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Is Now the Time for Modern Monetary Theory or Permanent Monetary Finance?

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Abstract

In response to the COVID-19 pandemic, G7 central banks have launched asset purchase programs in anticipation of an increase in government bond offerings to finance ballooning fiscal deficits. As the volume of government bonds owned by private investors is not expected to rise during the current crisis, these programs will amount to a monetization of large additional debt. The idea that the government sells bonds to the central bank or issues money by literally spending it into existence also plays a key role in Modern Monetary Theory (MMT), the concept of helicopter money and the idea of permanent monetary finance. This article subjects key aspects of MMT to critical examination and shows, using MMT's own balance sheet analysis, that the theory is almost always contradicted by the actual workings of the modern credit economy. In fact, MMT seems to be a collection of prescriptive ideas that dictate how things should function as opposed to how they actually do.

Keywords: Monetary Finance, Modern Monetary Theory, Helicopter Money, Monetary Theory, Balance Sheet Analysis, Theory, Central Banking, Fiscal Policy, COVID-19

JEL Classification: B41, E41, E42, E44, E51, E52, E62, H63

I. Introduction

Before the COVID-19 pandemic, there was broad consensus among economists and institutional investors that central bank policy makers in G7 counties no longer had the ammunition they needed to respond to recessions. In a future recession, fiscal policy would have to play the central role. As debt-to-GDP ratios were at record highs in the G7 countries except for Germany, most economists questioned whether there would be any room left in the next downturn for significant fiscal stimulus in the G7 countries. There were fears that interest

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spikes or concerns about debt sustainability could result in higher credit risk premia and successive increases in funding costs, causing the already high debt ratios to balloon further.[1]

When the COVID-19 virus began to spread across the world, an economic response was needed. In the early stages of the crisis, market participants wondered whether the G7 would be able to raise the necessary funds, but governments responded quickly by committing substantial financial resources. Although the specific fiscal approaches differed from country to country, the financial resources could only be provided through government bond issuance with the support of central banks. The steps taken, for example, by the Federal Reserve (FED), the European Central bank (ECB) and the Bank of England (BOE) essentially paved the way for governments to borrow unlimited amounts. As G7 central banks are forbidden by law from purchasing debt directly from the government, they have not explicitly offered to monetize deficits in response to the COVID-19 pandemic. Instead, central banks launched new asset purchase programs that were of unprecedented size or even limitless. As G7 central banks buy government bonds in the pandemic around or equal to the expected ballooning G7 deficits on the secondary market, the volume of government bonds owned by private institutional investors will not rise.[2] Moreover, in the United States, the fiscal stimulus program involved some form of direct money transfer from governments to citizens. All these measures blur the line between monetary policy and fiscal policy. Therefore, critics of the new policy regime ask how monetary and fiscal policy in G7 countries during the COVID-19 pandemic differs from the concepts of helicopter money and permanent monetary finance, or from the ideas of MMT, which models central banks as the operational arm of the treasury.[3]

Even before the COVID-19 pandemic, MMT theorists believed that their theory provided a "realistic description" of how our actual monetary system operates, but in many cases, policy makers and economists versed in mainstream theory regarded MMT as almost ludicrous. The disconnect arose primarily from fictitious consolidation of the central bank and the government into a single entity in the MMT model and its assumption that governments either sell bonds to their central bank or issue currency by literally spending it into existence. Furthermore, MMT adherents admitted that their analysis of fiscal and monetary policy is only applicable to national governments with sovereign cur-

[1] *Bartsch* et al. (2019, p. 7).

[2] Adair Turner, former chair of the UK's Financial Services Authority, is right when he says with regard to the fiscal stimulus packages: "that is permanent monetary finance" (*Sandbu* 2020).

[3] See speech of Paul Tucker, former deputy of the Bank of England (*Giles* 2020b).

rencies.[4] MMT theorists, in particular *Kelton* (2020), at least tend to recognize these weaknesses of their "descriptive" theory. Nevertheless, they argue that the financial non-consolidation of central banks and governments as well as the prohibition of direct government funding by central banks are by no means inevitable. Indeed, according to proponents of MMT, they constitute self-imposed constraints on parliamentary bodies that can easily be bypassed, suspended, or even modified to transform the prescriptive ideas of MMT "into better public policy" (*Kelton* 2020, p. 232, 234, and 288).

While a prescriptive theory or policy is not a religion, it is at least a statement of how things ought to be. It says how people or things should function, as opposed to how they actually do. According to *Schumpeter* (2010, Part One, "Nature of Essence of the Exact Economy"), the core criterion for the accuracy of any theory (and hence for its acceptance or rejection) is how well its conclusions match the facts: Only this can prevent theory from degenerating into a performance of mental acrobatics that is driven by ideology. Against this backdrop, the present article neither intends to present MMT as a fringe theory nor attempts to recycle it back into a mainstream paradigm. The intention is rather to perform a critical assessment of the entire body of original MMT work. As MMT supporters present their theory as a realistic description of how a modern credit economy like the USA, UK, or Germany actually works—in particular how money is created and destroyed by governments and how financial markets function—this article intends to show that MMT is "regularly disavowed by the facts", which is Schumpeter's criterion for validating sound economic thinking.

