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Article

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Invited Article

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What modern monetary theory is, and what it is not

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Modern monetary theory (MMT) has grown in popularity in recent years. Several central bankers have made passing comments about it. However, the publication of two papers by Drumetz/Pfister of the Banque de France in 2021 represents the first attempt at a more systematic assessment of MMT by two scholars with knowledge of and experience in central banking. This is a welcome event in the economic debate. The present paper analyses the merits of Drumetz/Pfister's criticism, and investigates some of the most common sources of 'misinterpretation' of MMT.

Keywords: *modern monetary theory, government debt, central banking, inflation, fiscal policy*

JEL codes: *E31, E52, E58, E62, B52*

1 INTRODUCTION

We should start this paper by highlighting an important and often ignored feature of modern monetary theory (MMT). Leading proponents of MMT such as Randy Wray or Stephanie Kelton mostly write for policy-makers and the public at large to win the 'battle of ideas'. These scholars rarely write formal academic papers with the goal of engaging with fellow mainstream economists, possibly because in their experience the latter show little or no interest in non-mainstream theories and policies. They seem to pursue a strategy that favours talking directly to policy-makers and the public, who will then force fellow mainstream economists to read and assess MMT. As a result of this strategy, the debate on MMT often develops far away from formal academic contexts, namely in newspapers, social media, podcasts, and other *agora* dominated by non-professional economists.

This strategy has undoubtedly brought significant results. MMT has contributed to the drawing of attention to several post-Keynesian ideas and theories that have been neglected for a long time. As Marc Lavoie (2019: 97) has pointed out, MMT can be considered part of the long-established post-Keynesian literature. Yet *The New York Times* has defined MMT as 'the buzziest economic idea in decades' (Smialek 2022).

However, the success of this work of 'popularisation' has come at a cost. Economic ideas are often oversimplified to make them easily understandable to non-economists. Nuances, important details and institutional caveats are omitted or not fully discussed. Then, often the debate between 'critics' and 'supporters' of MMT develops upon these 'popularised' ideas, rather than their original more rigorous formulations. In order to

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avoid falling into the same trap, we have chosen to ground our paper on the MMT book published by William Mitchell, Randall Wray and Martin Watts (2019).

During a hearing before the Committee on Banking, Housing and Urban Affairs of the US Senate, in February 2019, the chair of the Federal Reserve, Jerome Powell, made a few comments on MMT. Among other things, he declared: 'I have heard pretty extreme claims attributed to that framework and I don't know whether that's fair or not' (US Senate 2019: 38). We think it is time for fellow mainstream economists and policy-makers alike to move from the stage at which one hears things to a stage at which one critically analyses an intellectual endeavour containing many ideas which can be considered controversial (or plain wrong), but which should be taken seriously.

Therefore, we welcome the contribution of two scholars with knowledge of and experience in central banking, such as Françoise Drumetz and Christian Pfister. We think this could represent a step forward to a more constructive dialogue that can benefit both sides of the debate, as well as the numerous curious observers, who do not feel they belong to any side.

The remainder of this paper is divided into four main sections, plus conclusions. Each section discusses an original quotation from Drumetz/Pfister's paper (2021a) that we regard as important to assess the merits of their critiques. We have focused on Drumetz/Pfister (2021a), since it represents an extended version of Drumetz/Pfister (2021b).

2 DEBT CONSTRAINTS

MMT's fiscal policy doctrine builds on the FFT's [functional finance theory] dismissal of debt constraints on government borrowing, arguing that a sovereign currency issuer is financially unconstrained. (Drumetz/Pfister 2021a: ii)

The main argument of this section is that, in order to understand the quotation above, and MMT fiscal policy more generally, it is helpful to make a clear distinction between government solvency (what is possible) and the policy constraints on government borrowing (what is advisable or appropriate).

