-tier hierarchical banking system	13
2.3. A recurring criticism	15
3. The ongoing transformation of the mode of base money creation through unconventional monetary measures	16
3.1. Unconventional measures... ..	16
3.2. ...have initiated an "acquisitional" mode of base money creation	17
3.3. A security counterpart in place of a debt counterpart	20
3.4. The financialisation of money	23
3.5. Futile perpetuation	23
4. A new mechanism for creating central bank money that serves the common good	25
4.1. The introduction of a voluntary mode of money creation without counterpart	25
4.2. Expression of political commitment through money.....	25
5. Accounting rules and monetary tools adapted to this new mode of issuance.....	26
5.1. A new accounting item to balance the central bank's balance sheet	26
5.2. The adaptation of monetary policy to the coexistence of voluntary and current modes of money creation	28
6. Sharing and democratic control of the power to issue money.....	30
6.1. Protection from monetary power grabbing.....	30
6.2. Political and democratic governance	31
7. Conclusion	32
Annex 1: Changes in the consolidated balance sheet of the Eurosystem	35
Annex 2: Monetary base, Eurosystem balance sheet and money supply	37
Annex 3: Accounting of voluntary money	38

1. Introduction

In recent years, the monetary system and monetary policies have been the subject of intense public debate and innovation at various levels. At the top, the central banks¹ are constantly expanding their “unconventional” monetary policies. Since the COVID-19 pandemic, the ECB has launched the PEPP asset purchase programme², with a total envelope of €1,850 billion, which is in addition to previous and still ongoing programmes (some €20 billion of asset purchases per month under the QE³ programmes launched in 2015). It also strengthened its longer-term refinancing facilities for banks, with its PELTRO⁴ programme providing negative-rate liquidity, in addition to an easing of its TLTRO III zero-interest targeted refinancing programme to stimulate lending. The monetary system is also being shaken at its core by the development of cryptoassets⁵ such as bitcoin and other stablecoins⁶, including Diem (from the former Libra project) announced by Facebook, the rise of new payment service providers, the spread of complementary currencies, etc.

At the same time, economists, citizens, NGOs and think tanks have taken up the issue of money. They question the functioning of the monetary system, its scientific and ideological foundations, and its role in issues such as inequality, underemployment and the imperative of economic growth leading to the depletion of natural resources and climate change. Official currency is being questioned, particularly by the promoters of complementary currencies, who stress that these are needed to meet human and ecological challenges⁷. Public calls for reform are increasing. Some question our perceptions of money and denounce the doctrines of central banks, such as “market neutrality”⁸ for example, which has hindered their commitment to the ecological transition⁹. Others advocate closer coordination between fiscal and monetary policy, even to the point of questioning the independence of central banks¹⁰. Still others defend the use of “helicopter money” or the cancellation of public debts held by central

1 In this note, we use the term “bank” to refer to commercial banks and we consistently use the term “central banks” to refer specifically to the latter. As required, we will refer collectively to the European Central Bank and the national central banks of the euro area as the “Eurosystème”, but we will sometimes also use the acronym ESCB (European System of Central Banks), which refers to the larger group comprising all the central banks of the European Union, where the legal texts relate to it.

2 Pandemic Emergency Purchase Programme.

3 Quantitative easing.

4 Pandemic Emergency Longer-Term Refinancing Operations.

5 Cryptoassets or cryptocurrencies are unregulated, algorithmically created virtual assets that are accepted as virtual currency to conduct transactions on the Internet. They are not based on any counterpart.

6 A stablecoin is a cryptocurrency (see above) whose value is pegged to an asset, a currency or a basket of currencies.

7 P. Derudder and A-J Holbecq, “Une monnaie nationale complémentaire pour relever les défis humains et écologiques” [A complementary national currency to tackle human and environmental challenges], Yves Michel, 2010, 173p. see also: <https://lhed.fr/action-politique>

8 Cf. “La neutralité des banques centrales face à la crise climatique est un leurre” [Central bank neutrality in the face of the climate crisis is an illusion], collective opinion piece, *Libération*, 7 January 2021: https://www.liberation.fr/debats/2021/01/07/la-neutralite-des-banques-centrales-face-a-la-crise-climatique-est-un-leurre_1810578/

9 See the Veblen dossier “The ECB at a time for decisions”, 2 December 2020: <https://www.veblen-institute.org/The-ECB-at-a-time-for-decisions-1-2.html>

10 J.-C. Werrebrouck, “Banques centrales, indépendance ou soumission ? Un formidable enjeu de société” [Central banks: independence or submission? A huge social issue], Yves Michel, 2012, 184 p.

banks¹¹. In Switzerland, a citizens' vote was even held to demand (unsuccessfully) the adoption of a full-reserve system, inspired by the Chicago Plan and the debates between American economists in the 1930s, a system in which the central bank would become only bank able to create money¹². Others propose to monetise all or part of the public expenditure dedicated to the ecological transition, i.e. to finance it by a donation of central bank money¹³. And others, lastly, in the name of monetary sovereignty, put forward a vision in which fiscal and monetary policies become one. This is the vision implicit in Modern Monetary Theory (MMT), which is currently attracting a great deal of interest. It defends a public and sovereign concept of money, based on a chartalist vision, in which governments designate the official money of account and where money is therefore created by the government¹⁴. According to this theory, the central bank and monetary policy are directly consolidated in the public sector. All public expenditure is financed by monetary creation, and all public revenue, generally collected via taxes and other charges, results in monetary destruction. Within this structure, public deficit does not exist (it is a "myth", to use Stephanie Kelton's expression) and the government has, at all times, the resources that it needs to take action, thanks to the central bank, which is its "monetary arm" (the Treasury and the central bank are one and the same, according to this concept¹⁵).

All these proposals involve relatively radical challenges to the current monetary system which, from their authors' perspectives, is the cornerstone of a commercial and financial order whose excessive expansion is resulting in the deterioration of living conditions and social and environmental degradation. As such, they all question the monetary system's ability to serve the common good and the transformations that would direct it towards this objective.

This note focuses on those that would involve a new way of issuing base money—i.e. money created by the central bank—to circulate money that is "free from counterpart and permanent", a concept that we will attempt to define.

These proposals include:

- Helicopter money, an expression derived from a thought experiment proposed by the economist Milton Friedman in the 1960s, imagining the one-off parachuting of newly created money onto the population, which, receiving additional income, could then

11 N. Dufrêne, L. Scialom, J. Couppey-Soubeyran, B. Bridonneau, G. Giraud, A. Lalucq and others, "Annuler les dettes publiques détenues par la BCE pour reprendre en main notre destin" [Cancel the public debt held by the ECB to take back control of our destiny], *Le Monde*, 5 February 2021, <https://annulation-dette-publique-bce.com/>

12 See in particular Irving Fisher, *100% Money*, published in 1935.

13 In this note, we use the terms "central bank money" or "base money" when referring to money issued exclusively by the central bank, and simply "money" when referring to money issued by commercial banks or in the general sense of the term.

14 "All modern money systems (including those of the past 4000 years at least as Keynes put it) are state money systems in which the sovereign chooses a money of account and then imposes tax liabilities in that unit. It can then issue currency used to pay taxes", L. Randall Wray, *Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems*, 2nd edition, Palgrave Macmillan, 2015, p. 71.

15 See *ibid.* or S. Kelton, *The Deficit Myth*, John Murray Press, 2021.

endure an economic crisis situation where money is in short supply. This is a proposal backed for several years in Europe by the NGO “Positive money¹⁶”.

- “Drone money”, which would consist of paying each citizen of the eurozone between €120 and €140 of digital base money, into an account opened for each person with the European Central Bank¹⁷.
- Monetary donation, which would be “a donation of money from the central bank to the public authority within Europe, by monetary creation alone, without intermediary, free of debt, intended exclusively for financing public investments or taking actions deemed to be of major collective interest¹⁸”.
- Free money creation for ecological reconstruction¹⁹.
- The universal dividend, which is a proposal taken from the “relative money theory” (RMT). It is “a monetary system in which base money is uniformly distributed among all actors, individuals of all ages and sexes, each of whom receives an equal share” in the form of a monthly dividend received from the monetary authority²⁰.

These proposals all involve a mode of issuance in which it is the central bank (or an issuing institute whose mode of governance could be different) that decides to issue a quantity of base money to allocate it to a particular sector and assign it to a specific purpose: a transfer to households or companies to support their spending in a crisis or pandemic situation in the case of helicopter money or drone money, a donation of base money to governments so that they can accelerate investments in the ecological transition, etc. This issuance would be special in that it would not be associated with a repayable credit or loan, or with a purchase of resalable securities: it would be “free of counterpart”. Unlike the current method, which puts temporary money into circulation—which lasts for the duration of the initial credit or loan (the money is destroyed as the credit is repaid)—this new method of issuing central bank money would put “permanent” money into circulation²¹.

16 See www.positivemoney.org and the update to the initial helicopter money proposal in the context of the pandemic by S. Jourdan, “Helicopter money as a response to the COVID-19 recession”, March 2020, 16 pp, http://www.positivemoney.eu/wp-content/uploads/2020/03/Helicopter_Money_Covid.pdf

17 E. Carré, J. Couppey-Soubeyran, T. Lebrun & T. Renault, “‘Drone money’: putting monetary policy back to the people”, January 2020 <https://www.veblen-institute.org/Veblen-Policy-Note-Drone-money-to-put-monetary-policy-back-to-the-people.html>. See also the adaptation of this proposal to the context of the health crisis: J. Couppey-Soubeyran, “‘Helicopter money’ to combat economic depression in the wake of the COVID-19 crisis”, April 2020 <https://www.veblen-institute.org/Helicopter-money-to-combat-economic-depression-in-the-wake-of-the-Covid-19.html>

18 A. Peters, “Le don monétaire, pour compléter le système monétaire”, [Monetary donation, to complement the monetary system], *Financité*, p. 1, October 2020, 51 pp, https://www.financite.be/sites/default/files/references/files/etude_don_monetaire_-_ap_-_2020.pdf

19 This idea was introduced by Nicolas Dufrêne and Alain Grandjean in their book “Une monnaie écologique” [A Green Currency], Odile Jacob, February 2020.

20 S. Laborde, “Théorie relative de la monnaie” [Relative Money Theory], p. 3, October 2017, 141 pp. <https://trm.creationmonetaire.info/TheorieRelativedelaMonnaie.pdf>

21 A cancellation of public debt held by the Eurosystem would also, firstly, succeed in making permanent the base money initially created to acquire the securities that constitute the debt to be cancelled and, secondly, enable the decision to do so to be connected to serving societal objectives such as the ecological transition. In

To this list of proposals, we could add the granting of perpetual (or very long-term) and zero interest central bank loans to public authorities, except that, while this financing occurs outside the debt market, there remains a counterpart in the form of a debt (which may be “melting” thanks to negative real interest rates), even if it is not repayable or is only in the very distant future. The base money issued in this operation is therefore “quasi-permanent”, unlike the proposals listed, which are all characterised by the issuance of “permanent” money²².

