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Macroeconomics vs Modern Money Theory: Some unpleasant Keynesian arithmetic

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Macroeconomics vs Modern Money Theory: Some Unpleasant Keynesian Arithmetic[1]

Abstract: The last decade has witnessed a significant revival of belief in the efficacy of fiscal policy and mainstream economics is now reverting to the standard positions of mid-1970s Keynesianism. On the coattails of that revival, increased attention is being given to the doctrine of Modern Money Theory (MMT) which makes exaggerated claims about the economic costs and capability of money-financed fiscal policy. MMT proponents are now asserting society can enjoy a range of large government spending programs for free via money financed deficits, which has made it very popular with progressive policy advocates. This paper examines MMT's assertion and rejects the claim that the US can enjoy a massive permanent free program spree that does not cause inflation. As has long been known by Keynesians, in a static economy money financed deficits can be used to finance programs when the economy is away from the full employment - inflation boundary. However, that window will be temporary to the extent that those deficits drive the economy to full employment. Since the programs are permanent they have to be paid for with taxes or they will generate inflation. That is the economic logic behind the unpleasant Keynesian arithmetic.

Keywords: Fiscal policy, budget deficits, money finance.

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1. The revival of Keynesian fiscal doctrine

The last decade has witnessed a significant revival of belief in the efficacy of fiscal policy. In part, that revival has been prompted by the combination of the success of fiscal stimulus in combatting the US Great Recession of 2009 and the disastrous effects of fiscal austerity in Greece after the Greek sovereign debt crisis of 2009.

Mainstream economic theory has now embraced counter-cyclical fiscal policy effectiveness, albeit within the special context of economies trapped at the nominal interest rate zero lower bound (Christiano et al., 2011). The doctrine of expansionary austerity (Giavazzi and Pagano, 1990), which had flourished in the decade prior to the Great Recession, has now been largely rejected.[2] Likewise, the notion that the Keynesian expenditure multiplier is significantly less than unity has been abandoned, and there has been an upward revision of its size. Furthermore, it is now recognized that the multiplier is larger in times of recession (Batini et al, 2014). Lastly, the mainstream profession is now busy rethinking its attitude toward government debt, recognizing that there can be significant benefits from debt-financed government activity and that high levels of debt are sustainable in the long run (Blanchard, 2019). That latest development reflects a rediscovery of Domar's (1944) debt sustainability condition requiring the interest rate be less than the growth rate. In effect, mainstream economics is now reverting to the standard positions of mid-1970s Keynesianism espoused by economists like James Tobin and Robert Eisner.

[2] Caveats still exist. For instance, some (Velasco, 2017) still argue that when fiscal policy is responsible for financial instability, fiscal austerity can be expansionary if it restores financial confidence. That argument has been invoked for austerity in Argentina and Brazil. However, the empirical record is suspect for both Argentina and Brazil, and the real problem is confidence which is better solved by other measures rather than by "bleeding the patient" with austerity.

As is so often the case, there is a risk that the pendulum swings too far. Thus, on the coattails of the revival of fiscal policy, increased attention is being paid to the doctrine of Modern Money Theory (MMT) which asserts society can enjoy a range of large government programs for free via money financed deficits, all without inflation. That has made MMT very popular with progressive policy advocates.

Elsewhere (Palley, 2015a, 2015b, 2019), I have criticized the faulty macroeconomics of MMT which leads it to make exaggerated claims about the economic cost and capability of money financed fiscal policy. This paper further exposes MMT's faulty logic via an exercise in applied macroeconomic arithmetic.

Recently, progressive Democrats have called for a range of programs that include Medicare for all, expanded Social Security, free college tuition, and a Green New Deal. There is significant merit to each of these policy proposals and all of them can reasonably be argued for. However, there is also the question of how they will be financed. Proponents of MMT assert that is a non-problem and the programs can be financed by "printing" money and without causing higher inflation (Kelton et al., 2018). However, simple back of the envelope macroeconomic arithmetic shows that assertion to be completely implausible.

