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# Has Japan Been Following Modern Money Theory Without Recognizing It? No! And Yes.

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**ABSTRACT** 

Modern Money Theory (MMT) economists have used Japan as an example of a country that

demonstrates that high deficits and debt do not lead to insolvency, high interest rates, or

inflation. MMT insists that governments that issue their own sovereign currency cannot be

forced into insolvency, that they can make all payments as they come due, and that they do not

really spend tax revenue or borrow in their own currency—with Japan serving as an example of a

country that does not face financial budget constraints as normally defined. In this paper we

evaluate whether Japan is the poster child of MMT and argue that policy-wise Japan is not

following MMT recommendations; in fact, it is generally adopting policies that are precisely the

opposite of those proposed by MMT, consistently adopting the path of stop-go fiscal measures

and engaging in inadequate and temporary fiscal stimuli in the face of recessions, followed by

austerity whenever the economy has seemed to recover.

**KEYWORDS:** Modern Money Theory; Budget Deficits; Sovereign Debt; Japanese Government

Debt; MMT Policy

**JEL CLASSIFICATIONS:** E12; E32; E42; E58; H62; H63

1

#### 1. INTRODUCTION

Modern Money Theory (MMT) economists have used Japan as an example of a country that demonstrates that high deficits and debt do not lead to insolvency, high interest rates, or inflation (see Mitchell 2016). Japan also shows that mainstream theory about the dangers of government red ink is far from reality. MMT insists that governments that issue their own sovereign currency cannot be forced into insolvency, that they can make all payments as they come due, and that they do not really spend tax revenue or borrow in their own currency—with Japan serving as an example of a country that does not face financial budget constraints as normally defined.

This argument has been misinterpreted as "Japan is implementing MMT"—something Japanese officials and policymakers have tried to deny. Finance Minister Taro Aso called MMT "an extreme idea and dangerous as it would weaken fiscal discipline" (Nikkei Asia 2019). Bank of Japan (BOJ) policy board member Yutaka Harada said "[t]he approach proposed by MMT will 'cause [runaway] inflation for sure'" (Nikkei Asia 2019). BoJ Governor Haruhiko Kuroda stated, "Japan has deployed economic stimulus policies. But the government believes it's important to restore fiscal health and make fiscal policy sustainable. ... It's wrong to say Japan is resorting to MMT" (Kihara 2019).

In this paper we evaluate whether Japan is the poster child for MMT by distinguishing between MMT's claims about financial constraints facing a sovereign nation and MMT's policy prescriptions. We argue that policy-wise Japan is not following MMT recommendations; in fact, it is generally adopting policies that are precisely the opposite of those proposed by MMT. Whereas MMT prescribes strong fiscal stimulus (and a Job Guarantee) to facilitate full employment and growth, Japan has consistently chosen the path of stop-go fiscal measures: engaging in inadequate and temporary fiscal stimuli in the face of recessions, followed by austerity whenever the economy has seemed to recover. This has been justified on the belief that deficits and debt are too high.

While MMT is often mistakenly equated with advocating for high deficits, we clarify that MMT does not offer "deficit spending" as a policy tool and that its policy recommendations need not lead to bigger deficits. Similarly, just because Japan has been running deficits and accumulating debt does not mean it has been following MMT policy. Japan has run high deficits and debt not because of its active fiscal policy, for instance, but largely because of its failure to do so.

MMT sees the budget as a tool for pursuing the public interest—things such as full employment, inclusive and sustainable growth, and greater equality. Japan does reasonably well on some of these measures in spite of policy mistakes. Certainly, Japan *trumps* the United States in areas such as good and accessible healthcare, low infant mortality, long lifespans, low measured unemployment, and much less inequality and extreme poverty. But Japan could do better if it actually did adopt the MMT view that the budgetary outcome by itself is not an important issue.

We also argue that Japan is the perfect case for demonstrating that all of mainstream theory concerning sovereign budgeting is wrong: deficits need not lead to high inflation, sovereign governments cannot be forced to default on their debt, and the interest rate on government bonds is largely a policy variable under the central bank's control. The Japanese experience with relatively high deficits and debt validates MMT's core arguments concerning sovereign deficits and debt—largely unwittingly and because of Japan's failure to follow MMT policy recommendations.