All these proposals are oriented towards a form of reintegration of money into society (i.e. assigning social objectives to the creation of money) but are not necessarily viewed as complete alternatives to the current monetary system. Some are presented as one-off measures (drone and helicopter money) to be taken in exceptional circumstances (the COVID-19 pandemic, economic depression, etc.). What we are calling here “free and permanent money” could coexist with the money issued through current modes of money creation: we explore the implications of this idea of multiple modes of issue. Others, such as zero-interest long-term loans and the donation of central bank money to governments, are intended as ways to effect more profound change to the current monetary regime, providing a means for structural funding of public investment. Sometimes, finally, as is the case with the universal dividend, they are positioned as a complete alternative to the current monetary regime.

This note analyses the new mode of issuance that forms the common thread in these proposals by comparing it to those of the current monetary system based on the mechanism of bank credit and the acquisition of securities. We argue that permanent money, free of counterpart, would serve where money coupled to bank and temporary debt fails: it would give society the resources to complete its ecological and social transformation. Our aim is to open the discussion by remembering that, throughout history, whenever society has needed to, it has transformed the monetary system to suit its needs. As such, the “banking mode of money creation”, which stems from the banking principle, has supplanted the “feudal mode of money creation” and has responded, in turn, to the rising power of the market. Times have changed. Repairing social injustice, accelerating the ecological transition, guaranteeing employment and ensuring a minimum standard of living are all priorities and needs to which the market-based system is unable to respond. Economic, social and ecological transitions are now vital, and they go hand in hand with a monetary transition.

This note is set out as follows:

- The second section provides some history on how bank money was established and reflects on the fact that monetary transformations are always responses to economic and social transformations: the monetary regime changes when society needs it to.
- In the third section, we argue that new monetary transformation is underway, in which the traditional banking mode of issuing money (that of the banks, but also, and above all, that of the central banks) is becoming relatively less significant. A growing

particular, the cancellation proposal launched by 150 European economists in February 2021 has always been conditional on public investment equivalent to the amount of debt cancelled.

²² A proposal that contradicts Article 123 TFEU and Article 21.1 of Protocol No 4. On this proposal, see the work of Benjamin Lemoine and his book *L'Ordre de la dette. Enquête sur les infortunes de l'État et la prospérité du marché* [The Debt Order. Investigation into the misfortunes of the state and the prosperity of the market], La Découverte, 2016.

proportion of the central bank money created in the context of unconventional asset purchases is, in effect, already decoupled from bank debt. However, it circulates in a non-permanent form and is restricted to the banking and financial sector. Society as a whole should benefit from money that is free from counterpart.

- In the fourth section, we analyse the merits of a new form of base money that would allow counterpart-free money to coexist with the money created through current modes of issuance.
- The fifth section explores accounting and monetary policy implications.
- In the sixth section, we emphasise the need to share and democratically control the power to create money, which fully justifies the introduction of this new mode of voluntary money issuance, oriented towards the common good, and the implementation of a new form of governance.
- The seventh and final section concludes with a discussion of this monetary transition towards permanent, counterpart-free money, created to finance the common good.

2. Brief history of the banking mode of money creation

Contemporary money is essentially bank money: credit money created and put into circulation by banks. This was not always the case. Historically, bank money began to emerge in the late Middle Ages as a response to the inadequacies of the existing method of money creation at that time, the minting of metal coins, a system with which it initially coexisted and then gradually came to replace. “Alterations” to metallic money²³, its appropriation by private interests and recurrent fears of a shortage of money in the face of the growing needs of commerce and then industry were the main drivers for the development of bank money. Bank money was the institution required for the rise of capitalism²⁴.

2.1. The development of bank money to meet merchants’ needs

Throughout the Middle Ages until 17th century, coins were minted in mints and other workshops accredited by the sovereign, using metals brought there by their owners. At that time, coins were issued by private owners, with their size and quality being guaranteed by the sovereign’s workshops. These establishments imposed fees for the minting, as well as a tax called “*droit de seigneurage*”, which came into English as seigniorage. Once issued, money normally had an infinite life span: it was intended to be permanent and was free to circulate

23 Practices criticised as early as the mid-14th century by the theologian and philosopher Nicolas Oresme in his treatise on money.

24 As presented by Joseph Schumpeter in *Theory of Money and Banking* (two volumes, Paris, L’Harmattan, 2005). See Odile Lakomski-Laguerre’s analysis in “Le crédit et le capitalisme : la contribution de J. A. Schumpeter à la théorie monétaire” [Credit and capitalism: the contribution of J. A. Schumpeter to monetary theory], *Cahiers d’économie Politique*, vol. 51, No 2, 2006, p. 241-264.

without any other obligation, without any counterpart. But the sovereign regularly prohibited the circulation of old coins. The stock of old coins in circulation then had to be melted down and reminted in the royal workshops and, as a result, were again subject to the payment of seigniorage. Seigniorage, a genuine wealth tax before its time, was for a long time the main resource of sovereigns.

This circuit, dominated by the aristocracy and the management of taxes, proved increasingly inadequate to the needs of merchants, which were rising with the growth of trade. They found new payment instruments better suited to their needs from the money changers at medieval fairs, set up on their benches (*"bancs"*, in French, which gave rise to the word *"bank"*): bills of exchange marked the beginning of the end of the *"feudal mode of money creation"*²⁵. The money changers kept books recording the amount of coins that merchants deposited with them, in exchange for which they issued bills of exchange payable in metal coins to the bearer of the bill. These bills of exchange circulated the money recorded in the money changers books. They became the circulation instrument of the scriptural (book) money held by these financiers, money changers and sometimes usurers, the ancestors of the future bankers. The first banknotes or paper money, which appeared in Europe in the 16th and 17th centuries, were also a form of bill of exchange, issued in return for a deposit of metal coins into the banker's coffers and refundable with coins identical to those deposited.

Scriptural bank money, which took off with the development of big business, offered merchants greater convenience than coins, just like banknotes, but also greater security, surpassing banknotes in this respect. It was better for a rich merchant to entrust takings to a trustworthy banker for safekeeping in a vault, than to carry the takings with them, even in the form of light notes, and risk being robbed. In this context of expanding trade, bank money allayed fear of a shortage of money, as well as preventing the hazards of monetary alteration, which, as Scotsman James Steuart explained in his *"Principles"* of 1767, *"ruins credit"* and harms trade by increasing hoarding²⁶.

But this bank money would soon, in turn, require confidence and stability. In the 17th and 18th centuries, economic expansion was regularly halted by banking and financial crises due, among other things, to excessive issuance of paper money and loans that had become irrecoverable, which led to bank failures. The organisation of banking was fragile and fragmented. It was to bring order to the issuance of money, and to reassure the sovereign that they would not run out of money to wage wars, that the first central banks were set up, in Sweden (Riksbank) in 1668 following the failure of Johan Palmstruch's Stockholms Banco, in England in 1694, in France in 1800, and so on. The primary function of the central bank was to be the government's bank. In the 19th century, Henry Thornton and then Walter Bagehot theorised the role of the central bank as the lender of last resort.

Bank money would coexist with metallic money for a long time before becoming independent of it. This independence formed the subject of furious debate in 19th century England, dominant at the time, between defenders of the strictly metallic concept of money (currency principle) and innovators, the progressives of the time, who advocated for the banks freedom

25 See Jacques Heers, *La Naissance du capitalisme au Moyen Âge - Changeurs, usuriers et grands financiers* [The Birth of Capitalism in the Middle Ages - Changers, usurers and financiers], Perrin, coll. Tempus, 2012, 308 p.

26 See Michel Piteau, *"Money of Account and Payments System with James Steuart. How Important is Banking Stability?"*, *Revue économique*, vol. 53, 2002/2.

to issue money according to the needs of the economy (banking principle)²⁷. For the former, banknotes are representative of quantities of gold deposited in banks, and there must be a perfect match between the notes issued and the metal cash held. For the latter, bank money is “a system of signs that need not correspond to a deposit of precious metals²⁸”.

It was the “prudent” voices, or at least those who wanted to preserve the old way, who initially prevailed over the “daring” ones with the Peel Act—named after the British Prime Minister Sir Robert Peel—signed in 1844, to limit the creation of banknotes to the banks’ gold holdings. However, the British economy, in full expansion, required an increase in lending and payment resources, and scriptural money took over from fiduciary money.

The concepts of “exogenous money” and “endogenous money”, which have become prominent in current debate, have their roots in these controversies. For exogenous money theorists, money originates outside the economic sphere: in discoveries of precious metals, if the monetary regime involves metallic money or convertible banknotes, and in the decisions of the central bank and/or the political authorities in a credit money regime. For endogenous money theorists, on the other hand, money originates from the very heart of economic activity. As needed, agents send credit requests to banks and it is by responding to them that banks create money: money is endogenous to the needs of the economy²⁹.

2.2. A two-tier hierarchical banking system

The current architecture of the monetary systems, which is similar across all countries of the world, derives from this era. The role and tasks of central banks have evolved since then, focusing for the most part on monetary stability rather than financial stability and only shifting back to a combination of the two following the financial crisis of 2007-2008. But the architecture has not changed. It comprises a two-tiered banking system whose basic purpose is to foster the development of trade, industry and economic growth in a liberalised market

27 For a refresher on these polemics, we refer you to the still very current work *History of Monetary and Credit Theory. From John Law to the Present Day*, by C. Rist, originally published in 1940, republished by Routledge in 2018, or to the second edition of the excellent work *Les Grands Textes de la pensée monétaire [Key Texts on Monetary Theory]*, an anthology presented by C. Tutin in 2014, Champs Classique (first edition 2009).

28 “Since the 19th century, there have been two opposing schools of thought on money: the currency principle (banknotes should only be representative of quantities of gold deposited in banks) and the banking principle (money is a system of signs that need not correspond to a deposit of precious metals in banks”, Thomas Tooke in *An Inquiry into the Currency Principle* (London, 1844), translated by A. Cabannes and quoted by C. Tutin in *Les Grands Textes de la pensée monétaire [Key Texts on Monetary Theory]*, Champs Classique, 2014 (first edition 2009), p. 228.

29 The introduction of the concept is attributed to Nicolas Kaldor in “The New Monetarism”, *Lloyds Bank Review* 97.1 (1970): 18. For an academic discussion from an institutionalist perspective, see Thibault Laurentjoye and Léo Malherbe, “Éléments institutionnalistes pour la mise en perspective historique du concept de monnaie endogène” [Institutionalist elements for a historical perspective on the concept of endogenous money], *Regulation Review* [Online], 26 | 2nd Semester / Autumn 2019: <http://journals.openedition.org/regulation/15602>. Augustin Sersiron’s thesis “*Monnaie et dette : désencastrer la création monétaire du marché du crédit*” [Money and debt: decoupling money creation from the credit market] (under the supervision of Jérôme Lallement and André Orléan, Université Paris 1 Panthéon Sorbonne <https://monnaie-sans-dette.com>) offers an analysis of the instability generated by endogenous money. For an educational presentation on the concepts of endogenous/exogenous money, see A. Beitone and C. Rodrigues, *Economie monétaire* [Monetary economics], Armand Colin, 2017, p. 115.

economy by providing means of payment for financially profitable commercial transactions and investments within a framework of relative financial stability³⁰.

At the first level, the central bank³¹, the banks' bank, provides banks with the liquidity they need to settle with each other and acts as lender of last resort to the banking sector in crisis situations³². It also has a supervisory role. At the second level, the banking sector has a dual role: firstly, to grant loans to companies, public authorities and households and, secondly, to manage deposits, provide instruments to circulate them and guarantee the completion of payments.