As has long been known by Keynesians (Blinder and Solow, 1973), money financed deficits can be used to finance programs when the economy is away from the full employment - inflation boundary. However, that space will be temporary to the extent deficits increase real financial wealth and automatically drive the economy to full employment, at which stage there will be an inflationary gap. In a static economy, once the economy gets to full employment, policymakers are compelled to run a balanced

budget if they want to avoid inflation.[3] There is a money financed free lunch as long as the economy is below full employment, but the free lunch inevitably disappears. If programs are permanent, they ultimately have to be paid for with taxes or they will generate inflation.[4]

2. Some unpleasant Keynesian arithmetic

Table 1 details the implied direct GDP cost of Medicare for all, free college tuition, and the Green New Deal. According to the Centers for Medicare and Medicaid Services, private sector healthcare expenditures were 8.6 percent of GDP in 2017.[5] Private sector expenditure on tertiary education was 1.7 percent of GDP in 2014.[6] The Green New Deal has not been costed, but if it were the equivalent of the Marshall Plan it would cost 2 percent of GDP.[7] Together, that implies an AD injection equal to 12.3 percent of GDP. If the private sector saves 10 percent of the expenditures it is relieved of (i.e. healthcare and tertiary education), there would be an offsetting saving leakage equal to 1.0 percent of GDP. The net AD injection is therefore 11.3 percent of GDP, which would then be subject to an expenditure multiplier effect. Assuming a multiplier of 1.5, that implies a final increase in AD of 17.0 percent of GDP.

[3] If there is a conventional Keynesian Phillips curve the economy will experience inflation before what is reasonably deemed full employment.

[4] There is more leeway in a steady state growing economy in which case the deficit can be such that that stock of real wealth (W/P) grows at the rate of per capita real output growth. If inflation is accepted, then the deficit can be such that the stock of nominal wealth grows at the rate of per capita real output growth plus the target inflation rate.

[5] See NHE Fact Sheet, https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html

[6] See Statista.com, https://www.statista.com/statistics/707557/higher-education-spending-share-gdp/

[7] See Eichengreen (2010).

Table 1. AD effect of proposed policy proposals.

	Percent of GDP
(1) Medicare for all	8.6
(2) Free college tuition	1.7
(3) Green New Deal	2.0
(4) Total AD injection (=(1)+(2)+(3))	**12.3**
(5) Relief saving (= [(1)+(2)] x 0.1)	-1.0
(6) Net AD injection (=(4)-(5))	**11.3**
(7) Final increase in AD (=(6) x 1.5)	**17.0**

Table 2, shows the back of the envelope calculation regarding the impact on the budget deficit. The budget deficit in fiscal year 2018 was 3.9 percent of GDP, to which the MMT policy programs would add 12.3 percent of GDP. Assuming an average marginal tax rate of 25 percent, tax revenues would increase by 4.3 percent of GDP.[8] Consequently, the net increase in the deficit would be 8.0 percent of GDP, implying an overall deficit of 11.9 percent of GDP.

[8] According to the FRED data base of the Federal Reserve Bank of St. Louis, US federal receipts have averaged 17.2 percent of GDP over that past five years (2014-2018). In 2018 they were 16.2 percent of GDP. The average tax rate is therefore approximately 17 percent. The assumption of a 25 percent marginal tax rate reflects the presence of built-in progressivity in the tax code.

Table 2. Budget deficit effect of proposed policy proposals.

	Percent of GDP
(1) Deficit in 2018	3.9
(2) Effect of program spending on the deficit	12.3
(3) Induced tax revenues (= 0.25 x 17.0)	-4.3
(4) New budget deficit (=(1)+(2)-(3))	**11.9**

Turning to the labor market, assuming an Okun coefficient of 0.5 implies that producing an additional 17 percent of GDP would reduce the unemployment rate by 8.5 points. Since the US currently has an unemployment rate of 3.9 percent, that is not possible. The implication is the economy would be pushed far beyond full employment.