II. Do G7 Governments Issue Money by Literally Spending it into Existence?

Kelton (2020, p. 28 – 30) believes that the government can decouple spending from the prior need of funding, because it has the possibility to issue money by literally spending it into existence. In her view, to clear the payments for government spending, nothing more than the central bank's keyboard is needed to mark up the bank accounts of the sellers of goods or services. In order to prove that this is (technically) feasible in the current monetary system, Kelton cites *Bernanke* (2009), who said of the US Federal Reserve's lending policy in the financial crisis: "So, to lend to a bank, we simply use the computer to mark up the size of the account that they have with the Fed. It's much more akin to printing money than it is to borrowing." However, this reference to US Federal Reserve policy in the financial crisis is completely taken out of context. *Bernanke* de-

[4] In their view, for example, the Eurozone member states effectively agreed to "operate fiscal policy in a foreign currency" (see *Tymoigne/Wray* 2010, p. 40).

scribed in 2009 how, in the last financial crisis, the Federal Reserve provided urgently needed liquidity when the central bank allowed commercial banks to borrow all they needed against eligible collateral on a short-term basis in the emergency situation of a run on customer deposits (bank run), which was further aggravated when short-term funding markets dried up (wholesale run).

However, this is by no means a realistic description of how governments fund their spending in the G7 countries. In fact, it is Kelton's (and MMT's) prescriptive policy idea to define how governments should clear payments to enable government spending. Today, central banks like the Fed, the ECB, and the BOE normally do not cover any shortfalls on the treasury general account that could arise when the central bank clears spending bills by debiting the treasury's general account. The US Congress withdrew overdraft privileges long ago, and even when they were still permitted, dipping into the overdraft was only used to avoid disruptions in the money market.[5] With the start of the European Monetary Union Art. 104 TEC forbids Member State central banks from providing both overdrafts and other credit facilities to the public sector, and from the direct purchase of government securities. During the Covid-19 pandemic, the government of the UK announced that it would extend its existing overdraft facility with the central bank, raising it from £370m to an effectively unlimited amount. However, the UK Treasury stated that the government financing would be "temporary and short-term" to avoid disruption in the primary market. The treasury had long used dipping into its central bank overdraft facility for day-to-day spending before auctioning government bonds in the gilt market.[6]

III. The Real Cost of Printing Money

Instead of issuing money by spending it into existence, governments may also sell bonds to the central bank to finance their spending, which pays for them by creating new money, that is, by crediting the purchase price to the treasury's

[5] See in this context Tymoigne (2016) who is an adherent of MMT: "The most straightforward involvement of the Fed into fiscal operations was the availability of an overdraft on TGA until the late 1970s. As stated in the previous section, in practice this overdraft facility had been strictly used for monetary-policy operations, but it could be used for fiscal purpose in case of "national emergency." The $5 billion limit was, however, very limiting for that purpose and there were Congressional hearings in the 1960s that looked into the possibility of expanding that limit and making the overdraft line permanent (authorization of the overdraft had to be renewed by Congress every two years). This never went anywhere because the use of the overdraft for fiscal purpose was seen as inflationary and unsound. The Treasury always justified the use of the overdraft as a brief and occasional means to finance its expenditures in order to avoid disruptions in the money market."

[6] See *Giles* (2020a).

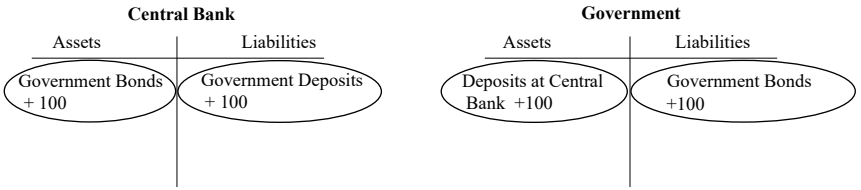

Figure 1: Balance Sheets Associated with Monetary Finance, Helicopter Money or MMT

general account. This is the approach proposed in MMT textbooks (see, e.g., *Mitchell/Wray/Watts* 2019) and proponents of helicopter money. Again, it is not the taxpayer's money that is used here when the computer marks up the size of the treasury's general account with the central bank. This means of financing spending leads to an additional asset for the central bank (government bonds, a government liability) and an additional central bank liability (government deposit). The balance sheet analysis (see Figure 1) is the same for MMT, permanent monetary finance, and for the idea of helicopter money.

Non-bank sellers that provide goods and services to the government are paid by transfers to the deposit accounts they hold at private banks (Figure 2). These banks in turn are credited equivalent amounts on the reserve accounts they hold at the central bank. This results in a massive injection of reserves into the banking system. Over time, all banks are deluged with non-interest-rate-bearing central bank reserves, and the overnight bid rate will fall to zero (*Mitchell/Wray/Watts* 2019, p. 320 – 322).

