

On Modern Monetary Theory

The availability of better (micro-) data has enabled modern mainstream macroeconomics to make substantial progress during the last decades. Surprisingly, however, some rather fundamental questions either remain largely unanswered or still lack satisfactory answers within the prevailing paradigm of economics. These deficiencies are regularly pointed out by lateral thinkers who propose alternative “theories” that often reside outside of mainstream economics. One such new macroeconomic theory is the Modern Monetary Theory (MMT), and it has recently attracted some attention in the press.

The MMT stems from the criticism that there continues to be no established satisfactory theory about the optimal level of government debt. It is rather remarkable that this is true. Policy makers in many countries seem to know better; they have recently been adopting stringent debt limits. In both Germany and Switzerland, for example, the constitution requires that nominal debt does not (systematically) increase over time. The USA also has a cap on nominal debt (the so-called debt ceiling), although it is regularly lifted via painful negotiations. It is astonishing that mainstream economics lacks the scientific foundation to contribute to this important debate on the “right” level of debt and on the sustainability of increasing levels of debt. On the other hand, it is equally worrying that scientifically unfounded tendencies towards “low” debt and limits to nominal debt have found their ways into constitutions. The MMT supporters have positioned themselves in this debate with the claim that high levels of debt are sustainable. This claim is based on the blunt observation that a government can always avoid defaulting on nominal debt denominated in its own currency by printing money, that is, by creating unlimited amounts of money to respect its debt obligations.

A second criticism of mainstream economics by MMT supporters is worth mentioning. It relates to the monetary transmission mechanism, that is, the question about how the actions of central banks affect the (real) economy. Mainstream thinking centers around the belief that central banks successfully affect the price level and inflation by adjusting (nominal) interest rates, thereby affecting the real economy, that is, consumption, savings and investment decisions. In fact, actual monetary policy around the world is still based on the assumption that this monetary transmission channel is powerful. However, recent research has shown that the empirical evidence for this channel is, at best, limited. The MMT thus correctly questions a central pillar of monetary policy. MMT supporters instead suggest that the real economy can be affected more effectively by relying on fiscal policy. The positive nature of the main MMT message may have contributed to the attention it has recently attracted not only in the US, but also in the German press (FAZ, Handelsblatt): full employment at “acceptable” wages can be achieved through expansionary fiscal policy, which, in turn, is sustainable if supported by monetary policy setting a sufficiently low interest rate.

Although the criticism of mainstream economics is justified, the alternative offered by the MMT is not convincing. The MMT has a misguided view of interest rates, assigns a particular causal interpretation to national accounting identities, lacks a theory of investment and an intertemporal model, provides a theory of inflation that is empirically rejected and has a limited understanding of the differences between real and nominal variables.

In terms of asset markets, the MMT assumes that the private sector is always willing to hold any amount of debt issued by the government at the interest rate set (or rather “envisioned”) by the central bank. A questionable assumption. A plausible alternative is that the private sector is willing to absorb a high level of public debt only at an interest rate higher than the one envisioned by the central bank, a possibility ignored by the MMT. This is a serious shortcoming of the MMT, since interest payments on government bonds have to be financed through the issuance of new bonds. But this financing scheme is not sustainable since interest rates eventually have to exceed the growth rate of the economy for the private sector to be willing to purchase the entirety of the debt. The amount of debt therefore grows at an interest rate higher than the growth rate of GDP, implying an exploding (and thus unsustainable) debt-to-GDP ratio.

Most of the MMT conclusions, including the absorption of bonds, arise from *assigning a particular causal interpretation to national accounting identities*. In a closed economy two accounting identities hold at the aggregate level. GDP Y can be used for private consumption C , investment I or government consumption G ,

$$Y = C + I + G. \quad (1)$$

A household can spend income Y on either consumption C , save S or pay taxes T ,

$$Y = C + S + T. \quad (2)$$

Combining the two identities yields that for the government deficit $G - T$,

$$G - T = S - I, \quad (3)$$

that is household savings are split between investment I and the deficit $G - T$. The MMT now assigns a particular interpretation to this equation. First, the private sector’s (financial) wealth is equal to government debt, implying that zero debt means zero wealth. Second, since higher deficits translate one-to-one into (financial) wealth, there is no crowding out of investment. Deficits and wealth expand by the same amount (since debt = wealth) so that households can use the additional wealth (due to higher debt) to acquire the additional debt without reducing investment.