The remainder of the paper is organized as follows. In the next section we look at some statistics to demonstrate that mainstream predictions about the consequences of high deficits and debt have failed to materialize in Japan. Section 3 explores the Japanese stance on fiscal policy in the aftermath of the burst of the speculative bubble, arguing that it has not been in line with MMT prescriptions. We tackle the issue of why debt and deficits have increased in Japan despite the lack of truly activist fiscal policy in section 4. Section 5 briefly addresses the Japanese reliance on monetary policy in the past couple of decades, while section 5 concludes.

## 2. DEBT, INTEREST RATES, AND INFLATION

Mainstream economists predict that large deficits would lead to inflation as the government competes for real resources with the private sector (real resource crowding out). This presumes (implicitly) an economy that is at or tends toward full employment. Further, the debt resulting from running deficits is supposed to push up interest rates as the government competes with the private sector for the limited amount of loanable funds (financial crowding out). Higher interest rates then depress growth as investment and other interest-sensitive private spending goes down. High debt is said to cause credit downgrades and shut the country out of the bond markets (*a la* Greece). Finally, resorting to "money printing" to pay for deficits is supposed to be the worst strategy, potentially turning inflation and currency devaluation into hyperinflation and currency collapse.

As figure 1 shows, Japan's deficit ratio has increased from a little over 50 percent in 1980 (pretty low by mainstream standards) to over 235 percent of GDP in 2018 (the highest in the world). This is not surprising given the persistent deficits (discussed in the next section) as well as its relatively stagnant GDP. Meanwhile, the inflation rate has remained consistently low and has even turned negative for a number of years. Since 1990 it has been over the 2 percent target of many central banks only four times.

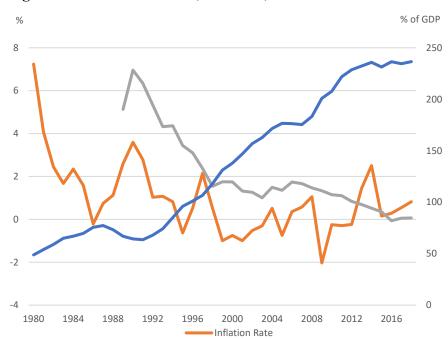


Figure 1. Government Debt, Inflation, and Interest Rate

Sources: Inflation and debt: IMF World Economic Outlook (IMF-WEO); interest rate: FRED

The long-term interest rate has also been on a steady decline, going from about 7 percent in 1990 to basically zero and even negative in recent years—even as the debt ratio has climbed up—as shown in figure 2. This trend is inconsistent with mainstream predictions and validates one of MMT's core claims that interest rates on government bonds are policy variables that are largely dependent on the central bank's stance—and not determined by the "market's" fear of growing debt. In case of Japan, monetary policy has been loose since 1991 when the BoJ gradually started lowering its discount rate from 5.6 percent all the way to 0.5 percent by 1996 and kept it at 0.5 percent and below ever since. The decline in the long-term rate clearly mirrors the decline in BoJ's discount rate (see also Akram and Das [2014] for empirical evidence to this effect).

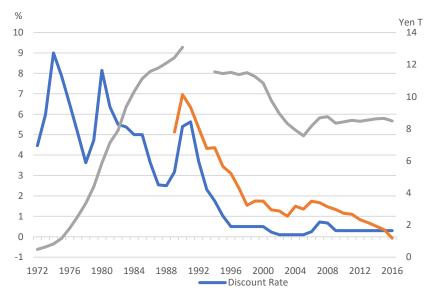


Figure 2. Interest Rates and Debt Service

Sources: Interest rates: FRED; interest payments: World Bank

Contrary to mainstream predictions, which see deficits spiraling out of control due to rising debt service (as debt and interest rates go up), we see the opposite outcome in Japan. As its debt has climbed, government interest payments (shown in figure 2) have gone down. The decreasing interest rates on government bonds (which are due to BOJ policy) have lowered Japan's debt servicing costs despite higher debt levels. As MMT maintains, interest rates are a policy variable, so debt service can be kept low by policy—if desired.