One of the theoretical pillars of MMT is that 'a country that issues its own currency can never run out and can never become insolvent in its own currency' (Mitchell et al. 2019: 13). The statement is grounded on the fact that the central bank can always 'print money', that is, create monetary reserves, and buy government bonds. There could be institutional constraints to this action (constraints whose rationality MMT challenges). But in theory there are no technical limits to it. Authors who firmly reject the opportunity of monetisation argue that this policy would have negative inflationary consequences, or even lead to hyperinflation. Therefore this policy should be avoided. Drumetz/Pfister seem to endorse this argument.

We will address the issue of the inflationary consequences of monetisation later in this paper. For now, we just point out that from a theoretical perspective there are indeed no solvency problems for the issuer of a sovereign currency. Therefore, technically speaking, the quotation from MMT reported above is correct. There is, however, a big difference between the possibility and the appropriateness of a policy. A policy can be possible, yet could still be considered inappropriate, or even dangerous.

The policy constraints on government borrowing are therefore a different matter. Even a government that cannot run out of money faces the problems of growing government debt. MMT actually acknowledges these problems. In some circumstances, namely when the production system is close to full capacity, the government deficit that contributes to the debt can create an excess demand for goods and services, and hence foster inflation: 'A government that

decides to keep spending and raising the price it is willing to pay to purchase resources and output will undoubtedly cause high inflation. There is no substitute for good governance' (Mitchell et al. 2019: 342). Still, history teaches us that full capacity should not be considered the norm or a rigid threshold. One of the main features of post-Keynesian economics is the interdependence between aggregate demand and aggregate supply (Fontana/Palacio Vera 2007; Fontana 2010). Therefore, through for instance hysteresis effects or increasing returns, a government-led boost of aggregate demand could have real effects (in the short and long term!) without necessarily causing inflation.

Another controversial issue related to debt constraints is that a high government-debt-to-GDP ratio implies high interest-rate payments. For any given level of interest rates, a growing debt implies growing interest payments. This means that a proportion of public expenditure could be diverted from projects that are far more consistent with the government socioeconomic mandate. This can represent a serious problem, but again it is a problem not related to a theoretical necessity: it is a matter of political choice. Putting it slightly differently, Wray has summarised this political choice with the following words: 'MMT does not argue that because the government can always meet its obligations that deficits don't matter. MMT does not argue that because a government does not face a budget constraint it should have an unconstrained budget' (Wray 2019: 6).

It is fair to say that MMT authors tend not to emphasise the potential detrimental effects of high interest payments. As a result of political choices, real resources could *de facto* be diverted from low-income taxpayers, on whom the general taxation system relies disproportionately in developed countries, to high-income domestic or foreign savers. Of course, this also depends ultimately on who are the holders of government bonds. Yet regressive redistributive effects cannot be ruled out, when these holders are predominantly the representatives of the most affluent portions of the population. Even if one holds the MMT assumption that government expenditure is not funded by taxes, taxes are still used to drain real resources from the private sector: when a citizen pays taxes, the individual relinquishes purchasing power and gives it to the government. Interest payments on government debt correspond to a transfer of this purchasing power to individuals. Again, this could come with bottom-up redistributive effects. It makes a lot of difference whether public money is used to provide public goods (for example, to build schools or hospitals) or to pay interest on government bonds to a specific portion of the domestic or foreign population.

In short, in order to understand the fiscal policy implications of MMT, it is helpful to make a clear distinction between government solvency (what is possible) and the policy constraints on government borrowing (what is advisable or appropriate). Then, a correct interpretation of the debt constraints on government borrowing would probably encourage a severe rethinking of how debt management problems have been treated until very recently by mainstream economists and policy-makers alike. The COVID-19 pandemic has clearly demonstrated that there cannot be solvency problems even for high-debt sovereign countries, if the central bank is willing to step in.

3 MONETISATION

The traditional orthodox opposition between monetization, whose use could lead to spiralling inflation, and bond sales, which are deemed to reduce risk of public spending, is viewed by MMT as a false dichotomy. (Drumetz/Pfister 2021a: 14)

The main argument of this section is that the mainstream dualistic analysis of monetisation and bond sales is misplaced. This is not to deny that there are differences between monetisation and bond sales: they depend on the institutional reserve system in place

(that is, a limited versus a large reserves regime) and on the holder of government bonds (that is, banks and financial intermediaries or households and firms).