In order to be able to assume this role as payment operators, banks must attract funds from their depositing customers and, if they fail to have sufficient funds, must borrow them either from their peers or from the central bank, on what is known as the "interbank market". The central bank acts as a clearing house for interbank payments and, traditionally, implements its monetary policy with banks in need of liquidity by setting the price of money via the key interest rate that it deems necessary to apply at that time based on economic and financial criteria that it considers important, mainly inflation and economic growth.

Note that the development of this monetary architecture is only possible thanks to the development of fiduciary money (banknotes) and scriptural money (money registered in accounts held by banks, in other words deposits), i.e. money whose expression is independent—or relatively independent—from any physical element such as gold or silver. By freeing itself from physical constraints, money has become (again) abstract and symbolic³³.

30 Article 127.1 of the Treaty on the Functioning of the European Union states that "The primary objective of the European System of Central Banks (hereinafter referred to as the ESCB) shall be to maintain price stability. Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union as laid down in Article 3 of the Treaty on European Union. The ESCB shall act in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources, and in compliance with the principles set out in Article 119".

31 In the European Union, this level is represented by the national central banks (NCBs) federated with the European Central Bank (ECB) within the European System of Central Banks (ESCB), in which each national central bank retains its own legal status but acts in accordance with the guidelines and decisions of the ECB, pursuant to Protocol No. 4 on the Statute of the ESCB and of the ECB annexed to the Treaty on the Functioning of the European Union (TFEU).

32 The actions taken by central banks in the wake of the 2008 subprime crisis have been strikingly described by Adam Tooze in *Crashed: How a Decade of Financial Crises Changed the World*, Allen Lane, 2018, 766 pp.

33 "Again" because, as D. Graeber clearly demonstrated in *Debt: The First 5,000 Years*, debt is consubstantial with community life and, from time immemorial, acknowledgements of debt have been recorded on various media (sticks, clay tablets, etc.), media which, like bills of exchange, have circulated as a means of payment within communities. In this respect, scriptural, symbolic means of payment have always existed, without, however, being organised like the banking system. For example, in ancient Egypt, farmers' deposits of grain in temple stores were recorded on pottery shards (or ostraca)—a genuine acknowledgement of debt on the part of the temple—"ostraca were used as currency in daily trade". In this respect, we could also talk about an "agricultural mode of money creation". See B. Liétaer, *Au coeur de la monnaie, Systèmes monétaires, inconscient collectif, archetypes et tabous* [At the heart of money. Monetary systems, collective unconscious, archetypes and taboos], Editions Yves Michel, second edition, 2012, pp. 213-214 or D. Agut-Labordère, "De l'amidonier contre de l'orge : le sens de la conversion des quantités dans les ostraca démotiques de 'Ayn Manâwir" [Wheat for Barley: the Meaning of the Converted Quantities in the Ayn Manâwir Demotic Ostraca (Kharga Oasis, Egypt)], *Revue d'histoire des comptabilités*, 08/2016, <https://journals.openedition.org/comptabilites/1945>

Today, and in fact since all currencies have become inconvertible into metal³⁴, money only has value because it is given value; it is a pure social convention. The corollary of this observation is that by detaching itself from the physical constraint, from gold or silver coverage, the possibility of creating money becomes a priori unlimited, and the institution that has the power to create money is freed from any physical constraint. This was precisely the objective of the Banking School. Theoretically³⁵, the only limit to money creation is the risk of inflation and the loss of confidence in the currency. It is the demand for credit from the banking sector that leads to money creation: we are in a system of endogenous money, coupled to the credit market, and therefore to debt. Money is created “in writing” when the bank grants credit, which it does based exclusively on economic and financial criteria. And the money is destroyed, in accounting terms, when the credit is repaid. In this “banking mode of money creation”, money is temporary and always has debt as a counterpart. Consequently, the money supply in circulation is dynamic, fluctuating up and down according to the volume of loans granted and repaid.

This two-tiered architecture enables two types of bank money to coexist³⁶:

- central bank money (or base money), known as external money, the only legal tender, issued by a public institution, which circulates among the population in its fiduciary form and circulates, in scriptural form and for the most part, between the accounts of the banks with the central bank;
- and the internal money of each commercial bank, private money, which circulates in a scriptural manner between the accounts of the customers of each bank³⁷.

2.3. A recurring criticism

Money and monetary systems are complex social constructions with multiple dimensions (material, institutional, cultural, economic, legal, symbolic, psychological, etc.) that have periodically undergone changes to adapt to the prevailing circumstances. They will undergo further change in the future, according to the needs of society. The current endogenous credit money regime will not escape this fate, and questioning of the system is not a recent phenomenon. As early as the 1930s, Irving Fisher explained the 1929 crisis as the result of a self-sustaining spiral of debt deflation. This led him to advocate a radical change in the monetary system: moving from an endogenous money creation system coupled to bank credit, to an exogenous money creation system, based 100% on central bank money, which involves withdrawing the banks' power to create money. The financial crisis of 2007-2008 once again provided an opportunity to question the extent to which the banking mode of money creation

34 The US dollar, the last currency convertible to gold, was declared inconvertible in August 1971 by President Nixon.

35 In reality, there are rules that limit money creation by the banking sector. These rules are set by the Bank for International Settlements (BIS) through the so Basel III accords. The main rules concern the level of banks' capital as a percentage of their risk-weighted assets (solvency ratio) or total unweighted assets (leverage ratio, which limits the level of debt) and compliance with a liquidity ratio.

36 For a more detailed description on the situation in the euro area, please refer to the European Central Bank website https://www.ecb.europa.eu/explainers/tell-me-more/html/what_is_money.en.html

37 Whereas interbank payments are made by banks from their central bank money accounts at the central bank.

was responsible for the instability that led to this crisis³⁸. So it is not that surprising that Irving Fisher's *100% money* has re-emerged in debates where the banking sector has expanded the most: in Switzerland, where in 2015 the "full money" campaign proposed a referendum on the proposal to withdraw the banks' power of money creation (the initiative was finally put to a vote and rejected in 2018), and in Iceland, where the issue was also discussed in a report on the reform of the monetary system³⁹.

Many other proposals, like the ones that interest us the most (helicopter money, central bank money donation, free and perpetual loans from the central bank to the government, etc.), that were formulated in the wake of the financial crisis and have been put forward again with the COVID-19 pandemic, also question, each in their own way, the banking mode of money creation, its orientation and its integration with debt, demanding that money creation respond better to the needs of society (climate, employment, combating inequalities, etc.) than it does currently.

In fact, as we will show in the next section, bank money has already begun to decouple from debt. This is particularly true of central bank money since the large-scale deployment of so-called unconventional asset purchase measures. But this is probably only a transitory phase of decoupling, rather than one that could lead to the coupling, or "embeddedness" (as Polanyi⁴⁰ describes), of money to/in society⁴¹.

3. The ongoing transformation of base money creation through unconventional monetary measures

3.1. Unconventional measures...

Since the subprime crisis (2007-2008), the sovereign debt crisis in Europe (2010) and the economic crisis linked to the COVID-19 pandemic (2020), central banks have adopted so-called "unconventional" monetary measures that follow two main paths.

1. Longer-term refinancing of the banking sector⁴².

38 For a detailed description of the genesis of this crisis and the actions taken by the central banks, see A. Tooze, cited above.

39 For a contemporary approach to Irving Fisher's thesis, see "The Chicago Plan Revisited" by J. Benes and M. Kumhof, IMF Working Paper, Research Department, WP12/202, August 2012, "The monetary system in crisis. Monetary reform proposals, and a simple suggestion for a more effective monetary policy" by M. Kroll, *Future Finance* - Discussion Paper, No. 1, 07/2015, World Future Council, 30 p., and for Iceland in particular, see Sigurvin B. Sigurjónsson, "Money Issuance: Alternative money systems. A report commissioned by the Icelandic Prime Minister's Office", www.kpmg.is

40 K. Polanyi, *The Great Transformation. The Political and Economic Origins of Our Time* (1944), Boston, Beacon Press, 2001.

41 Or to its historical "re-embedding" in society, if we consider that early commodity currencies were produced and circulated by society rather than monopolised by an authority. See *Les théories françaises de la monnaie* [French Theories on Money], ed. Pierre Alary, Jérôme Blanc, Ludovic Desmedt, Bruno Théret, PUF, 2004 (Chapter 3 by B. Courbis, E. Froment and J.-M. Servet, p.154 and following) where paleo-currencies are analysed as "agents of social life", "thought of as essential instruments for the existence of the group".

42 For the euro area: MRO ("Main Refinancing Operations") with a three-month maturity in euro (and in dollars, thanks to swap agreements between the ECB and the Fed), LTRO ("Longer-Term Refinancing Operations") with

2. Asset purchases on the financial markets or “quantitative easing”.

The longer-term refinancing programme for the banking sector differs from the central bank’s usual⁴³ operations in two ways:

- the interest rate level, zero or even negative in certain circumstances, at which these loans are granted (which was considered an aberration only a few years ago!);
- the duration of these loans, which is up to four years, whereas central bank liquidity loans are normally made for short periods ranging from one day to a maximum of three months.

However, these transactions remain within the remit of the lender of last resort, even if we are far from Walter Bagehot’s original theory: all banking establishments are entitled to them and access is free of charge, or even, currently, at negative rates under certain conditions. It is above all their size that makes them exceptional: in the Eurosystem’s consolidated balance sheet as of 31 December 2020, they represent more than a quarter of assets, compared with barely 5% as of 31 December 2000 (see Annex 1 – balance sheet item A52).

As for quantitative easing, it consists of financial asset purchase programmes on the markets for government debt securities, securitised real estate loans and corporate bonds⁴⁴. The resulting change is more profound: it is no longer the banking sector’s demand for liquidity and the central bank’s lending of such liquidity that drives money creation, but rather a unilateral decision by the central bank to buy financial securities⁴⁵, creating central bank money.

3.2. ...have initiated an “acquisitional” mode of base money creation

Without us really realising it, these operations have transformed the method of money creation: it is now triggered by the will of the central bank alone, detached from the classic mechanism of bank credit against the acquisition of financial securities (shares, bonds and public debt securities). Consequently, central banks have substituted, at least partially, an “acquisitional mode of money creation” for the “banking mode of money creation”. Instead of holding a claim on the banking sector as a counterpart to the provision of base money, the central bank holds financial securities on its own account as a counterpart to the (base) money it has put into circulation.

a three-year maturity, TLTRO (“Targeted Longer-Term Refinancing Operations”) and PELTRO (“Pandemic Emergency Longer-Term Refinancing Operations”) with a four-year maturity.

43 The central bank’s traditional and main tool for refinancing the banks is the sale and repurchase agreement, whereby two parties simultaneously agree on two transactions: a cash sale of securities by the bank to the central bank followed by a forward repurchase at a pre-agreed date and price. The difference in price between the cash sale and the forward repurchase pays the interest rate. Compared to a traditional loan with securities as collateral, a repurchase agreement (repo) has the advantage that the lender (the central bank) actually owns the security during the loan period.

44 This programme is made up of various components under a range of acronyms such as APP, PSPP, CSPP, PEPP, etc.

45 The TFEU and Protocol No. 4 require the ESCB to restrict itself to operations of a financial nature; the ESCB may not acquire real assets (e.g. precious metals or fixed assets) in the course of its monetary operations.