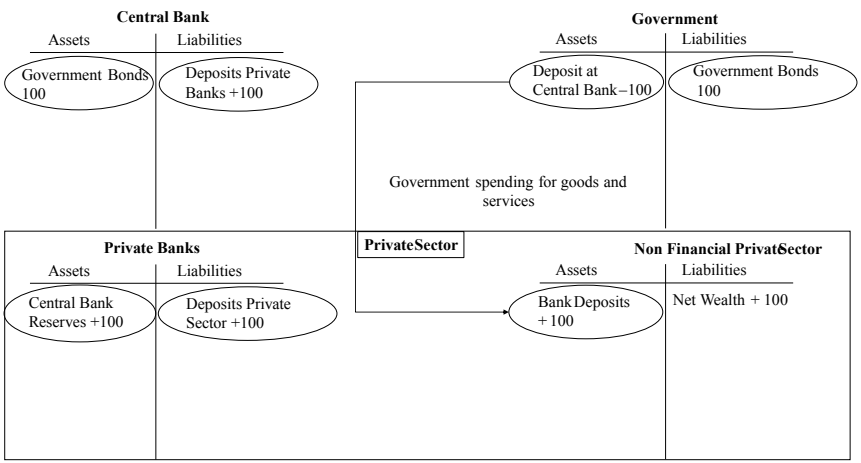

Figure 2: MMT Balance Sheets Associated with Government Spending

MMT therefore implies, not unlike proponents of helicopter money or permanent monetary finance, that government spending financed by selling bonds to the central bank is more or less "free money" that neither has to be repaid nor creates any cost. The interest on the loans from the central bank is simply added to the central bank's profits, which are then disbursed to the government. However, it is again a prescriptive idea of how things ought to be and not a theory that matches the facts, since the Fed, the BOE, and the ECB are prohibited from purchasing government debt in the primary market.

In addition, the apparent attractiveness of this means of "financing" government spending ignores an important detail: Creating central bank money through helicopter money or the MMT model does have costs, as noted by *Kocherlakota* (2016). The central bank can, of course, permanently buy bonds from the government, thus create non-interest bearing reserves, and accept a zero interest rate. But this comes at a very significant price: It means not only giving up on monetary policy completely but also losing the income from seigniorage that would otherwise be earned by lending central bank balances to banks as revolving interest-bearing loans against sufficient amounts of eligible collateral assets.[7]

MMT theorists would not worry about such a development because they want to decouple government spending from prior funding; as a result, they do not need seigniorage income. A key component of their prescriptive concept is to sideline the central bank and to "demote" monetary policy with its "democratically unaccountable central banker". In line with Lerner's theory of functional finance, which concludes that modern developed economies are rarely at full employment, parliaments and thus also governments should use their fiscal powers (spending, taxing, and borrowing) in whatever manner best enables them to maintain full employment and price stability. For that reason, MMT would also recommend leaving banks deluged with reserves, not paying interest on reserves, and consequently accepting a zero short-term interest rate (*Kelton* 2019a, *Kelton* 2020, p. 288 and 305).

In this regard, it is also interesting that the COVID-19 pandemic has begun to change the mainstream paradigm. Mainstream economists would now generally admit that monetary policy is powerless to prevent damage from the COVID-19 pandemic. They would even agree that close to zero or negative interest rates

[7] Until recently, seigniorage revenues disbursed as part of the central bank profits to the government were important, amounting to up to 0.5% of industrialized countries' GDP (see *Gros* 2016, p. 2). Even in the low interest rate environment, *Buiter* and *Mann* (2019, p. 12), estimated a corresponding figure of around 0.34% of GDP for the USA for 2019. However, due to the zero interest rate policy of the ECB, these seigniorage revenues have actually disappeared in EMU and even became more negative with the introduction of negative rates and the current outbreak of the COVID-19 pandemic.

have reached the limits[8] of their ability to manage business cycles in light of the aging workforces in G7 countries, increased corporate concentration, technology-driven labor market disruptions, and a zero lower bound, with its repercussions for banks, life insurance providers, and pension funds. In addition, economists recognize that even independent central bankers may sometimes get it wrong (*Rogoff* 2020). In 2020, US Federal Reserve chief Powell and policy maker Brainard both acknowledged that the central bank's pre-emptive rate hikes in 2015 – 2018 were missteps. Central bankers had focused on the natural rate of unemployment rather than on labor force participation. The predicted return to an inflation rate of 2% never occurred because the historically strong labor market did not trigger a significant rise in inflation. As a consequence, the Federal Reserve recently announced that it would experiment to see how low unemployment would fall. Instead of preemptive hikes, it will now accommodate expansion until it knows maximum possible employment has been reached. However, it will only know this in retrospect, by observing the inflation rate beginning to accelerate well beyond its new 2% average inflation target (see *Jones* 2020).

Nevertheless as a stabilization tool to manage the business cycle, fiscal policy faces the same problems in the case of calibrating maximum employment and timing a break in public spending. The magnitude of possible government fiscal activity depends on how close the private sector comes to delivering full employment and price stability on its own. Governments advised by MMT, like independent central bankers, would only know ex post when their spending has pushed employment above the maximum employment rate consistent with price stability (see *Rogoff* 2020 and *Wolf* 2019). In addition, at zero or even negative interest rates during recessions like the great financial crisis or the COVID-19 pandemic, it does not matter whether you finance spending by creating new money or by issuing government bonds. However, mainstream economists like Blanchard argue that in normal times, central bankers should have interest tools to combat undesired rising inflation rates.[9]

If the central bank wishes to avoid losing the control over setting short-term interest rates as a tool to achieve price stability in normal times, it could, according to the MMT model, pay interest on reserves to absorb excess liquidity and set a floor that prevents policy rates from falling below the target level chosen (*Mitchell/Wray/Watts* 2019, p. 320). When the government prints money to pay for spending while the central bank pays interest on reserves, the government is effectively borrowing, because the central bank can disburse less money to the government. In this specific case, there is no economic difference between bor-

[8] Interest rates can become so low that the detrimental effects on the banking sector outweigh the benefits of lower rates. *Brunnermeier* and *Koby* (2016) refer to this rate as the "reversal rate".