Olivier Blanchard and Jean Pisani-Ferry (2020) have observed that monetisation is an ambiguous concept. Indeed, when central banks operate with a limited reserve regime, they buy and sell government bonds all the time (usually through repo agreements) to steer the effective interbank rate (the interest rate that banks charge each other to borrow or lend reserves) towards the target range or the target rate. Purchases of government bonds within quantitative easing (QE) programmes are something different as they aim to influence the steepness of the yield curve. More explicitly, these operations cap the yields of long-term bonds. Drumetz/Pfister accuse MMT authors of considering these operations as business as usual, which do not differ qualitatively from the operations for liquidity management. We see this controversy largely as a matter of definitions and interpretations that should not be overstated.

In the MMT book (Mitchell et al. 2019), QE is treated in sub-chapter 23.4 under the title ‘Unconventional forms of monetary policy’. The description there mirrors Drumetz/Pfister’s treatment in their paper.

Strictly speaking, monetisation can be defined as the use of money creation as a permanent source of financing for government spending (Bernanke 2012). The central bank buys government bonds and commits itself to hold them until maturity, and reinvest the money in the same amount of government bonds after the maturity of the original bonds.

For instance, the Federal Reserve (Fed) acquired a vast amount of government bonds at the outbreak of the 2007–2008 global financial crisis: its total assets grew from \$0.89 trillion in August 2008 to \$4.4 trillion in August 2014. In 2012 the then governor of the Fed, Ben Bernanke, denied that the Fed was monetising the debt:

In contrast, we are acquiring Treasury securities on the open market and only on a temporary basis, with the goal of supporting the economic recovery through lower interest rates. At the appropriate time, the Federal Reserve will gradually sell these securities or let them mature, as needed, to return its balance sheet to a more normal size. (Bernanke 2012)

In reality, this has not happened. The shift between a limited reserves regime and the large reserves regime created by those asset acquisitions is now regarded as permanent by the Fed. In 2019 the Federal Open Market Committee officially announced that it

intends to continue to implement monetary policy in a regime in which an ample supply of reserves ensures that control over the level of the federal funds rate and other short-term interest rates is exercised primarily through the setting of the Federal Reserve’s administered rates, and in which active management of the supply of reserves is not required. (FOMC 2019)

In short, the Fed *did* monetise the debt. The European Central Bank (ECB) has not declared whether its shift to a large reserves regime is to be considered permanent. If it were, a substantial portion of the European debt acquired by the ECB during the sovereign-debt crisis should be considered monetised. Therefore, monetisation is a reality of contemporary economies, not a fantasy of MMT authors.

A possible source of misunderstanding here is related to the following three features of the current analyses of monetisation and bond sales:

1. the *ex ante* versus *ex post* outcome of the operations;
2. the institutional level of the analysis, namely if we are in a limited or large monetary reserves regime; and
3. the holder of government bonds, namely if the latter are purchased by the banking sector (or financial intermediaries) or by households and firms.