In this sense, money creation is decoupled from the bank debt mechanism, and we move from an endogenous money demand mechanism to an exogenous money supply mechanism. There is certainly a “demand” to which this supply responds, and which tends to confuse the characterisation (endogenous/exogenous) of this mode of issue, but it is above all the demand of the banking and financial sector and not (or at least far from directly) that of the real economy.

Let us also immediately clarify what we mean by “decoupled from the mechanism of bank debt”: clearly, this is not to say that money is no longer a debt owed by the issuer to its users. Once created and credited to the liabilities of the central bank, in the case of bank reserves at the central bank (central bank money), or to the liabilities of a commercial bank, in the case of deposits (commercial bank money), money remains, of course, a debt owed by the monetary institution to its creditors (the banks in the case of the central bank, and the depositors in the case of the commercial bank). By “decoupled from debt”, we mean that the money put into circulation in this way no longer has as a counterpart, among the assets of the issuing institution, in the form of a loan (from the central bank to the banks) or a repayable credit (from the banks to their customers). The acquisitional mode of money creation participates in this decoupling by replacing the loan/credit with a security in the issuing institution’s assets.

This acquisitional mode already exists on the balance sheet of commercial banks. The acquisition of securities (but also of goods, services, etc.) forms part of the counterparts of their monetary creation and has developed considerably in recent decades with the development of banks’ market activities⁴⁶. It is much more novel, however, in the context of central banks. Outright purchases of securities were a very small part of their open market operations until the financial crisis of 2007-2008. The management of this crisis and, even more so, of the pandemic, has required these securities purchases to be undertaken on a scale unprecedented in contemporary monetary history. Assets held for monetary policy purposes represented 0% of the Eurosystem’s balance sheet in December 2000 and 52.9% in December 2020, amounting to €3,694 billion (see the extract from the Eurosystem balance sheet in Table 1, item A71 of the balance sheet, and the full balance sheet in Annex 1).

These purchases have, since 2015, contributed extensively to the accelerated growth of the stock of central bank money in circulation (M0). In twenty years, the monetary base has multiplied by more than 8, while the broad money supply (M3) from the banking sector has multiplied by 3 (see Table 2 and the full complete version in Annex 2).

⁴⁶ The supervisory reforms implemented after the financial crisis did not aim to reduce the share of securities on banks’ balance sheets, only to increase the capital and liquidity requirements associated with them. Structural reforms (separation of activities along the lines of the US Glass Steagall Act of 1933, taxation of bank balance sheets, etc.), which could have had a greater impact in this area, did not see the light of day in Europe (the European draft directive on banking separation was, for example, rejected) and remained limited to the United States (the Volcker rule) and the United Kingdom (the rules implemented on the basis of the Vickers report).

Table 1: Share of securities held for monetary policy purposes in the consolidated balance sheet of the Eurosystem

Balance sheet of the Eurosystem (million EUR)	2000-12	2005-12	2010-12	2015-12	2020-12
A71. Securities held for monetary policy purposes	0	0	134,829	803,135	3,694,642
Balance sheet total	835,065	1,038,152	2,004,432	2,781,145	6,979,324
Securities held on the balance sheet (%)	0.0%	0.0%	6.7%	28.9%	52.9%

Table 2: Monetary base, Eurosystem balance sheet and money supply

Period	Monetary aggregates (million EUR)				Evolution (1999 = 100)			
	M0	Eurosystem balance sheet total	M1	M3	M0	Eurosystem balance sheet total	M1	M3
2020-12	4,900,044	6,979,324	10,131,300	14,497,646	1063.3	868.9	526.2	310.6
2015-12	1,723,357	2,781,145	6,614,314	10,850,414	374.0	346.3	343.6	232.5
2012-12	3,018,198	3,018,198	5,102,620	9,787,906	654.9	375.8	265.0	209.7
2010-12	1,073,068	2,004,432	4,709,706	9,294,345	232.8	249.6	244.6	199.1
2009-12	1,052,340	1,904,935	4,500,560	9,346,624	228.3	237.2	233.8	200.3
2008-12	1,150,668	2,043,465	3,992,465	9,401,865	249.7	254.4	207.4	201.4
2007-12	841,899	1,511,244	3,838,952	8,650,036	182.7	188.2	199.4	185.3
1999-12	460,847	803,192	1,925,201	4,667,221	100.0	100.0	100.0	100.0

Note: M0 refers to the stock of central bank money, also called the monetary base, composed of banknotes in circulation and liabilities to the banking sector (bank reserves): https://sdw.ecb.europa.eu/quickview.do?SERIES_KEY=123.ILM.M.U2.C.LT00001.Z5.EUR. The total Eurosystem balance sheet is the readily available indicator generally used for quick comparisons: https://sdw.ecb.europa.eu/quickview.do?SERIES_KEY=123.ILM.W.U2.C.T000000.Z5.Z01. M1 refers to the money supply in the narrowest sense (narrow money), consisting of coins, banknotes and overnight deposits. M3 refers to the money supply in the broadest sense (broad money), including M1 plus short-term deposits and marketable instruments held at monetary institutions (including money market fund shares/units and certificates of deposit).

Since 1999, when the euro was introduced, the monetary base has increased tenfold and the balance sheet total eightfold, with the increase accelerating with the asset purchase programmes that began in 2015, while the broad money supply has “only” tripled. The relatively stronger increase in M1 than in M3 is partly due to the asset purchase programmes, which increase the bank reserves and the deposits of non-bank investors who also benefit from these purchases. We report here the values of the aggregates M0, M1, M3 at a few significant dates (1999

for the introduction of the euro; 2007-2008 for the financial crisis; 2010-2012 for the sovereign debt crisis; 2015 for the start of asset purchase programmes; 2020 for the COVID-19 pandemic. The full table appears in Annex 2.

3.3. A security counterpart in place of a debt counterpart

This acquisitional mode has two closely-linked aspects in common with the banking mode of money creation: the temporary nature of the money created and the existence of a counterpart. Once again, the counterpart is no longer a direct debt owed by the banking sector but a financial security⁴⁷ owned by the central bank. It is the existence of this counterpart, which can be redeemed or resold, that makes the money created temporary, since it is destroyed, in accounting terms, when the financial instrument is either presented to the debtor for redemption or resold on the financial market. As such, the central bank money created in the acquisitional mode is, in this sense, decoupled from the bank debt but not free of counterpart, and therefore always temporary.

This being the case, this acquisitional mode presents an essential difference with respect to the banking mode of money creation: it does not create a claim; the claim merely changes hands and is “monetised”, i.e. transformed into money. When a commercial bank extends credit or a central bank refinances a bank by lending it base money, a claim (receivable) is created in both cases that did not previously exist. In contrast, in the context of a security being purchased, the claim already existed: the security had already been issued and was already on the balance sheet of a holder. The purchase of the security by the central bank shifts the claim from the balance sheet of the vendor (bank or non-bank holder) to the central bank’s balance sheet—just as a security purchased by a bank is transferred from the vendor’s balance sheet to the balance sheet of the commercial bank; see diagram.

In other words, the security changes hands. This has no direct impact on the issuer of the security: what the issuer owed to the original creditor, before the creditor sold the security, is now owed to the central bank when the purchase of the security is made by the central bank (or to the bank when purchased by the latter).

The security is monetised by a purchase made by the central bank as well as by a bank purchase: in the first case it is transformed into central bank money, and in the second case into commercial bank money. This has a major impact on the beneficiary of the purchase and on all potential beneficiaries of such purchases: the securities eligible for these purchases gain access to a higher degree of liquidity, and to ultimate liquidity when the purchase is carried out by the central bank. If, to illustrate this, we take the image of the pyramid of money used by Daniela Gabor or Perry Mehrling in their works on shadow banking, the central bank’s purchases move securities from the bottom to the top of the pyramid. Asset purchases extend the financialisation of money or the monetarisation of finance. The boundary between money

⁴⁷ Whether the financial security is a debt security or a company share does not change the fact that the counterpart is no longer a debt, in the sense that the beneficiary of the central bank money (who has seen, following the purchase of the financial security, an increase in their reserves in their central bank account, if they are a bank, or a deposit in their commercial bank account, if the seller of the security is not a bank) is not indebted to the central bank, whereas traditionally, when the central bank creates money in the traditional banking mode by lending to banks, the counterpart is a debt owed by the banks to the central bank (just as when a commercial bank creates money by granting a loan, the counterpart is a debt owed by its customer to the bank).

and securities had already become porous with the expansion of the repo market, as explained by Daniela Gabor and Jakob Vestergaard⁴⁸, Perry Mehrling⁴⁹ and Zoltan Pozsar⁵⁰; with central bank purchase programmes, it becomes even more blurred for all the securities eligible for purchase: once declared eligible for central bank purchase, the securities become, in a manner of speaking, money. The central bank’s power to create money is also a power of “monetisation”: any asset acquired by the central bank gives rise to the creation of money, so any asset destined to be acquired regularly and in significant quantities by the central bank is, for its initial holder, in advance, assimilated to money⁵¹.

Entire pools of securities gain access to ultimate liquidity, for the exclusive use of banks and other financial beneficiaries of asset purchases. Households, non-financial companies and the vast majority of local and regional authorities are excluded: the central bank buys securities from banks and non-bank financial intermediaries and not from non-financial agents such as companies or households. The money created by the central bank in the acquisitional mode provides those who receive it (in this case banks and other financial intermediaries) with an alternative means of accessing liquidity without incurring debt. In essence, this acquisitional mode creates a currency whose counterpart is no longer a loan granted by the central bank but a security that it holds, which is temporary (due to its security counterpart) and reserved for the financial sphere.

Diagram: Impact of central bank (CB) purchases of financial securities on balance sheets

Example 1 : CB buys securities to a commercial bank for a value of 100

Central Bank		Commercial bank	
Assets	Liabilities	Assets	Liabilities
Securities +100	Reserves +100	Securities -100	
		Reserves +100	
Total Balance sheet : + 100		Total Balance sheet : unchanged	

Example 2 : CB buys securities to third parties (companies, insurance companies, pension funds, etc.)

Central Bank		Commercial bank		Third party	
Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Securities +100	Reserves +100	Securities +100	Reserves +100	Securities -100	
				Reserves +100	
Total Balance sheet : + 100		Total Balance sheet : + 100		Total Balance sheet : unchanged	

48 Daniel Gabor and Jakob Vestergaard (2016), “Towards a theory of shadow money”, Working Paper, Institute for New Economic Thinking, April 2016 <https://www.ineteconomics.org/research/research-papers/towards-a-theory-of-shadow-money>

49 Perry Mehrling (2012), “The Inherent Hierarchy of Money” in Lance Taylor, Armon Rezai and Thomas Michl (Hg.), *Social Fairness and Economics: Economic Essays in the Spirit of Duncan Foley*, Oxon/New York, Routledge, pp. 394-404.

50 Zoltan Pozsar (2014), “Shadow Banking: The Money View”, Office of Financial Research, Working Paper 14-04, 2 July 2014.

51 The carbon certificate mechanism proposed by Michel Aglietta and Etienne Espagne in “Financer les investissements pour une croissance soutenable en Europe” [Financing investments for sustainable growth in Europe], *CEPII Newsletter* No. 353, March 2015, was based on this “monetisation” power held by the central bank.