[9] See *Robb* (2020).

rowing in the market and spending newly created money (*Kocherlakota* 2016; *Mankiw* 2020, p. 2).[10]

The outcome is still the same when the interest rate paid by the central bank on reserves is zero and when the central bank instead sells (short-term) government bonds to the private banking sector, thereby draining reserves to set a floor to prevent policy rates from falling below the target rate necessary to achieve price stability. This alternative is set out by *Mitchell/Wray/Watts* (2019, p. 321 – 322). What it neglects to consider, however, is that in such a situation, the interest on the bonds will not be earned by the central bank and therefore cannot be disbursed as a profit to the government. Rather, the interest payment by the government benefits the private banking sector.[11] Finally, central banks may simply absorb the excess liquidity by increasing minimum reserve requirements and thus forcing banks to hold higher reserves on their (non-interest bearing) reserve accounts. However, the downside is that such a tax on banks would depress bank profits by limiting the earnings from maturity transformation.[12]

To summarize, contrary to MMT's claim that it offers a "non-partisan lens" to describe how the monetary system operates (*Kelton* 2020, p. 3), its prescriptive ideas of decoupling spending from the prior need for funding make it very complicated for central banks to preserve their interest tools to combat higher prices.[13] In addition, governments relying solely on fiscal policy face the same problems as they do with current independent monetary policy because a MMT-advised government would only know ex post when its spending has pushed employment above the maximum employment rate, consistent with price stabil-

[10] Kelton admits that there is no free lunch, but does so only in a very indirect and convoluted way when saying that "overall, there is little difference in terms of macroeconomic impact whether the government sells its securities or prints money because the latter isn't actually a real thing" (*Kelton/Smith* 2018).

[11] See the very ambiguous phrasing in *Mitchell/Wray/Watts* (2019, p. 325): "Note that the sale of its own debt by a sovereign government should not be thought of as a borrowing operation […] the operational effect of government bond sales (whether by the treasury in the new issue market or by the central bank in open market operations) is to drain any excess reserves created (mostly) by treasury deficit spending."

[12] See *Borio/Diayatat/Zabai* (2016, p. 3), who analyze the same issue in the context of helicopter money.

[13] While central bank interest rates are a policy variable that the central bank can set autonomously, the central bank also has clearly defined and prioritized objectives to meet, in particular its mandate to use monetary policy to achieve low and stable inflation. This implies a very small range of potential central bank policy rates that can be expected to be suitable to promote price stability. The government cannot arbitrarily choose the interest rate of a short debt instrument to drain reserves. As a result, financing spending by printing money can only save term risk premia in the term structure of interest rates.

ity.[14] Ultimately, and especially in times of underused resources, the social returns on increased spending for infrastructure or decarbonization are high, and there is no need to make these investments dependent on the use of MMT prescriptive ideas. The existing monetary system does not constitute a hurdle for those expenditures.

IV. The MMT Mantra: Public Spending is the Accelerator; Public Borrowing and Taxation are the Brakes

Perhaps due to its almost complete fixation on full employment and social progress, MMT seems to consider the possibility of inflationary spending more a hypothetical than a real threat (*Mankiw* 2020, p. 4). While certainly aware of the potential of excess (government) spending to accelerate inflation, proponents of MMT nevertheless believe that under normal conditions, excess demand is rarely the cause of inflation. Rather, rising inflation would be caused by increasing profit margins, the pricing power of large suppliers, the practice of passing on cost increases to end customers, higher commodity prices, and the increased costs of health care. In all these cases, MMT argues, measures aimed at reducing aggregate demand may not be appropriate (*Fullwiler/Grey/Tankus* 2019). However, proponents of MMT do understand that their prescriptive idea of selling bonds to the central bank or spending money into existence and consequently accepting zero short-term interest rates could occasionally induce too much investment, thus bringing about inflation. For that reason, drawing on Lerner's theory of functional finance, their prescriptive idea is that the government should tax or sell bonds in order to drain excess reserves up to the point where short-term interest rates rise enough to prevent excessive investment and achieve price stability (*Kelton* 2019a).