It is true that according to MMT, while there are *ex ante* differences, there is virtually no difference in the *ex post* outcome between bond sales to the banking sector and monetisation, namely bond sales to the central bank (that is, central-bank intervention in the primary market). The issue is explained in the MMT book (Mitchell et al. 2019: 339 and 321) by relying on the balance-sheet analysis of the central bank and the banking sector featured in Lavoie (2013). A government deficit financed by bond sales to the central bank would create an equivalent amount of monetary reserves and bank deposits once the monetary reserves are transferred from the government account at the central bank to the current accounts of households and firms, which provides goods and services to the government. Yet this would not be the final outcome of the process. In a limited reserve regime, an excess of liquidity would force the central bank to intervene, for instance through the sale of government bonds to the banking sector, if the target inter-bank rate is to be achieved. Ultimately, the level of additional liquidity in the economy is determined by the quantity of additional cash that households and firms want to hold, and the additional quantity of monetary reserves that banks want or are legally required to hold against the deposits (Mitchell et al. 2019: 321, table 20.1). An equivalent outcome would result if the financing of the government deficit was provided by the banking system. The injection of bank reserves in the system created by government expenditure would be used to ‘pay back’ the reserves used by the banking system to initially purchase government bonds. The same reasoning applies when primary dealers finance their purchases of bonds at auctions in the repo market. In the final stage, the additional liquidity held in the economic system is ultimately a decision of private agents like households, firms, banks, and financial institutions. That is why MMT authors state that there cannot be, and ‘there is not an ex-ante decision of the treasury to either borrow or print money’ (ibid.: 335). Indeed, in this case, monetisation and bond sales bring about the same increase of liquidity held in the economic system.

Building on the discussion in the previous section, this additional stock of money would lead to spiralling inflation, as warned by Drumetz/Pfister in the quotation at the start of this section, as far as one believes that the quantitative theory of money holds. More precisely, if one believes that in the equation of exchange ($MV = PY$), the direction of causality goes from M (money) to P (price level), with a given velocity of circulation of money (V) and output (Y). This seems the view of Greg Mankiw 92020: 142) in his ‘Skeptic’s guide to modern monetary theory’: ‘the mainstream view, explained most simply by the quantity theory of money ... [believes] ... that a high rate of money creation is inflationary’. Mankiw (2020: 142) adds that ‘mainstream macroeconomists also go beyond the most simplistic quantity theoretic reasoning ... [though] these ideas refine the quantity theory of money rather than refute it’.

Interestingly, the governor of the Fed, Jerome Powell, seems to have distanced himself from this quantity theoretic reasoning. During a hearing before the *Committee on Banking, Housing, and Urban Affairs* of the United States in February 2020, Powell replied with the following words to the Republican senator John Kennedy:

Well, when you and I studied economics a million years ago, M2 and monetary aggregates generally seemed to have a relationship to economic growth. Right now, I would say the growth of M2, which is quite substantial, does not really have important implications for the economic outlook. M2 was removed some years ago from the standard list of leading indicators, and just that classic relationship between monetary aggregates and economic growth and the size of the economy, it just no longer holds. We have had big growth of monetary aggregates at various times without inflation, so something we have to unlearn, I guess. (US Senate 2021)

It is now a common view among many academics and policy-makers that the surge in inflation that has characterised the post-pandemic recovery in the USA and many

European countries originated in supply shocks, including disruptions to the supply chain, rising energy prices and labour market shortages, rather than increases in monetary aggregates, stimulating the aggregate demand for goods and services.¹

The analysis of bond sales to the banking sector and to the central bank (that is, monetisation) is slightly different when the central bank operates within a large reserves regime (Lavoie 2014: sec. 4.4; Ihrig/Wolla 2020). The central bank does not have to withdraw the excess reserves from the system, as the inter-bank rate gravitates towards the interest rate on reserve balances, which is set as the policy rate. That is why monetisation can indeed bring about a significant increase in the monetary reserves. Yet, again, there is little change in terms of broader monetary aggregates and inflation, unless one holds true the quantity theory of money and the ‘money multiplier’ hypothesis. The latter assumes that banks would lend more if they did not have to hold back funds to meet legal reserve requirements: therefore, an increase in the reserve balances would trigger an expansion of lending and an increase in bank money. The post-Keynesian literature has criticised the quantity theory of money and the traditional money-multiplier hypothesis a long time ago (for example, Moore 1988; Lavoie 1992; 2010). Banks are in the business of making loans. As long as they find creditworthy borrowers, they create money *ex nihilo*. More recently, official publications of the Fed (Ihrig/Wolla 2020; Ihrig et al. 2021), the Bundesbank (Deutsche Bundesbank 2017) and the Bank of England (BoE) (McLeay et al. 2014) have *de facto* endorsed the post-Keynesian endogenous-money theory: ‘The reality of how money is created today differs from the description found in some economics textbooks: rather than banks receiving deposits when households save and then lending them out, bank lending creates deposits’ (McLeay et al. 2014: 14).