Monetary transition: the case for money serving the common good

Source: authors. Adapted from "QE and bank balance sheets: the American experience", Céline Choulet, BNP Paribas Note de conjoncture, July-August 2015

3.4. The financialisation of money

The expansion of the acquisitional mode of money creation to central banks is, in itself, an at least implicit recognition of the inadequacy of the traditional banking mode of money creation. The acquisitional mode aims to support the traditional objectives of the central bank through new means. The mandate remains unchanged; the means implemented are new. However, it must be said that it does not succeed in making bank money work better for society, or respond better to its economic, social and ecological needs. In fact, the support it brings consists of adding the financial markets to the banks as channels for the transmission of monetary policy, and it has only succeeded in extending the banks' monetary power to other financial actors, whose securities are now quasi-money. The reason for this is excessive financialisation and the resulting autonomy of the financial sphere. Banks and financial markets are now interlocking channels for the transmission of monetary policy, which are closed off and largely disconnected from the real economy. Central bank money may flow freely through loans to banks and purchases of securities on the markets, but this does not help to proportionately increase the circulation of bank money in the economy, to redirect it more significantly towards productive uses that create jobs, to better distribute its ownership and use, or to respond to the ecological emergency. It only fuels the expansion and disconnection of the financial sphere.

To a certain extent, the proposed debt cancellation by the Eurosystem, called for by more than 150 European economists in February 2021, aimed, firstly, to redirect the central bank money created by this cumulative acquisition of some €3 trillion of public debt securities towards vital collective uses, recommending that it be conditional on public investment in the ecological transition equivalent to the amount cancelled, and, secondly, to make the corresponding stock of money permanent by erasing its counterpart (the Eurosystem's receivables from governments). The proposal was rejected on the basis of the ECB's mandate and independence; this fact once again raises questions about the adequacy of the institution's doctrine and principles of governance—first and foremost its independence—in the current circumstances of economic, social and ecological emergency. Surely this operation mode is an obstacle to guiding of the monetary base towards major societal issues, such as preventing the pandemic from destroying productive potential and employment, preventing increases in insecurity and inequality, and combating climate change?

3.5. Futile perpetuation

The question arises as to whether the acquisitional mode of money creation is transforming, complementing or replacing the mode of central bank money creation that has prevailed until now. The money is, a priori, a form of assistance for finance, not intended to last beyond crisis management. Clearly, however, this acquisitional mode of central bank money creation is becoming a permanent feature: Japan has been using it since 2001, the United States and the United Kingdom since 2008, and the euro area since 2015... Gradually, imperceptibly, and even probably unconsciously, it seems that the mode of money creation is changing again, which also affects the underlying concept of money: we are moving from a strictly endogenous concept with the banking mode of money creation (stemming from the Banking School) to a more flexible concept, with an acquisitional mode of money creation combined with the

banking mode. We are experiencing the start of a dual mode of monetary issuance: exogenous (the central bank's acquisitional mode) and endogenous (the banking mode); a sort of "exoendogenous" mode—or in any case one that is no longer exclusively endogenous.

Does this acquisitional method of central bank money creation stabilise finance and ultimately the economy? Nothing is less certain. These securities purchases are necessary when the central bank has no more room for manoeuvre in terms of its key rates, but they essentially serve to keep long-term interest rates low, especially those of sovereign borrowers⁵² (whose securities make up a major part of these purchase programmes) and provide support for the financial markets, including the stock markets and, indirectly, the real estate market too⁵³ (at least until now). In the specific case of the euro area, without these central bank purchases of public debt securities, we would most likely observe significant sovereign spreads between the nineteen sovereign debts that coexist in the absence of fiscal union. In the euro area, these securities purchases by the Eurosystem serve far more to mitigate the shortcomings of an area that is united in monetary terms but not in fiscal terms, than to stabilise prices, the economy and finance. Admittedly, without these securities purchases, the eurozone might have sunk into deflation at the end of the financial crisis, but they have clearly not enabled the ECB, at least not to date, to return to its inflation target. They have an undeniable effect on long-term rates, but are not sufficient to get investment moving again. As for their effect on financial stability, they may prevent a financial collapse in the short term, but they only postpone the risk of instability in the longer term by filling all market segments with liquidity.

The question remains: "How can central bank money be made to better serve economic and financial stability, to serve society?" The proposals we are interested in offer the following answer: by permanently freeing it from the obligation of counterpart, which involves creating it without this counterpart, and steering it directly towards the spending needs of the real economy: those of households, those of companies, and those of governments in particular, to support them and allow them to make the investments that are vital to the ecological transition. We present the mechanism for this in the next section.

52 The mass purchase of debt securities by the central bank keeps the demand for securities at a high level, which increases their price and automatically lowers the yield and therefore the interest rate.

53 In this case, too, a high demand for securities ensures a high stock price. The price is all the higher because this demand is fuelled by the need to find a profitable use for the money newly created by the central bank in exchange for the debt securities sold. If the influx of central bank liquidity fuels a cumulative rise in stock prices, speculative bubbles will form, the bursting of which could trigger a financial crisis. However, there is some debate as to whether central bank asset purchases create bubbles on the financial markets, and even in the real estate market via the same mechanism. Without necessarily leading to bubbles, the increases in financial and real estate asset prices caused by central bank asset purchases can lead to growing wealth inequalities between those who own overvalued movable or real estate assets and those who do not. The younger generation would fall victim to this since they would no longer be able to build up their assets.

4. A new mechanism for creating central bank money that serves the common good

4.1. The introduction of a voluntary mode of money creation without counterpart

Whereas currently, with the banking and acquisitional regimes of money creation, each unit of money issued by the central bank has a counterpart (a security among its assets in the acquisitional mode, or a receivable due from the banks it refinances in the traditional banking mode), the proposals for helicopter money, monetary donation or monetary dividends do not share this defining feature of the current money creation system. All these proposals renounce any counterpart of money in the types of issuance they suggest. Helicopter money involves the distribution of money to the population without any counterpart, monetary donation is the financing of public investments without any counterpart, and the free and long-term lending of central bank money to governments also means abandoning this counterpart to a large extent. So, in terms of these proposals, the volume of central bank money in circulation does not have to be 100% backed by debt. If the central bank implements only a few one-off measures (e.g. drone money, helicopter money or cancellation of public debts) or recurrent measures (monetary donation) to create money, which then coexist with traditional monetary creation (banking mode), the mass of central bank money in circulation (monetary base) will remain largely backed by counterparts (80% for example).

Implicitly or explicitly, these proposals highlight the fact that confidence in money is not derived from the fact it is back by a counterpart but from a complex set of institutions, laws, controls, rules and practices that are deemed legitimate by the users of this money. By abandoning the representation of money by a counterpart, the mechanism of money creation is radically changed. We are moving to a “voluntary mode of central bank money creation”, without the acquisition of receivables in return. This method of money creation is reserved for the central bank, acting for the public or common good. It goes far beyond the method introduced with quantitative easing⁵⁴. It is the decision of the monetary authority that creates the money.

4.2. Expression of political commitment through money

If the proposed monetary measures were to be integrated into the panoply of measures that the European Central Bank is able to take⁵⁵, it would have at its disposal three complementary modes of monetary creation that meet different objectives: the traditional banking mode, the acquisitional mode inaugurated with unconventional measures and, based on these proposals, the voluntary mode that would allow it to carry out the monetary distribution that society collectively needs.

⁵⁴ Although there is an aspect of will or decree associated with the acquisitional mode as it is the central bank that “decrees” the amount of its asset purchases and the quantity of money it creates to conduct them, there remains a counterpart (the security purchased), unlike the voluntary or decreed mode of creation, in which this counterpart does not exist.

⁵⁵ This would require a revision of Protocol No 4 to the TFEU.

While under the traditional banking monetary regime, the “invisible hand of the market” drives the creation of money, under these new proposals, the “visible hand of political will” would decree the creation of money and would decree its allocation to a particular sector of society, such as households, companies or public authorities, according to social, environmental, economic or other objectives.

These proposals all lead to the creation of permanent money⁵⁶, which no longer obeys the usual rule of monetary reflux. While under the traditional system, money is temporary with a monetary flow increasing the volume of money in circulation created by the granting of loans and monetary reflux decreasing the volume of money through loan repayments, these proposals result in the creation of a stock of base money intended to circulate *ad infinitum*. They do not, *a priori*, provide for a mechanism to destroy money through repayment.

This raises a number of questions: on the adjustment of the volume of base money in circulation to the level of economic activity; on the relationship between the respective volumes of permanent and temporary money in circulation; on how to control these volumes in order to prevent inflation; on the possible abuse of issuance (abuse of the ability to print money); and on the possibility of applying monetary policy in a context where the volume of money in circulation is wholly or partially outside the central bank’s interest rate policy⁵⁷. These new issues will require new rules and tools adapted to the new context. In what follows, we outline the main principles based on our own vision of counterpart-free, permanent money.

5. Accounting rules and monetary tools adapted to this new mode of issuance

This new method of creation breaks with the current accounting and financial definition of money, which requires that every issuance has a counterpart. Money is no longer necessarily issued via a banking mechanism or money creation through debt: with the introduction of voluntary money, some of the money in circulation would be free of debt or any other counterpart—and permanent instead of temporary.

5.1. A new accounting item to balance the central bank’s balance sheet

The accounting rules should be adapted to the fact that the voluntary mechanism of money issuance transforms the central bank, at least partially, into an issuing institution that issues money without a counterpart. Therefore, on the assets side of the balance sheet where, traditionally, securities held for monetary policy purposes are recorded, the amount of money issued on behalf of the community would be recorded. This accounting item could be entitled

56 For a more detailed description of the concept of permanent money, see G. Galand and A. Grandjean, “La monnaie dévoilée” [Money uncovered], (L’Harmattan, 1996), especially Chapter V on permanent money.

57 Note, however, that for the past ten years or so, since the implementation of unconventional operations, central bank interest rates have been at rock bottom and are virtually no longer used as monetary policy instruments. Money on the wholesale market is free, or almost free.

“Definitive contribution to public objectives”, and, for the purposes of both monetary policy and democratic control, would enable the close monitoring of the amounts issued without counterpart for the benefit of the community (see Annex 3 for an illustration of the accounting of voluntary money).

In the current accounting system, adapted to central banks and their banking mode of money creation, the creation of this item would avoid having to record a loss on the institution’s balance sheet, whether for the cancellation of central bank-held debt, helicopter money or the donation of central bank money to public authorities. Functionally, this loss is not a problem for a central bank, as explained by the Bank for International Settlements in “Central Bank Finances”⁵⁸.

This document provides a conceptual framework for harmonising the principles and practices of central banks around the world. It quite rightly points out two essential factors.

- The balance sheet of a central bank is not the same as that of a commercial bank: “Central banks are not commercial banks. They do not seek profits. Nor do they face the same financial constraints as private institutions”; “Central bank gains and losses belong to society”⁵⁹.

– A central bank can operate with negative equity since its debt is only in central bank money, which it has the power to create *ex nihilo* and *ad infinitum*: “The problem is that not everyone appreciates that a central bank’s accounting equity can be negative without any reason for alarm bells to ring”⁶⁰.