This analysis seems questionable for several reasons. The economy as a whole can accumulate wealth only through investment. To account for the wealth of a nation one has to consolidate the private and the public sector so that government debt is not national wealth. The MMT seems to talk about $S - I$ while I is relevant for wealth accumulation of a nation. Certainly, no-one thinks that Switzerland with a zero-deficit limit and thus a vanishing debt/GDP ratio will be a country without wealth (and large deflation)—the prediction of the MMT. Mainstream thinking predicts the opposite. There will be less crowding-out of investment through government debt, wealth will increase over time and prices are stable. MMT often refers to Japan as an example that high debt levels can be sustainable. While this is certainly a valuable observation, the strong decline of investment in Japan suggests that crowding-out is an important aspect of reality.

The discussion of fiscal multipliers also suffers from a particular use of national identities. National accounting identities are about the use of real resources, not about financial markets. The nation must decide what fraction of income to consume in the private (C) and public sector (G) and which fraction to invest (I). For a fixed income, increasing one component, say G , necessarily implies that either C or I has to fall. No fancy story about how bankers work in practice can circumvent this problem. Everybody has to respect the resource constraint.

The MMT therefore basically follows old Keynesian ideas and uses equation (7) in a particular way, implying that an increase in G leads to an increase in C and Y , apparently permanently. This contradicts empirical evidence on the effects of fiscal expansions as Valery Ramey and coauthors have recently shown. This result is again a consequence of using national identities, interpreting correlations as causal relationships, lacking a theory of investment and having no dynamic model.

The MMT is also *a weak theory of inflation*, where taxation is used to control the price level and the inflation rate. Since taxation is not necessary to pay for government expenditures, the only essential purpose is to control prices. Using taxes to control the nominal price level seems questionable. One can think of taxes as the amount of consumption goods owed by the private sector (number of cows) and thus can be raised in a world without money. In this money-free world, higher taxes also lower the purchasing power of households but there is no price level. But how can taxes then be used to determine the price level in a world with money? The answer is not really. The reason is that taxes are a real concept and prices a nominal one. An insight Milton Friedman had many decades ago. In general, it seems impossible to relate a real variable without a trend like taxes to a nominal variable with a trend like prices. At an inflation rate of 2%, prices double within 35 years, at a rate of 10% within 7 years, while taxes change only little. How can one use taxes to explain a doubling of prices? How can one explain that some countries have 0%, some 2%, some 10% and some even higher inflation rates? The MMT cannot and the fundamental reason is that a determinant of prices should be a nominal variable with a trend and not a non-trending real variable. The MMT is right though; this variable is not the exogenous supply of money through the central bank. But this is not a new insight.

The insufficient theory of inflation also leads to some confusion between nominal and real variables, for example when discussing reserves at the central bank. If MMT states that there are excess reserves, denominated in the country's currency, then this is a nominal statement. But private agents do not care about nominal variables, they care about the real value, the purchasing power. One possibility is that the price level adjusts (increases) to ensure that the purchasing power falls until there are no excess reserves in real terms. This (possible) adjustment of the price level is not considered by the MMT, a consequence of their limited view of price formation.

In conclusion, the MMT stems from weaknesses of mainstream economics but fails to provide a new theory of prices and inflation determination. This leads to problems distinguishing nominal and real variables, uses an incorrect concept of wealth and falls into the time-honored trap of using accounting identities as causal relationships and to inform policy. Unfortunately, the easy way to full employment proposed by the MMT does not work. A high level of government debt is not necessarily a disaster, but there will be costs associated with it.