A different case is represented by the sale of bonds to the private non-banking sector. If a fiscal deficit is entirely funded by purchases of government bonds by the private non-banking sector, monetary reserves and bank deposits *strictu sensu* will not change. The financial wealth of the private non-banking sector grows, due to the increase of overall government debt. The net financial wealth of the system remains zero. This case is not covered in the MMT book, but it would add further arguments against the thesis of the inflationary consequences of government deficit through the monetary aggregates transmission mechanism.

In short, while there are differences between monetisation and bond sales depending on the institutional reserve system in place (that is, a limited versus a large reserves regime) and on the holder of government bonds (that is, banks and financial intermediaries or households and firms), the mainstream dualistic analysis of monetisation and bond sales is misplaced.

4 THE CONSOLIDATION OF THE GOVERNMENT AND THE CENTRAL BANK

MMT never explains what [the coordination between the central bank and the Treasury] consist in, instead letting the reader assume that the central bank would receive instructions from the Treasury that dictate the amount of liquidity to be provided or withdrawn. (Drumetz/ Pfister 2021a: 7)

The main argument of this short section is once again that when discussing the coordination between the central bank and the Treasury it is helpful to distinguish between theoretical alternatives (what is possible), institutional constraints (what is currently allowed by legislation as statutes) and policy constraints (what is desirable or appropriate). When describing this issue, Mitchell et al. (2019: 320) state that ‘the treasury is typically prevented by legislation or other rules from selling bonds to its own bank (the central bank on whose

account it draws to spend)'. The word 'typically' is used because this is the standard regime, but exceptions can occur. For instance, on 9 April 2020, the British Treasury and the BoE announced that the latter would 'provide a short-term source of additional liquidity to the government if needed to smooth its cash flows and support the orderly functioning of markets, through the period of disruption from Covid-19' (BoE 2020). For this purpose, the government could make use of the Ways and Means (W&M) facility, which 'functions as the government's overdraft account with the Bank of England (the Bank), i.e. the facility which enables sterling cash advances from the Bank to the government' (BoE 2020). The facility was not used, as the widespread intervention of the BoE in the secondary markets kept the yields on government bonds down and the Treasury did not have any problem in managing its funding. Other examples of direct loans by central banks to governments or primary market purchases of government debt by central banks during the COVID-19 pandemic have been offered by India, Indonesia, New Zealand and the Philippines (for example, Felipe et al. 2020: table 1).

Whereas theoretically possible, the Treasury is usually prevented by law or other institutional constraints from being directly financed by the central bank. For this reason, Mitchell et al. (2019) can generate some confusion by choosing to 'provide a simplified analysis in which treasury engages in net government spending' by assuming that 'the central bank can purchase treasury debt on the primary market' (ibid.: 321). This is consistent with an early approach by MMT economists to treat the Treasury and the central bank as being consolidated into one identity. As observed by Marc Lavoie in his 'friendly critique' of the monetary and fiscal nexus of neo-Chartalism,

although there is an internal logic to these statements ... , such paradoxical claims run the risk of overkill in trying to convince fellow economists that a central government with a sovereign currency does not face a financial constraint. There is also a problem of terminology, when words often take on a meaning that is different from their general use' (Lavoie 2013: 8)

The internal logic of these statements was explained in the previous paragraph: in a limited reserves regime, there is no difference *ex post* in terms of money creation, whether the government sells its bonds to the central bank or to the banking sector. In addition, as long as the additional demand for goods and services created by the government deficit does not hit the limits of full capacity utilisation of the production system, in theory there is no need for taxation to reduce aggregate demand. Yet we have examined previously the limits of the equivalence between monetisation and bond sales. Wray (2019: 19) acknowledges this when he writes that 'if it is projected that the Treasury's credit [of its account at the central bank] will fall short of debits, Treasury will sell bonds to dealer banks that stand ready to place bids'; 'since the Fed is not supposed to allow "overdrafts", Treasury will need to sell bonds over the course of the year even if it ends the year with total tax revenues greater than spending'.