But it also points out that financial markets, policymakers and the general public may have misperceptions about a central bank’s balance sheet and that, for this reason, despite the fact that it can operate with negative equity, “central bank financial independence is important”⁶¹. Since a loss on the central bank’s balance sheet cannot be offset either by issuing money⁶², or by indemnification⁶³, it is better to find a way to avoid it in the accounts. This is exactly what

58 “Central Bank Finances,” BIS Papers No. 71, Bank for International Settlements, Monetary and Economic Department, April 2013, <https://www.bis.org/publ/bppdf/bispap71.pdf>

59 Ibid., p. 1.

60 Ibid.

61 Ibid.

62 If, for example, the ECB created 1,000 of base money to offset a loss of 1,000 on the NCBs’ balance sheets, the NCBs’ reserves would increase by 1,000, but this creation of base money without counterpart would result in a loss for the ECB, reducing its own equity by 1,000. On the Eurosystem’s consolidated balance sheet, the initial loss of 1,000 would remain. This situation approaches the limits of double-entry accounting. Under the current mechanism, the central bank must acquire a receivable in order to create money on the liability side and cannot hold its own money as an asset item.

63 In the case of the European System of Central Banks and the European Central Bank, Articles 32.4 and 33.2 of Protocol No. 4 annexed to the Treaty on the Functioning of the European Union provide that “In the event of a loss incurred by the ECB, the shortfall may be offset against the general reserve fund of the ECB and, if necessary, following a decision by the Governing Council, against the monetary income of the relevant financial year in proportion and up to the amounts allocated to the national central banks in accordance with Article 32.5” (Article 33.2), and that in the event of losses incurred by the national central banks, “the Governing Council may decide that national central banks shall be indemnified against costs incurred in connection with the issue of banknotes or in exceptional circumstances for specific losses arising from monetary policy operations undertaken for the ESCB. Indemnification shall be in a form deemed appropriate in the judgment of the Governing Council; these amounts may be offset against the national central banks’ monetary income”. But this indemnification scheme

this new asset item would do, restoring the accounting equality needed by the double-entry accounting system that governs the current money creation mechanism.

There is another functional reason for creating this noncallable asset item: it would serve as a record of the stock of permanent money put into circulation, as the latter merged into the total stock of money. Tracking permanent money in circulation through this asset item would facilitate its management. In its absence, monetary policy would be made more difficult.

5.2. The adaptation of monetary policy to the coexistence of voluntary and current modes of money creation

The voluntary mode of issuance would be introduced to respond to current major problems, such as financing the ecological transition, actively managing a pandemic, ensuring a universal basic income, guaranteeing employment for all, etc. The various proposals we have listed do not necessarily advocate for the same usage, and the choice of usage or allocation cannot be fixed in advance since it would emanate from a democratic choice.

On the other hand, it is up to us to clarify the impact of this new mode of issuance, which would coexist with the existing banking and acquisitional modes specific to the market structure. Money issuance cannot be entirely based on this voluntary mode, as the market and financial systems need the existing modes of issue. In other words, the permanent money issued via the voluntary mode of issuance would merge with the temporary money produced via current modes of issuance. Monetary policy instruments should be adapted accordingly.

Regulation of the stock of money in circulation would continue to rely on monetary policy measures tailored to temporary money, those acting on the price of money (interest rates)⁶⁴, and unconventional measures acting on the volume of temporary money in circulation (quantitative easing/tapering). However, these measures would not affect the volume of counterpart-free, permanent money. By definition, this volume of “free” money is beyond the central bank’s control, just as, in the Middle Ages, coins were beyond the control of the sovereign from the moment they were issued.

Therefore, to act on the volume of permanent money, additional monetary regulation tools would be needed, whose purpose would be to re-establish the reflux that does not naturally exist with the voluntary mode of issuance of counterpart-free money, and to control it. First of all, there should be tools to directly influence the volume of money in circulation: to increase it by decision of the issuing committee, and to reduce it if it becomes excessive. Reducing it would be tantamount to causing some monetary reflux. Three categories of means are possible:

- incentives, such as the sale of interest-bearing debt securities by the issuing institution;

was not designed to enable solidarity between the central banks of the system. Neither would not cover cancelled amounts of several thousand billion euro.

⁶⁴ Note that it has been at zero for many years, indicating that traditional monetary policy is encountering obstacles that it cannot overcome.

- regulatory means, such as adjusting the level of the required reserves deposited by banks in their central bank accounts, which, although provided for in the current legal framework, has fallen into disuse (except in China), or the obligation for the government to set aside a reserve with the central bank, even if it means issuing a loan to the general public;
- fiscal means, by which the public authority would apply a one-off or recurrent levy directly on the money supply in circulation—which would amount to having “melting” money, close to the agricultural (and biodegradable) definition of money⁶⁵.

It would be up to the issuing institution to assess whether the stock of permanent money was becoming excessive, i.e. whether it proved to comprise too large a spending capacity in relation to the supply capacity, which could lead to inflation.

However, this fear of inflation, often associated with proposals for helicopter money or monetary donations, should be tempered. On the one hand, this mode of voluntary money is proposed in response to a macroeconomic context that is no longer one with a risk of high inflation but of latent deflation against a backdrop of secular stagnation; in which case, raising inflation would be a solution to the problem of massive stocks of debt and not a problem. On the other hand, the monetary factor is not the only determinant of inflation. Certainly, the voluntary mode of money creation would result in the money circulating more in the real sphere⁶⁶ than does money created by the banking and acquisitional modes, which circulates in the financial sphere more than in the real sphere. The quantitative relationship between the stock of voluntary money in circulation and the general price level would therefore probably be less lax than today’s virtually non-existent relationship between the money supply and the general price level, which is probably transferred to financial and real estate asset prices. Hence the need to provide for measures to reduce the stock of voluntary money if necessary, but without seeing it as a drawback of voluntary money. We should be more concerned about bank money and the acquisitional mode, the strong increase in which is not sufficient to ward off a deflationary risk and which fails to offer a solution to current problems.

Secondly, since the volume of permanent money could constitute a free resource for the banking sector (unless transfers of central bank money to the accounts of beneficiaries—households, companies, etc.—are confined to the issuing institution and prohibited from being deposited in bank accounts), allowing it to make excessive profits and grant excessive volumes of credit, the issuing institution should be given a regulatory framework enabling it to set new rules on the price of money, i.e. to set minimum and maximum interest rates for certain types

65 See S. Gesell, *The Natural Economic Order*, particularly the chapter on “free money”, where he describes the process of the loss of value of money in circulation and its expected effects.

66 Among the criticisms of helicopter money, some point out that a significant proportion of transfers to households would be saved or used for stock market trading (see for example P. Artus, “L’Helicopter Money ou le “100% monnaie” n’évitent pas les bulles sur les prix des actifs” [Helicopter Money or “100% money” do not avoid asset price bubbles], *Flash Economie Natixis* 29 March 2021 - 232, or the survey carried out by the Federal Reserve Bank of New York: “How Have Households Used Their Stimulus Payments and How Would They Spend the Next?” : <https://libertystreeteconomics.newyorkfed.org/2020/10/how-have-households-used-their-stimulus-payments-and-how-would-they-spend-the-next.html>. It is likely that some of the transfers would not be spent, but it is unlikely that the share of base money that increased overall spending in the real economy would be smaller than the share associated with central bank asset purchases. Helicopter money is therefore necessarily less conducive to asset price bubbles than asset purchases.

of transactions (mortgages, consumer loans, investment loans, etc.). For the same reasons, the leverage of individual banks relative to their capital should be limited.

6. Sharing and democratic control of the power to issue money

We believe that the introduction of the voluntary mode of issuance, oriented towards the common good, alongside existing modes of issuance, oriented towards the commercial order, would meet the need for better sharing of the power to issue money and, correspondingly, justifies rethinking its governance.

6.1. Protection from monetary power grabbing

It is, in fact, the rules of issuance that attribute monetary power. However, because of its ambivalence⁶⁷—both a social bond and an object of desire (and therefore of appropriation)—money can only remain the expression of the common good if sharing of the power it confers is inscribed in its mode(s) of issuance. This sharing is the essential safeguard against the risk of monetary power grabbing. If, by its mode of issue, the power of money is entirely entrusted to the government, then the government makes money “its” object; if it is entirely entrusted to the bank or to finance, then money becomes the “object” of finance and the expression of the financial order. Current banking and acquisitional modes of issuance have not protected us from this risk of appropriation. On the contrary! Moreover, because they respond primarily to the demands of the commercial and financial systems, whereas the needs of today’s society lie in the quest for shared prosperity, respectful of planetary boundaries, the money produced from them is not the expression of the common good.

The voluntary mode of money creation aims precisely at making it such. It aims to establish money as an institution of the common good, in the service of objectives that are crucial to the maintenance of our community (social cohesion, ecological survival, etc.), decided on democratically. It would couple money to society, in the sense that it would create an enormous potential for responding to societal issues without coming up against the constraint of the sustainability of public debt, which limits the capacity of public authorities to respond to these issues. It would also free it from the totally paradoxical injunction, induced by the banking method of money creation, of having to constantly support economic growth in order to finance an ecological transition supposed to limit the negative environmental and climatic impact of... economic growth. But it can also be a legitimate source of concern, since it would be these societal issues, and only these issues, that would trigger the creation of voluntary money. So who would define, recognise and control them? How can we ensure a sufficiently consensus-based and democratic definition of these issues? How can we avoid autocratic drifts and the distortion or appropriation of these issues by a particular industry sector? How can we ensure that these issues are aligned with the general interest?

⁶⁷ This ambivalence was theorised by Michel Aglietta and André Orléan in *La Monnaie, entre violence et confiance* [Money: Between Violence and Confidence], Odile Jacob, April 2002.

6.2. Political and democratic governance

The governance model of each mode of issuance determines the sharing of monetary power. This new mode of monetary creation is a priori barely compatible with an independent and non-democratically elected central bank or issuing institution, as they could not lawfully define and control these societal issues. Could the decision to create money be made by the government (or by the Member States, in the case of Europe)? This would also be difficult, in our opinion, without running the risk that it would then have a sort of drawing right for expenditure, the justification for which it would, itself, be defining and that it could divert to other more short-term or electoral political ends.

At the very least, the decision should be based on close collaboration between the treasury and the central bank, which would put an end to the latter's independence. Andrew Jackson and Ben Dyson had proposed⁶⁸, for the United Kingdom, the election of an independent and democratically constituted Monetary Policy Committee (MPC), whose function would be to decide on the amount of new money to be issued for grants to the government and loans to banks. They describe the committee's position as follows: "*The MPC would need to communicate and collaborate with the Treasury. This may require more cooperation between monetary and fiscal policy than the current consensus around central bank independence would support*⁶⁹." The proposals to re-establish the French Treasury circuit⁷⁰ also form part of this governance-focussed approach, aimed at shattering the independence of the central bank and putting it back at the service of the treasury.

However, there is a risk that, within such a governance structure based on a strong link between the treasury and the issuing institution, close collaboration could quickly turn into a complete merger, making money the "creature of the government"⁷¹, as the supporters of MMT see it, even though as André Orléan reminds us, it is not: "*La monnaie est dans son essence une puissance indépendante de l'État*" [Money is, in its essence, a power independent of the government]⁷² (St. Petersburg's Conference, April 2021).

Consequently, we believe that it is important to stress that if a voluntary mode of money creation were to be inserted into the existing monetary regime, the governance of its mode of issuance would have to be based on a consultation structure, involving not only the issuing institution and the treasury, but also parties concerned on a wider basis. In concrete terms, if it were set up in the euro area for example, this would mean entrusting the decision to a

68 This proposal is part of a broad reform project, which combines elements of the reform proposed by Irving Fisher (100% Money) and those of Modern Monetary Theory, of which a summary table can be found on page 243 of their book (A. Jackson & B. Dyson, *Modernising Money, Positivemoney*, 2013, 334 p.).

