Modern Monetary Theory:

Implications and Problems

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#### Introduction

<sup>1</sup>Modern Monetary Theory (MMT) states that government expenditure is necessitated by taxation.<sup>2</sup> That is to say, taxpayers can be taxed only if government spends the currency into the economy. Government only pays for interest on debt. In worst case, the central bank will buy the debt. An argued corollary is that taxation functions merely as a fiscal instrument for demand management, and the conventional notion of a government budget constraint is a misconception: government expenditure is constrained by inflation, not revenue.<sup>3</sup> Following from this, one objective of MMT is to ensure job guarantee where even the structurally unemployed can secure an employment.<sup>4</sup> In this paper, we argue that MMT is an idealized theory that oversimplifies economic interactions of and between the public and the private sector. In particular, job guarantee program is not economically feasible. First, we examine the implications of MMT. Then, we raise two problems about the MMT framework: 1) the inflation constraint approach is unrealistic in implementation without undermining central bank independence, and 2) job guarantee program leads to distortions in supply side expectations, especially when evaluated through the lens of the Phillips Curve and Dynamic Partial Equilibrium Model. We conclude that MMT is flawed due to its disregard for the behavioral essence of the private sectors in terms of expectation and of the public sector in terms of output/inflation sensitivity.

# **MMT: Implications**

Taxation is not revenue but merely a fiscal tool. Government spending injects currency into the economy. Only then the currency injected is taxed to ensure the scarcity of money, i.e., its value. For example, suppose the federal government spends 10% of the GDP, while the tax revenue is 6%. Then, holding all else constant, the *net injection* into the economy is 4% of GDP.<sup>5</sup> From which it follows that the interest rate should be discarded as

<sup>1.</sup> Open<br/>AI,  $\it Chat GPT$ , Debuging Figure Printouts by Python and Grammer Editting, 2025, https://chat.openai.com.

<sup>2.</sup> L. Randall Wray, Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems (Palgrave Macmillan, 2015), 137–145, https://gandalf.fee.urv.cat/professors/AntonioQuesada/Curs2223/MMT.pdf.

<sup>3.</sup> Peter Coy, Katia Dmitrieva, and Matthew Boesler, "Warren Buffett Hates It. AOC Is for It. A Beginner's Guide to Modern Monetary Theory," *Bloomberg*, March 21, 2019, https://www.bloomberg.com/news/features/2019-03-21/modern-monetary-theory-beginner-s-guide.

<sup>4.</sup> Pavlina R. Tcherneva, "The Job Guarantee: Design, Jobs, and Implementation," Levy Economics Institute Working Paper No. 902, 2018, https://www.levyinstitute.org/pubs/wp\_902.pdf.

<sup>5.</sup> Wray, Modern Money Theory: A Primer on Macroeconomics for Sovereign Monetary Systems, 141.

a tool of stabilization policy and the overnight rate should be set at its normal rate of zero via bond offerings.<sup>6</sup>

A stabilization policy thus advocated is job guarantee. Job guarantee is a proposal for states (funded by the federal) to offer permanent voluntary job opportunities at living wage that ensures full employment.<sup>7</sup> It serves also as an automatic stabilizer that expands during recessions (due to increased government spending for wages) and contracts during economic upturns.<sup>8</sup>

Differing from conventional macroeconomic theory, i.e., that of the IS/LM based framework, MMT proponents posit that government expenditure is inversely related to interest rate. When government spends money, it injects net reserves into the banking system. These reserves lower the overnight rate, whenever the central bank do not sterilize them. Thus, deficit spending does not crowd out private investment via higher rates—it reduces rate.

This claim is supported by some empirical observations. For example, in Febuary 2022, inflation rate in US was 8.54%, <sup>10</sup> of which 41.6% of the inflation determinants can be attributed to federal spending; <sup>11</sup> while the real interest rate of the same period is -6.90%. <sup>12</sup> It is however exceptional compared to some prior observations, e.g., 1980 Huge Reagan tax cuts caused both the deficit and the real interest rate to rise.