In summary, we think it could be beneficial to future debate on these issues if the nuances that characterise the consolidation of the central bank and government into a unique identity are explained. A clear distinction between theoretical alternatives (what is possible), institutional constraints (what is currently allowed by legislation or statutes) and policy constraints (what is desirable or appropriate) could prevent criticism, or at least direct the critiques on the actual elements of disagreement.

5 MONEY

Although this is not explicitly stated by MMT economists, they consider money as a pure asset that the state can create at will, whereas it is both an asset and a liability in the STM [Knapp's

state theory of money]. In that regard, MMT represents a regression vis-à-vis the STM. (Drumetz/Pfister 2021a: ii)

[MMT and STM] both hold a narrow vision of money as a means of payment, and more precisely as currency (also including reserves in the case of MMT). (Drumetz/Pfister 2021a: 4)

The main argument of this short section is that MMT builds on the long-standing post-Keynesian endogenous-money theory (for example, Moore 1988), which offers a coherent analysis of the nature of money (money is a debit–credit relationship), creation of money (bank loans create bank deposits), and circulation of money (bank deposits make monetary reserves) in the private sector (Lavoie 1992; 2014: ch. 4; Graziani 2003). MMT has explored the implications of the endogenous-money theory for the government sector (for example, Tymoigne/Wray 2007). Since the endogenous-money theory has only slowly been recognised by mainstream academics and central bankers, there is room for some misunderstanding.

The MMT book is explicit about different uses of the term ‘money’:

Throughout this book, we will carefully distinguish between the money of account (the US dollar or the Australian dollar, for example), and specific money denominated liabilities (demand deposits issued by banks or currency issued by the government, for example). The term ‘money’ simply refers to the unit of account chosen by government to denominate tax liabilities and payment made to government, the dollar in both the US and Australia’ (Mitchell et al. 2019: 145)

Money is a measure of debit–credit relationships. Money-denominated liabilities are therefore liabilities from the point of view of the debtor and assets from the point of view of the creditor. MMT describes the structure of liabilities used as final means of payment through the ‘Minsky–Foley pyramid’, ‘with different layers corresponding to the degree of separation from the central bank’ (Mitchell et al. 2019: 144). Agents in each layer use the liabilities issued by agents in the higher layer in the pyramid to clear accounts, for example firms make payments to each other through bank deposits, while banks make payments to each other through monetary reserves.

That is why currency and central-bank reserves are not the only means of payment. The MMT book describes the structure of the variety of measures of monetary aggregates (M0, M1, M2, M3 and M4, depending on the conventions of the central bank in each country) exactly as in standard macroeconomics or monetary economics textbooks. The only difference is the MMT emphasis on the fact that in a floating exchange regime central-bank liabilities are not convertible in gold or foreign currency. That is why, technically, the central bank ‘cannot run out of money’. It can be created *ad libitum*, by the stroke of a pen, or by pushing a button on a keyboard. During the COVID-19 pandemic, the deposits of depository institutions (central-bank reserves) at the Fed passed from \$1.735 trillion (2 March 2020) to \$4.255 trillion (6 December 2021). This represents a net creation of \$2.520 trillion of central-bank money ‘out of nothing’.

According to Drumetz/Pfister the possibility of monetising the debt does not allow the public sector to avoid the risk of running out of money: ‘reserves created by the central bank to purchase public securities would leave the amount of public liabilities unchanged’ (Drumetz/Pfister 2021a: 8–9). This is correct. Still, as far as central banks’ liabilities are not convertible in gold or foreign currency, the risks of such a policy of money creation should be judged on the basis of its macroeconomic consequences (for example, inflation, distortions on government expenditure, etc.), and not on the basis of its feasibility.