69 See "Sovereign Money: An Introduction", Ben Dyson, Graham Hodgson & Frank van Lerven <https://positivemoney.org/wp-content/uploads/2016/12/SovereignMoney-AnIntroduction-20161214.pdf>

70 See Lemoine (2016) op. cit.

71 J.-F. Ponsot, "*La monnaie n'est pas nocive et elle est avant tout une créature de... l'État*" [Money is not harmful and is primarily a creature of... the government], *Le Monde*, 2 April 2021.

72 "[Translation from French:] The government uses money to collect taxes, but it does not create it. This is our criticism of Modern Monetary Theory. Money is, in its essence, a power independent of the government", in "La communauté monétaire comme corps politique. Réflexions sur le néo-chartalisme : un point de vue institutionnaliste" [The monetary community as a body politic. Reflections on neo-chartalism: an institutionalist view], St. Petersburg's Conference "Money and Interest: Economics and Ethics", St. Petersburg State University, 26-28 April 2021.

committee that would include representatives of the Eurosystem, the Member States, the European Commission, parliaments, NGOs (particularly environmental) and the scientific community (for example, those working on climate change for the ecological transition, those working on health issues, etc.).⁷³

In any case, this new mode of monetary creation would have to go hand in hand with new institutional structures yet to be defined that would aim, by bringing together all the parties concerned, to ensure that the power of monetary creation is shared so that it remains at the service of the collective interest, and that it is protected from monopolisation by private interests or by the public authorities which, if they had full power, could also divert it to their own ends—military or repressive, for example⁷⁴.

The scheme we have outlined for this voluntary, permanent, counterpart-free money, with the mode of issuance and governance that we have just described, can be applied at different levels: to a monetary zone, to the countries that make up that zone, or across the territories and regions of those countries, by coordinating these different levels of action. The allocation of the amounts created by the issuing institution could be performed by decentralised public services, organised according to the same mode of shared governance, capable of understanding and managing projects, not only on a national scale but also on a local, departmental or regional scale.

And this would in no way be incompatible with, for example, the densification of a network of local public banks, or even the development of local currencies, which constitute complementary levers for revitalising or restoring the common good in the territories. Voluntary money, bank money and complementary currencies would coexist in order to meet the requirements of market relations without undermining the common good.

7. Conclusion

In this note, we have tried to show that most current monetary proposals (sometimes old ones brought up to date), or at least those we have put forward here, are, as diverse as they may seem, connected by a dual process of which they form part.

On the one hand, the historical process of the transformation of the money creation mechanism: nearly two centuries ago, the “banking mode of money creation” replaced “money printing”; it was itself partially replaced more recently in the context of multiple crises—financial crisis (2008), sovereign debt crisis (2010) and pandemic economic crisis (2020)—by means of unconventional measures, by the “acquisitional mode of money creation” that these alternative proposals now aim to complement, or to transform into a “voluntary mode of creating base money”.

⁷³ This was an aspect discussed in “The Role of Monetary Policy in the Ecological Transition: An Overview of Various Greening Options” (J. Coupey-Soubeyran, Veblen Note, 2 December 2020), which includes a proposal to monetise public investment expenditure in the ecological transition, which would require a new governance structure involving all stakeholders.

⁷⁴ For an example of the inappropriate use of monetary issuance, read *The Wage of Destruction: The Making and Breaking of the Nazi Economy*, by A. Tooze, Allen Lane, 2006, 800 pp.

On the other hand, the historical process of the progressive decoupling (or “disencumbering”) of money: first, a decoupling of the physical counterpart (gold, silver or precious metal) that the banking mode replaced with debt; then a decoupling of the bank debt⁷⁵ from which the voluntary mode, free of counterpart, would free itself. As a pure social convention, money does not need a counterpart: it needs the confidence of the community. It must, therefore, remain the expression of the common good. When its architecture no longer allows this, transformation is necessary.

The traditional banking system had responded to the growth of the market society, but locked the power of money creation within the banking sector, without introducing sufficiently strong regulation to direct its usage towards the real economy and guarantee its social utility. Bank money is no longer an adequate response to the needs of contemporary society. It is no longer an expression of the common good. The acquisitional mode of money creation has not corrected this monopolisation of money and has intensified the circulation of money within the financial sphere, without resolving societal ills (climate change, inequalities, unemployment, social instability, etc.), even aggravating them. Coupling money to society, re-coupling monetary creation to the limits of the natural resources available and putting it at the service of the reduction of climate uncertainties involves a voluntary mode of monetary creation directed towards the needs of society and controlled by society, decided on within a structure that allows democratic expression.

By equipping current monetary architecture with a voluntary mode of central bank money creation, which would not replace but complement existing modes, we would radically transform the independent and technocratic central bank into a democratic monetary institution, which would directly finance the political objectives that the political system has assigned itself. Using drone and helicopter money or a universal dividend, it would be distributed directly to households and even to companies and, according to the other proposals, it would directly finance public authorities without intermediaries.

The fundamental issue at stake in these proposals is the transfer of some of the banking sector’s financial power to political authorities (not simply the government) who would create money in response to societal needs expressed by the community. This is a real matter of “monetary democracy”, as highlighted in a recent book⁷⁶. When we see how the proposal for the conditional cancellation of public debt held by the Eurosystem was received, the situation seems likely to be a repeat of the epic battle between the “prudent” of the Currency School and the “daring” of the Banking School; but this time, the supporters of the Banking School are the “prudent” conservatives. And the paradox is that this time, the endogenous, banking and private concept of money is under pressure from an exogenous, societal and public concept of it.

Finally, if we believe that the greatest challenges currently facing public authorities are investments to combat climate change and restore biodiversity while maintaining social cohesion, and if we note that these essential investments cannot be financed because they are financially non-profitable, we can begin to believe that the monetary transformation made

75 See Augustin Sersiron’s thesis (op. cit.) on the decoupling of money creation from the credit market.

76 A. Peters, *De la dictature financière à la démocratie monétaire* [From financial dictatorship to monetary democracy], Collection Questions contemporaines, L’Harmattan, 2016, 200 p.

possible by the introduction of this new method of money creation would help us better respond to the challenges of the 21st century. In any case, we are entitled to wonder whether an ecological transition is possible without a monetary transition.

Annex 1: Changes in the consolidated balance sheet of the Eurosystem

	Heading	% start of period	2000-12	2005-12	2010-12	2015-12	2020-12	% end of period
	(million EUR)							
A	Assets	100.00%	835,065	1,038,152	2,004,432	2,781,145	6,979,324	100.00%
A1	Gold and gold receivables	14.02%	117,073	163,881	367,402	338,713	536,542	7.69%
A2	Claims on non-euro area residents denominated in foreign currency	30.98%	258,688	154,141	223,995	307,115	347,179	4.97%
A3	Claims on euro area residents denominated in foreign currency	1.89%	15,750	23,694	26,941	31109	24,437	0.35%
A4	Claims on non-euro area residents denominated in euro	0.45%	3,746	9,185	22,592	20,468	14,337	0.21%
A41	Balances with banks, security investments and loans	0.45%	3,746	9,185	22,592	20,468	14,337	0.21%
A5	Lending to euro area credit institutions related to monetary policy operations denominated in euro	32.17%	268,648	405,967	546,747	558,989	1,793,194	25.69%
A51	Main refinancing operations	26.70%	222,988	315,001	227,865	88,978	468	0.01%
A52	Longer-term refinancing operations	5.39%	45,000	90,017	298,217	469,543	1,792,574	25.68%
A52	Fine-tuning reverse operations	0.00%	0	0	20,623	0	0	0.00%
A54	Structural reverse operations	0.00%	0	0	0	0	0	0.00%
A55	Marginal lending facility	0.07%	607	949	25	468	3	0.00%
A56	Credits related to margin calls	0.01%	53	0	17	0	0	0.00%
A6	Other claims on euro area credit institutions denominated in euro	0.07%	578	3,635	45,654	107863	25,328	0.36%
A7	Securities of euro area residents denominated in euro	3.11%	25,958	92,367	457,427	1,161,159	3,890,916	55.75%
A71	Securities held for monetary policy purposes	0.00%			134,829	803,135	3,694,642	52.94%
A72	Other securities	0.00%			322,598	358,023	196,274	2.81%
A8	General government debt denominated in euro	6.91%	57,671	40,113	34,954	25,145	22,676	0.32%
A9	Other assets	10.41%	86,953	145,169	278,719	230,810	325,715	4.67%

Heading	%	2000-12	2005-12	2010-12	2015-12	2020-12	%
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Monetary transition: the case for money serving the common good

	(million EUR)	start of period						end of period
L	Liabilities	100.00%	835,065	1,038,152	2,004,432	2,781,145	6,979,324	100.00%
L1	Banknotes in circulation	44.47%	371,370	565,216	839,702	1,083,539	1,434,512	20.55%
L2	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro	14.93%	124,642	155,535	378,008	768,419	3489194	49.99%
L21	Current accounts	14.90%	124,402	155,283	212,739	555,864	2805331	40.19%
L22	Deposit facility	0.03%	240	252	104,458	212,415	683,863	9.80%
L23	Fixed-term deposits	0.00%	0	0	60,784	0	0	0.00%
L24	Fine-tuning reverse operations	0.00%	0	0	0	0	0	0.00%
L25	Deposits related to margin calls	0.00%	0	0	27	140	0	0.00%
L3	Other liabilities to euro area credit institutions denominated in euro	0.00%		207	2,808	5,202	23,563	0.34%
L4	Debt certificates issued	0.45%	3,784	0	0	0	0	0.00%
L5	Liabilities to other euro area residents denominated in euro (including general government)	6.87%	57,343	41,767	79,791	141,805	611,304	8.76%
L6	Liabilities to non-euro area residents denominated in euro	1.30%	10,824	13,224	47,703	54,529	431,145	6.18%
L7	Liabilities to euro area residents denominated in foreign currency	0.10%	807	367	1,995	2,803	7,816	0.11%
L8	Liabilities to non-euro area residents denominated in foreign currency	1.49%	12,414	8,405	14,346	3677	3,895	0.06%
L9	Counterpart of special drawing rights allocated by the IMF	0.80%	6,702	5,920	54,480	59,179	54,799	0.79%
L10	Other liabilities	8.80%	73,452	7,043	175,932	218,618	301,414	4.32%
L11	Revaluation accounts	2.12%	17,668	119,113	331,524	346,172	512,884	7.35%
L12	Capital and reserves	6.71%	56,059	58,355	78,143	97,201	108,797	1.56%