<sup>6.</sup> Biagio Bossone, "Why MMT Can't Work," International Journal of Economic Policy Studies 15, no. 1 (February 2021): 157–181, https://doi.org/10.1007/s42495-020-00055-w, https://doi.org/10.1007/s42495-020-00055-w.

<sup>7.</sup> Tcherneva, "The Job Guarantee: Design, Jobs, and Implementation."

<sup>8.</sup> Ibid.

<sup>9.</sup> Coy, Dmitrieva, and Boesler, "Warren Buffett Hates It. AOC Is for It. A Beginner's Guide to Modern Monetary Theory."

<sup>10.</sup> LongTermTrends, *The Real Interest Rate*, LongTermTrends.net, 2025, https://www.longtermtrends.net/real-interest-rate/. Note that inflation herein is calculated based on CPI of the last 12 months

<sup>11.</sup> William Kinlaw et al., "The Determinants of Inflation," Journal of Investment Management 21, no. 3 (2023): 29–41, https://globalmarkets.statestreet.com/research/service/public/v1/article/insights/pdf/v2/e5783813-6d94-4bdc-9ebc-5a05943ff2dc/joim\_the\_determinants\_of\_inflation.pdf.

<sup>12.</sup> LongTermTrends, The Real Interest Rate.

## **MMT: Problems**

## Central Bank Independence

MMT places inflation, rather than financing capacity, at the center of fiscal restraint. Yet this relies on the government's ability to respond to inflation in real time. Recall Taylor's Rule states that

$$i_t = \pi_t + \rho + \theta_\pi \left( \pi_t - \pi_t^* \right) + \theta_Y \left( Y_t - \overline{Y}_t \right),$$

where  $i_t$  is the nominal interest rate currently,  $\pi_t$  the inflation rate,  $\rho$  is natural rate of interest,  $\theta_{\pi}$  and  $\theta_Y$  respectively are the sensitivity to inflation and output gap with  $\pi_t^*$  being the inflation target. Where  $\theta_{\pi}$  depends on the central banker's preference. Suppose we allow for the consolidation (into one) of central bank and the government treasury. For simplicity, we refer to this entity as "central treasury", which issues its own currency and runs fiscal policy. Before the consolidation of such entity, there were existing deficit. Its nominal deficit is characterized by

$$D^n = iB = \Delta B$$
,

Where i is nominal interest rate and B is the total debt. Since MMT supposes deficit is unconstrained by tax, and government expenditure can be financed by money printing here we do not include so. Then, in real terms, we have by fisher approximation

$$D^{r_t} = r_t B \approx (i_t - \pi_t) B$$

Since the central treasury is both the central bank and the government we substitute with Taylor's Rule give

$$D^{r_t} = \left(\pi_t + \rho + \theta_\pi \left(\pi_t - \pi_t^*\right) + \theta_Y \left(Y_t - \overline{Y}_t\right) - \pi_t\right) B.$$

In particular note that

$$\frac{\partial D^{r_t}}{\partial \pi_{\star}^*} = -\theta_{\pi} B < 0$$

This means that the central treasury has an incentive to raise the inflation target  $\pi_t^*$ , since doing so reduces the real burden of interest payments on debt. This conflict of interest undermines the credibility of inflation targeting, as the fiscal authority may resist tightening policy in response to inflation shocks. As a policy rule announced will work only if the announcement is credible. A policy thus announced will only results in private sector's discretion expectation.