According to MMT, taxes play a central role in the origins of today's monetary systems. MMT's policy prescriptions are based largely on the idea that money derives its value from use in the payment of taxes. A government currency should circulate at par value, because by imposing taxes paid with this currency, the government ensures the currency's widespread acceptance within the population (*Tymoigne/Wray* 2013, p. 5 – 10). When the government taxes its citizens, their purchasing power and the bank's deposits decline. The purpose of addi-

[14] Moreover, "pay off debt tomorrow" (*Kelton* 2019a) would finally result in a global shortage of safe assets that may create additional financial stability issues. Even after the outbreak of the COVID-19 pandemic and the announcement of massive government stabilization programs, very high-grade government bonds are still seen not only as a liability, but also as a safe asset for savers and institutional investors, who perceive government bonds as a reliable store of value, as safe collateral and a benchmark to measure the relative risks of other assets (see *Tett* 2020).

tional taxes in a situation of excess demand and therefore increasing inflation is to drain central bank reserves and to reduce excess demand to help keep inflation in check. The magnitude of possible government fiscal activity depends on how close the private sector comes to delivering full employment and price stability on its own. From MMT's viewpoint, public spending is the "accelerator" in case of deficient demand, while draining reserves through public borrowing and taxation are the "brakes" to curb excess demand (*The Economist* 2019).

To prove the soundness of their fiscal policy advice, adherents of MMT refer to the successful debt operations conducted in early monetary systems such as the Massachusetts colonies, which first issued fiat paper money in America around 1690. While supporters of MMT are keen to argue that these "successes" of past monetary systems are applicable to the fiscal and monetary operations of contemporary economies (*Tymoigne/Wray* 2013, pp. 11 – 15), they completely overlook the fact that the production of (bank) money has become "an enterprise" of the commercial [banking] sector (*King* 2016, p. 62).

In the twenty-first century, almost all money is the result of credit created by private banks. They monetize loan claims by crediting the debtor's account with a claim on the bank itself ("loans make bank deposits"). The introduction of deposit insurance and of increased legal requirements, in particular the tightening of Basel rules, have made bank deposits safer. Nevertheless, bank money in the form of deposits is an imperfect substitute for cash, because central bank money is still regarded as a store of liquidity that offers protection against losses that might otherwise result from the default of a single bank or a systemic crisis within the banking sector. For that reason, there is a need for sufficient trust among creditors, including lenders in the interbank market, that lending banks will not suffer massive losses on their claims (asset side) which would erode their equity base. When this is the case, they will be able to meet their payment obligations on the liabilities side, even in the event of a run on customer deposits ("bank run").

Against this backdrop, the key question is: How effective are the policy instruments of MMT in times of excess demand? MMT's restrictive fiscal policy advice focuses primarily on draining reserves and thus solely on shrinking or lowering the growth rate of central bank money (the monetary base), even as excess demand and increasing inflation may be driven primarily by ongoing private credit creation. One could also ask: What should happen if the proposed fiscal brake only works in theory, because MMT is based on a fictitious consolidation of the government and the central bank? In the next subsection, using MMT's balance sheet analysis, this article will show that MMT theory neglects the possibility of paying taxes with bank money wired to government accounts with the private banking sector. In addition, the balance sheet analysis of real-life government bond auctions will show that bond sales may not drain reserves, but in-

stead lead to an increase of bank money, while the monetary base and short-term interest rates remain unchanged.

1. Taxes as an Instrument of MMT for Preventing Excess Demand

As discussed above, MMT claims that a government does not need taxes or bonds to fund itself because it can spend by selling bonds to the central bank or can spend money literally into existence. The only reason for the existence of taxes is, according to MMT, to curb excess demand by reducing the spending power of the private sector directly[15] and by draining reserves, which leads to an increase of interest rates and thus dampens demand indirectly. In a situation where all resources are fully utilized, imposing taxes would free up "real resources" (*Mitchell/Wray/Watts* 2019 p. 323). This would allow the government to spend on public goods and social benefits without leading to excess demand and overshooting the inflation target.

The other brake on excess demand is, as mentioned earlier, draining reserves to raise (short-term) interest rates. In the MMT model, taxpayers use private bank deposits to meet tax obligations. However, their banks must make payments to the state for the customers using central bank reserves. Using MMT balance sheet analysis (see Figure 3), taxing means eliminating central bank

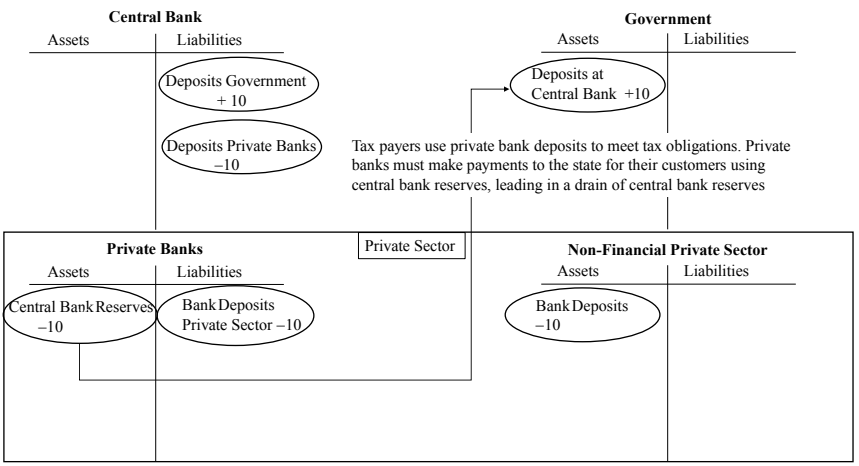

Figure 3: MMT View of Balance Sheets Associated with Non-Financial-Sector Tax Payment

[15] According to *Lerner* (1943, p. 40): "Taxation should therefore be imposed only when it is desirable that the taxpayers shall have less to spend." (see also *Mitchell/Wray/Watts* 2019, p. 323 – 325).

money in the hands of the private sector and therefore leads to higher interest rates. This curbs excess demand indirectly, because the central bank is debiting bank reserve accounts and simultaneously crediting the government account at the central bank, and the private banks are debiting the accounts of the taxpayers (*Mitchell/Wray/Watts* 2019, p. 554 – 555).