Source: ECB, <https://sdw.ecb.europa.eu/browse.do?node=9691294>

Calculations: Authors

Annex 2: Monetary base, Eurosystem balance sheet and money supply

Period	Monetary aggregates (million EUR)				Evolution (1999 = 100)			
	M0	Eurosystem balance sheet total	M1	M3	M0	Eurosystem balance sheet total	M1	M3
2020-12	4,900,044	6,979,324	10,131,300	14,497,646	1063.3	868.9	526.2	310.6
2019-12	3,182,895	4,691,998	8,944,737	12,999,113	690.7	584.2	464.6	278.5
2018-12	3,217,721	4,669,003	8,278,090	12,371,789	698.2	581.3	430.0	265.1
2017-12	3,138,794	4,471,563	7,750,111	11,867,538	681.1	556.7	402.6	254.3
2016-12	2,366,303	3,662,901	7,158,714	11,389,727	513.5	456.0	371.8	244.0
2015-12	1,723,357	2,781,145	6,614,314	10,850,414	374.0	346.3	343.6	232.5
2014-12	1,192,512	2,150,247	5,944,224	10,334,896	258.8	267.7	308.8	221.4
2013-12	1,194,434	2,285,399	5,384,753	9,835,620	259.2	284.5	279.7	210.7
2012-12	1,630,969	3,018,198	5,102,620	9,787,906	353.9	375.8	265.0	209.7
2011-12	1,335,315	2,735,628	4,803,639	9,497,601	289.8	340.6	249.5	203.5
2010-12	1,073,068	2,004,432	4,709,706	9,294,345	232.8	249.6	244.6	199.1
2009-12	1,052,340	1,904,935	4,500,560	9,346,624	228.3	237.2	233.8	200.3
2008-12	1,150,668	2,043,465	3,992,465	9,401,865	249.7	254.4	207.4	201.4
2007-12	841,899	1,511,244	3,838,952	8,650,036	182.7	188.2	199.4	185.3
2006-12	771,805	1,150,980	3,696,413	7,756,980	167.5	143.3	192.0	166.2
2005-12	692,918	1,038,152	3,422,279	7,087,688	150.4	129.3	177.8	151.9
2004-12	614,084	884,233	2,905,953	6,540,370	133.3	110.1	150.9	140.1
2003-12	548,711	835,157	2,681,722	6,148,767	119.1	104.0	139.3	131.7
2002-12	480,453	832,558	2,442,884	5,767,431	104.3	103.7	126.9	123.6
2001-12	426,215	814,662	2,221,922	5,402,883	92.5	101.4	115.4	115.8
2000-12	478,001	835,065	2,025,182	4,859,203	103.7	104.0	105.2	104.1
1999-12	460,847	803,192	1,925,201	4,667,221	100.0	100.0	100.0	100.0

Note: Since 1999, when the euro was introduced, the monetary base has increased tenfold and the balance sheet total eightfold, with the increase accelerating with the asset purchase programmes that began in 2015, while the broad money supply has “only” tripled. The relatively stronger increase in M1 than in M3 is partly due to the asset purchase programmes, which increase the bank reserves and the deposits of non-bank investors who also benefit from these purchases.

Source: ECB; M0: https://sdw.ecb.europa.eu/quickview.do?SERIES_KEY=123.ILM.M.U2.C.LT00001.Z5.EUR;
Balance sheet total: https://sdw.ecb.europa.eu/quickview.do?SERIES_KEY=123.ILM.W.U2.C.T000000.Z5.Z01

Annex 3: Accounting of voluntary money

Recap

- On the liabilities side of a central bank balance sheet, money issued in the form of customer (mainly bank) deposits is recorded. These are commitments by the central bank to deliver money at the simple request of its customers.
- The assets side of a central bank balance sheet includes debt securities, other financial securities and fixed assets (gold, real estate and others) which constitute the collateral pledged by banks to the central bank in exchange for the latter's liabilities.
- Under normal circumstances, the value of the collateral provided (on the assets side) is higher than the value of the liabilities⁷⁷. Also, in normal circumstances, a revaluation item is present on the liabilities side to balance the balance sheet.

In order to assume the role of a money-issuing institution that creates voluntary money (on the liabilities side)—without a financial counterpart (on the assets side)—the structure of the central bank's balance sheet must be adapted to balance the balance sheet and to fully reflect the new monetary policy. As such, we propose the creation of a new asset item entitled "Definitive contribution to public purposes". It would be used to record amounts issued on a decreed (voluntary) basis and without further acquisition of assets, i.e. the issuance of permanent money to the nation. From an accounting perspective, these contributions can be treated as non-current, permanent financial assets. Given the non-current nature of these amounts, we would place this item at the foot of the balance sheet opposite "capital", which is also non-current.

Proposed new central bank balance sheet structure with new accounting item

⁷⁷ To avoid losses due to changes in the valuation of collateral between the time the central bank lends money and the time it receives repayment, the central bank always applies a haircut to the securities it takes as collateral. The haircut is the difference between the market value of an asset and the value assigned to that asset when used as collateral for a loan.

ASSETS		LIABILITIES	
1.	Gold and gold receivables	1.	Banknotes in circulation
2.	Claims on non-euro area residents denominated in foreign currency	2.	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro
3.	Claims on euro area residents denominated in foreign currency	3.	Other liabilities to euro area credit institutions denominated in euro
4.	Claims on non-euro area residents denominated in euro	4.	Liabilities to other euro area residents denominated in euro
5.	Lending to euro area credit institutions related to monetary policy operations denominated in euro	5.	Liabilities to non-euro area residents denominated in euro
6.	Other claims on euro area credit institutions denominated in euro	6.	Liabilities to euro area residents denominated in foreign currency
7.	Securities of euro area residents denominated in euro	7.	Liabilities to non-euro area residents denominated in foreign currency
	7.1. Securities held for monetary policy purposes	8.	Counterpart of special drawing rights allocated by the IMF
8.	Intra-Eurosystem claims	9.	Liabilities within the Eurosystem
9.	General government debt denominated in euro	10.	Other liabilities
		11.	Provisions
10.	Other assets	12.	Revaluation accounts
11.	Permanent contribution to public objectives	13.	Capital, reserve fund and available reserve
		14.	Profit for the year
	Total		Total

In concrete terms, how does this accounting structure work in different situations?

1. Monetary donations

For all forms of monetary donation (drone, helicopter, donation, universal dividend) to public authorities or households, the following entry would be made when the money was created.

	Debit	Credit
11. Permanent contribution to public objectives	+	
to 4. Liabilities to other euro area residents denominated in euro		+

N.B. The accounting item “4. Liabilities to other euro area residents denominated in euro” must obviously be broken down into sub-items based on the addressees. If the central bank wanted to transfer money directly to individuals, each individual would have to have a sub-item under item 4.

2. Long-term loan to public authorities followed by cancellation

Long-term loans to public authorities⁷⁸ are treated like loans to the banking sector but with a liability to the public authorities rather than to the banking sector. The public authority (international, national, regional or local) issues bonds that are directly subscribed by the central bank and held until maturity. Note that this constitutes the issuance of temporary money that does not use the new accounting item. The following accounting entry would then be made.

	Debit	Credit
9. General government debt denominated in euro	+	
to 4. Liabilities to other euro area residents denominated in euro		+

The central bank and public authorities then agree to cancel the public debt held by the central bank. This would result in the cancellation of the securities held and their conversion into a permanent contribution to the nation’s objectives⁷⁹. In accounting terms, this involves balancing the asset item “General government debt denominated in euro” and transferring the amount to the new asset item “Permanent contribution to public objectives”.

	Debit	Credit
11. Permanent contribution to public objectives	+	

⁷⁸ Which are currently prohibited by Article 123 of the TFEU and Article 21 of Protocol No. 4 of the ESCB.

⁷⁹ Under current law, this operation is hypothetical in two respects since the central bank neither lends to public authorities nor cancels the latter’s debt it holds.

to 9. General government debt denominated in euro		+
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3. Purchase of government debt for monetary policy purposes

As part of its monetary policy (e.g. quantitative easing), the central bank buys government debt via the banking sector. At the time of purchase, it reserves the right to place the securities on the financial market or to present them to the debtors at maturity. The money it has created is immediately paid into the accounts of the banks. The accounting entry is:

	Debit	Credit
7.1. Securities held for monetary policy purposes	+	
to 2. Liabilities to euro area credit institutions related to monetary policy operations denominated in euro		+

4. Cancellation of public debt originally purchased for monetary policy purchases

Now suppose that the central bank and public authorities agree to cancel the public debt held by the central bank that was originally purchased for monetary policy purposes. In accounting terms, the securities held for monetary policy purposes must then be cancelled and converted into a permanent contribution to public objectives. We would then have the following entry.

	Debit	Credit
11. Permanent contribution to public objectives	+	
to 7.1. Securities held for monetary policy purposes		+

Note that, in this case, depending on the acquisition prices of these securities and the market values at which they are recorded on the balance sheet, the central bank may have to record a difference from the par value of the security. This difference would be recorded in the income statement.

Conclusions on the accounting method

The accounting method proposed here will appear totally heterodox to accounting specialists. In fact, from a strictly accounting point of view, the amounts included under item “11. Permanent contribution to public objectives” are worthless, as this item does not include marketable assets. What is under this item has no value or, rather, this item should have a value of zero. From a strictly accounting perspective, it should disappear from the balance sheet.

But, as evidenced by

- the publication “Central Bank Finances⁸⁰” published by the Bank for International Settlements (BIS), the international body responsible for regulating central banks worldwide, and
- “the European Central Bank’s guideline⁸¹ on the legal framework for accounting and financial reporting in the European System of Central Banks (ECB/2016/34) (Guideline (EU) 2016/22497)”,

central bank accounting deviates in many respects from the usual rules of accounting.

The BIS, in “Central Bank Finances”, points out that

- “Central banks are not commercial banks. They do not seek profits. Nor do they face the same financial constraints as private institutions⁸²,
- “central banks carry many assets and liabilities where changes in value are just not relevant, even under International Financial Reporting Standards (IFRS)⁸³”,
- “With respect to accounting policies, this may imply departing selectively but transparently from International Financial Reporting Standards (IFRS)⁸⁴”.

Articles 3 and 4 of the Guideline specify certain accounting principles:

- “Economic reality and transparency: the accounting methods and financial reporting shall reflect economic reality, be transparent and respect the qualitative characteristics of understandability, relevance, reliability and comparability. Transactions shall be accounted for and presented in accordance with their substance and economic reality and not merely with their legal form;
- “Going concern basis: accounts shall be prepared on a going concern basis”.

Consequently, this balance sheet, which to some may seem like a transgression of “financial reality” since the amount shown under “11. Permanent contribution to public objectives” is no longer actually a realisable asset of the central bank is, on the other hand, in line with economic reality and the reality of the monetary policy conducted by our hybrid monetary institution with its two wings: the traditional central bank with its banking mode of money creation on the one side, and the money issuing institution with its decreed mode of money creation on the other.

80 “Central Bank Finances”, BIS Papers No. 71, Bank for International Settlements, Monetary and Economic Department, April 2013, <https://www.bis.org/publ/bppdf/bispap71.pdf>

81 A guideline is a legal text issued by the ECB which gives binding instructions to the national central banks. The concept of guidelines is defined in Protocol No. 4 on the Statute of the ESCB and of the ECB, in particular Article 14.3, which states that “The national central banks are an integral part of the ESCB and shall act in accordance with the guidelines and instructions of the ECB. The Governing Council shall take the necessary steps to ensure compliance with the guidelines and instructions of the ECB, and shall require that any necessary information be given to it.”

82 “Central Bank Finances”, op. cit. p. 1.

83 *Ibid.*, p. 2.

84 *Ibid.*, p. 3.

Monetary transition: the case for money serving the common good

The balance sheet structure presented here contains all necessary information to reflect the monetary reality and maintain the going concern principle. Its objective has been met!