If customers of a bank suspect that the balance sheet of that bank is not solid, they could ask for their bank deposits to be converted into cash. This could trigger a bank

run and the bank could run out of monetary reserves. If banks ask for their deposits at the central bank to be converted into cash, the central bank can print cash.

Drumetz/Pfister recognise that it is true that central-bank money cannot be exchanged for gold or foreign currency: ‘the only way the public can rid themselves of central bank money they not want to hold [*sic*] is to “fly from currency”, chasing assets, goods and services. In particular, foreign currency can then act as a proxy asset for outside money to domestic currency, triggering a depreciation of the exchange rate that fuels inflation’ (Drumetz/Pfister 2021a: 8–9). In addition, they write: ‘If a Government considered that, as suggested by Kelton (2020), the central bank would have paid off its debt when purchasing it, the monetary base would become partly or entirely unbacked, which at some point would trigger a “flight from currency”’.

It is hard to understand how monetary reserves can *become* ‘partly or entirely unbacked’ if they are non-convertible. Monetary reserves are *always* unbacked in a floating exchange-rate system. With respect to the ‘fly from currency’, that is not something affecting the ability of the central bank to honour its liabilities denominated in its own units of account. True, it can trigger a devaluation of the currency and foster inflation. If a government creates the condition for a ‘fly from currency’, this is indeed a serious problem. But again, as Mitchell et al. (2019: 342) put it, there is no substitute for good governance. A massive amount of monetary reserves created by the Fed, the BoE and the ECB during the COVID-19 pandemic has not initiated any fly from the US dollar, sterling, or the euro.

To sum up, the problem of inflation generated by currency devaluation has little to do with whether or not monetary reserves are backed or unbacked in a flexible exchange-rate regime. MMT does not consider money as a pure asset: it considers it as an asset and a liability. The peculiarity of the liabilities of the central bank (that are assets for all the other sectors of the economy) is that they are not convertible. MMT does not have a narrow vision of money: its understanding of the structure of the monetary aggregates does not differ from the one that can be found in standard macroeconomics textbooks. What differs is its understanding of the causal link between the monetary aggregates (for example, that monetary reserves do not create bank deposits as in the money-multiplier story) and between the monetary aggregates and other macroeconomic variables (for example, an increase in the money supply is not *per se* inflationary).

On the other hand, it is fair to say that analyses of open-economy issues, particularly those relevant for developing and emerging countries, together with the risks of inflation generated by currency devaluation, is an exciting area of new developments and intense debates in MMT (Bonizzi et al. 2019). For instance, Carnevali/Deleidi (2022) have argued that, even in countries that are relatively high in the hierarchical international monetary and financial system, the aggressive fiscal policies championed by MMT can bring about significant current-account deficits, which in turn could cause currency devaluations. The potential inflationary consequences of a currency devaluation are a helpful reminder of the external policy constraints that affect fiscal policy, even if one shares a functional finance approach to government expenditure. Of course, this argument should not be interpreted as a reason to rule out aggressive fiscal policies, but rather that the institutional features of a country do matter.

6 CONCLUSIONS

MMT has grown in popularity in recent years. In this paper we have highlighted two features of MMT that may have led to some misunderstanding or confusion.

First, leading proponents of MMT mostly write for policy-makers and the public at large to win the ‘battle of ideas’. As a result, important details and institutional caveats of the analysis are omitted or not fully discussed in order to make the main MMT propositions easily understandable to policy-makers and the public at large.

Second, MMT has explored the implications of endogenous-money theory for the government sector. Since endogenous-money theory is only slowly being recognised by central bankers and mainstream academics, there is room for some misunderstanding.

We welcome the contribution of Françoise Drumetz and Christian Pfister, two scholars with knowledge of, and experience in, central banking. We believe this is a significant step forward for a more constructive dialogue on the strengths and weaknesses of MMT. In this paper, we have discussed four original quotations from their work in order to assess some of the merits of their critiques.

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