This balance sheet analysis conforms to the institutional arrangement in the United States, where taxpayers must instruct their bank to send payments directly to the treasury's account at the Federal Reserve Bank. However, the situation in the United Kingdom and Germany is different. In both countries, the government also has accounts in the private banking sector. Thus, taxpayers may instruct their bank to send payments to the treasury account of government at a private bank.[16] Under this institutional arrangement, only an accounting exchange on the liability side of the banking sector occurs (debiting the taxpayer's account and crediting the government's account in Figure 4), leaving bank reserves at the central bank unchanged.

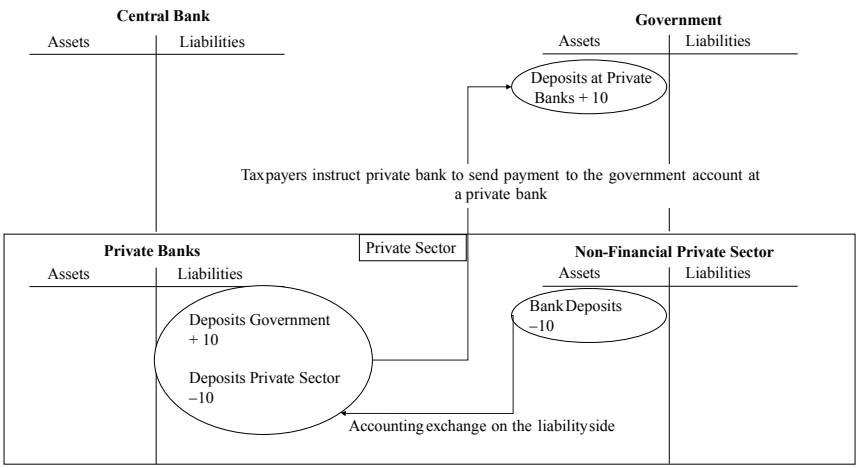

Figure 4: MMT View of Balance Sheets Associated with Non-Financial Sector Tax Payment in the UK or Germany

In this case, taxation can only eliminate central bank money in the hands of the private sector when the government always transfers the tax payments received to its account at the central bank (see Figure 3 again). However, in order

[16] In Germany, Sparkassen and Landesbanken are publicly owned, yet commercial in nature. However, there is no functional difference between private and commercial banks. Following the balance sheet analysis of *Mitchell/Wray/Watts* (2019), this article uses the term private bank.

to drain the reserves permanently, it is not sufficient to credit the government's account at the central bank with the tax payment. For MMT's policy advice to be effective, the government has to leave the tax payment in its central bank account indefinitely. But how can this MMT model be implemented in the real world if the government has only one account at the central bank and is constantly making expenditures while also receiving tax payments?

Critics have a point here, and MMT's answers are vague.[17] Nevertheless, the British and German governments would hardly allow for tax payments on their accounts at commercial banks if their primary interest were to withdraw central bank money from the private sector. Effectively, the governments immediately use those tax payments for spending. Taxation could at best reduce the pressure of additional money printing if the government is making expenditures.[18]

Whereas taxation curbs excess demand by directly reducing the spending power of the private sector, the claim of MMT adherents that taxes raise short-term interest rates by draining reserves is flawed, as seen in G7 countries such as the United Kingdom and Germany. This view of MMT is inconsistent with the ways that governments normally collect and spend taxes. However, proponents of the theory believe that one further instrument exists to drain reserves and thereby raise (short-term) interest rates in case of excess demand.

2. Government Bond Auctions as an Instrument for Preventing Excess Demand

In most countries, the government issues its own new bonds on the primary market, usually through a specialized public debt management agency to banks and private investors. As mentioned in section 3, in countries like the United States, the United Kingdom, and Germany, legal requirements prevent the government from selling newly issued bonds directly to the central bank. Rather, central banks, acting as fiscal agents, support the auctioning and issuance process of new government bonds. When private banks buy newly issued government bonds, the central bank will debit their reserve accounts and credit the government deposit account at the central bank, which results in a loss of reserves (see Figure 5).

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[17] See in this context (*Mitchell/Wray/Watts* 2019, p. 325) who simply claim; "If a government spends by crediting a bank account (issuing its own IOU or currency of issue [printing money in form of central bank reserves]) and taxes by debiting a bank account (and eliminating its IOU or currency of issue [central bank reserves]) then it is not spending tax revenues"

[18] *Kelton* admits: "when you pay your taxes your bank loses reserves, but with a trillion-dollar deficit, there is a huge net infusion of reserves into the banking system" (*Kelton* 2019b).