Distortions: Philips Curve and Dynamic Model

Another issue arises when the sole target of such entity, i.e., central treasury is not only to mantain inflation rate but to achieve other fiscal aim. Take for example the full employment program. The implementation of MMT's job guarantee program defines full

employment to be that of the case where no voluntary labor is idel. <sup>13</sup> Consider Figure 1. below. Suppose we are originally in equilibrium (A) where the private sector believes in the rule announced by central treasury in the framework of MMT. The problem of time inconsistency arises. The government attempts to achieve full employment beyond the natural unemployment (the vertical black line). At first, the discretion of the central treasury surprises the private sector's rational expectation and so we arrive at (B) where higher inflation and lower unemployment is achieved. However, the entity has thus lost credibility and the private sector will then base their forward looking expectation on the discretion of central treasury. This results in point (C) where higher inflation is attended and has no change in unemployment.

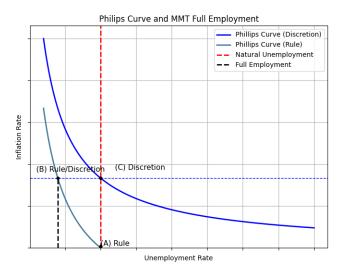


Figure 1.

Now we proceed to provide a theoretical framework had MMT been dynamic. Again, back to MMT's fisal aim, its conceived full employment, i.e., where no one is structurally unemployed. Suppose the market is originally at its natural equilibrium  $A_0$  where DAD intersects DAS. Since some workers are still unemployed in MMTers' sense, the central treasury should, by their theory, shock the economy through government expenditure. Thus, we have a new equilibrium A. The private sector will then form expectation and adjust DAS to A'. Consider Figure 2.

<sup>13.</sup> Tcherneva, "The Job Guarantee: Design, Jobs, and Implementation."

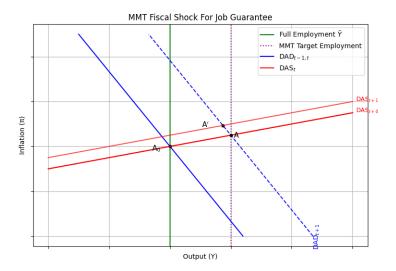


Figure 2.

Since A' is still below the MMT target employment, the central treasury in response to DAS's expectation adjustment will shock DAD positively again. Giving us Figure 3. Where B is again in the targeted full employment. However as DAS adjust in accordence, we have B'.

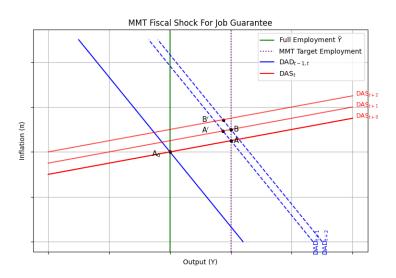


Figure 3.

Suppose this process continue for 8 times. Then we have Figure 4.

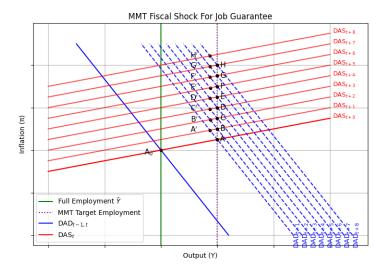


Figure 4.

From which it is obvious that shall the process continue n times, inflation would have gone up indefinitely. Clearly Job Guarantee is not a feasible fiscal aim at all. One can even question further the exact measurement of full employment in their definitions. Shall we include international workers? And what if the economy restores back to its original capacity? Shall the established government occupation be destroyed? Such program is but a delusion as though, analogously, to stimulate the growth of physical capital, we deliberately bomb all the factories, highway preexisting; and in bombing so we are delighted that jobs are created and new production is promised.

#### Conclusions

In short, MMT's objective, for instance job guarantee, is not feasible under the framework of orthodox macroeconomics. In particular, MMT neglects the behavioral indispensability of economics as a social science. For example, the expectations formed by private sectors. Or even the fact that government and central bank themselves have different preferences and objectives, e.g.,  $\theta_{\pi}$  v.s  $\theta_{Y}$  in Taylor's Rule. Though the simplicity of the theory may be appealing to many, an inconsiderate leap of faith toward the unrealizable utopia promised by mere sophistry will only result in a destined path toward serfdom.

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