Generously assuming the full employment unemployment rate is 2 percent, implies the US economy still has 1.9 percent of labor slack.[9] Again using an Okun coefficient of 0.5, implies the economy has spare capacity equal to 3.8 percent of GDP.[10] Consequently, the proposed policy programs generate a net excess AD of 13.2 percent of GDP, being the increase in AD (17.0 percent) minus spare capacity (3.8 percent). Excess

[9] Some may argue the US has additional labor market slack owing to low rates of labor market participation. However, the US economy has never reached two percent unemployment in the post-war era, so that any uncounted slack is already built into the assumption of full employment corresponding to two percent unemployment.

[10] The assumption of excess capacity of 3.8 percent of GDP is generous in two regards. First, it assumes a very low full employment rate of unemployment. Second, it assumes the Okun coefficient holds steady at 0.5. In reality, it is more likely the Okun coefficient deteriorates (i.e. increases) as the economy approaches full employment owing to diminishing returns and decreasing quality of marginal workers.

demand of 13.2 percent of GDP in the context of a 2 percent unemployment rate is likely to produce high inflation.

One way to prevent such inflation would be for the Federal Reserve to spike interest rates to control AD. However, that would likely produce another financial crisis given the leveraged state of household and corporate balance sheets, and because of the high valuation of equities. It is also the case that MMT proponents (Wray, 1998) reject using interest rate policy to fine tune the economy. Instead, they recommend parking the interest rate at zero. Were that policy adopted, in conjunction with MMT's recommendation of money financing of the policy program, the inflation situation would be even more dire.

The second way to prevent inflation would be to raise taxes. Over the last five years US federal receipts have averaged approximately 17 percent of GDP. To offset excess demand of 13.2 percent of GDP, federal receipts would need to rise by 13.2 percent of GDP, constituting a 78 percent increase in the federal tax and fee take.

3. The political dangers of MMT

Political activist and media interest in MMT comes at a time of new found political confidence among progressive Democrats, as reflected in the scale and ambition of the proposed policy programs. After forty years of neoliberal dominance of social and economic policy, that scale and ambition is welcome. However, there is a grave political danger progressive Democrats may embrace MMT's claims that those programs can be had for free by printing money.

Doing so risks splashing the progressive project as economically implausible even before it has gotten off the ground. Even if that pitfall is avoided, MMT's financing

recommendations will inevitably place the progressive project on the horns of a dilemma. If followed, the outcome will be significantly higher inflation and massive budget deficits, the combination of which would also likely trigger a new financial crisis. Alternatively, avoiding that outcome would require huge tax increases and fee impositions that would leave progressives politically vulnerable, both to charges of policy mendacity and to voter backlash against surprise forced tax increases.

The political dangers inherent in MMT are succinctly captured by Max Sawicky (2019): "A story that emphasizes unlimited public spending, besides being fallacious, will impress most people as either crankish or arcane…. Any existing progressive government that comes to power under such delusions is bound to disappoint its constituents…. a politically evasive monetary theory should not be the basis for a progressive movement".

4. Conclusion: MMT is a flawed foundation for progressive macroeconomic policy

In sum, the above Keynesian arithmetic rejects the MMT claim that the US can enjoy a massive permanent money financed program spree that does not cause inflation. To avoid inflation, such a program will require taxes and fees to pay for it. Keynesians have long recognized that money financed deficits can be used to finance programs when the economy is away from the full employment - inflation boundary. However, that financing option is temporary to the extent that those deficits generate developments which ultimately drive the economy to full employment. The case for progressive programs rests on their own merits, which should constitute their political foundation. Financing of those programs should be rooted in plausible macroeconomics, which MMT manifestly fails to provide.

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