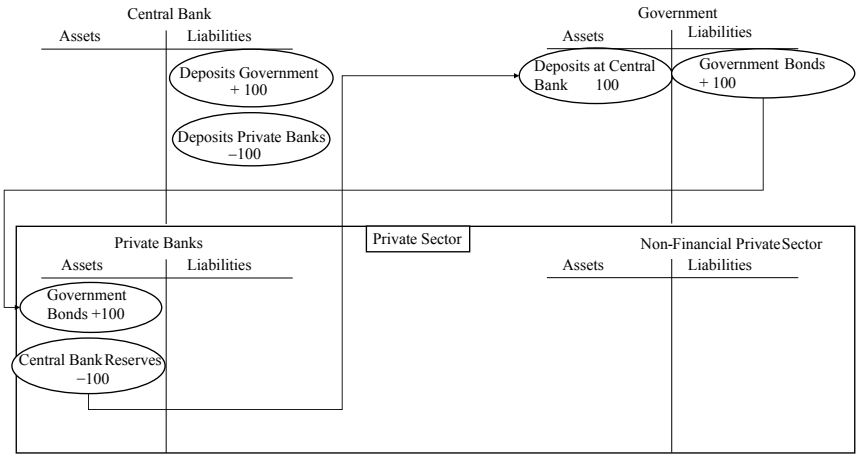

Figure 5: MMT View of Government Borrowing in the Primary Market

However, if a bank that wants to buy the newly issued bonds has no reserves to be debited, or if no excess reserves exist anywhere in the banking system that can be borrowed in the market, the intended draining of reserves will lead to tensions in the money market, and short-term interest rates will rise (*Mitchell/Wray/Watts* 2019, p. 337 – 339). Based on Lerner's theory of functional finance, this situation is precisely what MMT prescribes in the case of excess demand. However, the question arises why the banking sector should be interested in buying government bonds on the primary markets in a situation where the central bank refuses to lend additional reserves on a short-term basis. Even MMT supporters appear not to believe that their own policy advice to curb excess demand can succeed.[19]

In addition, there is another important reason why the MMT analysis is flawed. According to the theory, a drain on reserves will happen in a government bond auction because the central bank debits the reserves of bond-buying banks and credits the government deposit account at the central bank. Just as in the case of taxation, the government will not retain the issuance proceeds in its central bank account indefinitely. It will instead either spend them immediately

[19] *Mitchell/Wray/Watts* argue: "We know that if the banking system has no excess reserves, the central bank will respond to any pressure on overnight interest rates that might be created by banks trying to borrow reserves in order to buy the bonds. It will either lend them at the discount windows, or engage in open market purchases, creating reserves by buying bonds from the non-government sector. With an interest rate target, the central bank is always accommodating. Thus, banks will always be able to get the reserves they need to buy the bonds" (*Mitchell/Wray/Watts* 2019, p. 322).

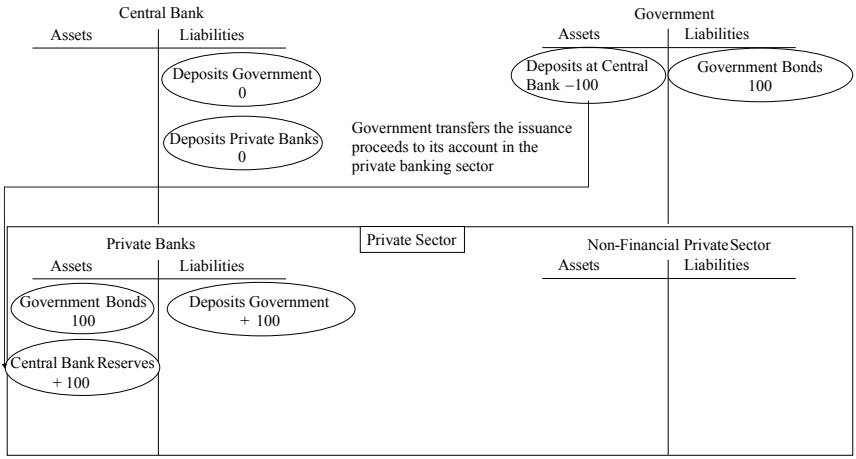

Figure 6: Auction Process for German Federal Securities in the Primary Market

(remitting the reserves into the banking system because the providers of goods and services to the government are paid by crediting their bank accounts) or simply transfer them the same day for future spending to its accounts in the private banking sector. For the private banking sector, the outcome of the auctioning process ultimately amounts to a balance sheet expansion. While the reserve amounts remain unchanged, bank deposits (M1) have increased. This will only change when private investors buy the newly issued bonds later and when their bank deposit accounts are debited.

The balance sheet analysis in Figure 6 describes precisely how the German government issues its own new bonds on the primary market to banks and private investors. The German government will not retain the issuance proceeds from bond auctions in its central bank account. At settlement, it will transfer the proceeds to private banks, resulting in no shortage of reserves and therefore no upward pressure on short-term interest rates. Hence, the idea that the amount of reserves in the banking system would shrink following a government bond auction, as suggested by the MMT model, and the idea that taxes could be used to raise short-term interest rates by draining reserves are both flawed and disproven by cross-country differences in the behavior of governments. The Bundesbank neither has to lend short-term reserves against collateral nor has to engage in open market purchases.[20] This is again a serious blow to adherents of MMT,

[20] As the government fiscal agent, "the Bundesbank performs technical debt management […] and does not grant loans when auctioning Federal securities in the primary market, nor does it take Federal securities into its own portfolio" (*Deutsche Bundesbank* 2018).

who erroneously assure governments that they have a brake to combat rising prices in case of excess demand and who lecture the profession on how to finance government borrowing and spending in the COVID-19 pandemic (*Nersisyan/Wray* 2020).

V. Conclusion

While MMT proponents believe that they understand far better than mainstream economists how governments create and reduce the amount of money in circulation and how financial markets function, this article has shown that their theory is "regularly disavowed by the facts", according to Schumpeter's understanding of economic thinking. In fact, MMT can be seen as a collection of prescriptive ideas to prescribe how things should function, as opposed to how they actually do. MMT's proposals to decouple spending from the prior need for funding because governments can issue money by literally spending it into existence or they can sell bonds to the central bank would come at a high price: They would mean giving up on monetary policy in a credit economy completely. Over time, all banks would be deluged with non-interest-rate-bearing central bank reserves, and the overnight bid rate would fall to zero.

MMT theorists would not worry about such developments. They would recommend accepting zero interest rates and not otherwise paying interest on reserves because sidelining the central bank and demoting monetary policy, with its democratically unaccountable central banker, are an essential part of their prescriptive ideas. In their belief that modern developed economies are rarely at full employment, MMT notoriously argues that the government should always use its fiscal powers (spending, taxing, and borrowing) in whatever manner best enables it to maintain full employment and price stability. The magnitude of possible government fiscal activity would depend on how close the private sector comes to delivering full employment and price stability on its own. Due to its almost complete fixation on full employment and social progress, MMT seems to consider the possibility of inflationary spending more a hypothetical than a real threat. However, if this would happen, governments advised by proponents of MMT would—like independent monetary policy bankers— only know ex post, when their spending has pushed employment above the maximum employment rate consistent with price stability. Drawing on Lerner's theory of functional finance, MMT proposes that the government, in the rare case of excess demand, should tax or sell bonds in order to drain excess reserves up to the point where short-term interest rates rise enough to prevent excessive investment.

However, this theory of how to dampen excess demand is not applicable in a modern credit economy. In the twenty-first century, almost all money is the re-

sult of credit created by private banks. MMT's prescriptive recommendation of restrictive fiscal policy focuses primarily on draining reserves and thus on shrinking the monetary base, whereas excessive demand and increasing inflation may be driven primarily by ongoing private credit creation. As a consequence, MMT gives governments that follow their prescriptive ideas the false assurance that they have a policy tool at hand with which to combat rising prices in the case of excess demand. According to MMT, they simply need to impose taxes or sell bonds to drain reserves, which will lead to increased interest rates and will dampen rising prices. As shown in this article, this analysis is deeply flawed. After demoting monetary policy, MMT has no effective tool to increase interest rates in the case of excess demand.

VI. Outlook: The Political Economy of Permanent Monetary Finance

Most mainstream economists identify a significant moral hazard problem that arises from granting politically elected governments the power to create, allocate, and spend money, as proposed by MMT (see, e.g. *Rogoff* 2020). In demanding that policy makers aim for the optimum, advocates of MMT, like the proponents of helicopter money, tend to overlook the problem of moral hazard (*Mankiw* 2020, p. 7). According to *Alesina/Passalacqua*, "fiscal policy is deeply intertwined with politics." Hence, serious problems may arise from putting the power to create, allocate, and spend money permanently in the hands of politically elected governments. Governments may try to win elections by promising to increase spending, financed by monetary finance, in hopes that their promises will garner voters' support (*Alesina/Passalacqua* 2015, p. 1; *Rogoff* 2020).

In this context, economists widely regard the COVID-19 pandemic as an unforeseen natural disaster. According to *Wolf*, "desperate times demand desperate measures" (*Wolf* 2020), and *Sandbu* (2020) reflects the increasing support for a break with "conventional taboos in economic thinking", at least for a limited period until the world has overcome the current crisis. As history suggests, governments only reluctantly give up the ground they gained in previous crises (*Sandbu* 2020, *The Economist* 2020a, *The Economist* 2020b). It is noteworthy that academics are beginning to address legitimate concerns about what would become a normal practice if proponents of MMT, helicopter money, and permanent monetary finance had their way and if governments merged their treasuries and central banks

Instead, now is the time to think about ways to ensure that the central bank measures that have been implemented to fight the natural disaster of a pandemic are only a one-off emergency monetary finance plan (see *Yashiv* 2020). It is certainly not "Modern Monetary Theory time", as Mitchell claims (*Mitchell* 2020), as this would result in giving up on monetary policy altogether. Even if

an independent central bank does sometimes "get it wrong", and even if fiscal policy may be more powerful during recessions, *Rogoff* may be right when he says that giving discretion to a "modern, independent, technocratic central bank is arguably the greatest innovation in macroeconomics since John Maynard Keynes pioneered demand management" (*Rogoff* 2020).

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