We conclude that the BOJ's rate policy is the main driver of the debt service ratio, since interest rates on government bonds track the BOJ rate. That is why interest payments by government have remained low for the past two decades even as the debt ratio has risen, while they were going up in the 1970s and 80s despite a lower debt ratio (but higher BOJ interest rates).

Lastly, high debt-to-GDP ratios are believed to trigger credit downgrades—potentially shutting the country out of bond markets. While it is true that the ratings agencies have downgraded Japan (and the United States!), this has had no significant impact on government bond yields (see Tymoigne 2019). In fact, Japan's government debt (like the US's growing federal government debt) is in high demand. This is all the more true with the BoJ (along with the other major central

banks) running quantitative easing (QE) and creating a "scarcity" in bond markets in spite of the growing quantity of sovereign debt—with much of it at zero or even negative rates.

## 3. FISCAL POLICY IN JAPAN: THE ANTITHESIS OF MMT

In this section we take a closer look at Japan's fiscal policy since early 1990s. Before examining actual policy, let's outline MMT-based policy. MMT follows Abba Lerner's (1943) functional finance approach: budgeting should be "functional" (pursuing policy in the public interest) rather than "sound" (trying to achieve a desired balance between tax revenue and spending). MMT is known for prioritizing full employment and using fiscal policy to achieve it. More specifically, MMT recommends spending targeted to job creation, with the Job Guarantee program perceived to be the best method. We need not go through that in detail, as so much has been written about it. In addition, MMT would recommend spending for Green New Deal projects that would include moving toward achieving net zero emissions. Finally, MMT would include an array of "social safety net" programs that need to be formulated to address national problems. We will not list specific programs here (other than the Job Guarantee), as these need to be nation-specific. However, generally these should address problems such as inequality (including gender and racial inequality), poverty, support for young, old, and other vulnerable populations, and so on. Not only do such policies relieve suffering and enable fuller participation in society, but they also improve economic performance by reducing uncertainty. This could be particularly important for Japan given the aging population and a relatively weak public safety net—which promotes high personal saving rates that depress growth.

Many economists and policymakers believe that Japan demonstrates the ineffectiveness of fiscal policy, which according to MMT can be a powerful tool. This stems from the view that Japan has been trying to stimulate its economy through fiscal policy without much success since the bursting of its real estate bubble. Japan officially fell into a recession in August of 1990 and came out of it in 1994, only to fall back into a recession a mere three years later in 1997. Since then it has been in and out of recessions, with its longest recovery lasting from 2004 to 2008.

7

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<sup>&</sup>lt;sup>1</sup> Recession dates based on OECD indicators (source: FRED).

Japan has had a negative output gap in 70 out of 122 quarters from 1990 until the second quarter of 2020 (latest available data).<sup>2</sup> This probably understates the deviation from its potential, as potential output itself could be depressed by chronically insufficient demand and growth as investment for domestic consumption is discouraged.

In the early 1990s, Japan announced a number of what seemed to be large fiscal stimulus packages to try to get the economy out of the rut. There were at least two issues with the Japanese approach to fiscal policy. First, the actual stimulus spending was apparently lower than what was announced. According to Adam Posen (1998, 41), "all announced Japanese fiscal programs hugely overstate their stimulative content, usually by a factor of 2 or more." In addition to actual government deficit spending with a stimulative effect, these packages also include a number of measures, such as loan programs for the private sector, "front-loading of previously committed public works programs, land and other asset purchases, and direct injections of funding into the financial system" which do not directly stimulate the economy (Posen 1998, 43).

Second, each time the economy seemed to start recovering, the stimulus plug was pulled too soon, impeding the recovery (Posen 1998). Richard Koo (2003, 21) draws parallels between Japan's fiscal retrenchment in 1997 and the Roosevelt administration's policies in the United States in 1937, which threw the US economy back into a recession. Indeed, Japan's fiscal policy, though seemingly expansionary, was reality quite austere over this period (Posen 1998).

Japan tackled the initial downturn in 1991 with two stimulus packages worth 10.7 trillion yen and 13.2 trillion yen announced in 1992 and another package announced in 1993 (Pollack 1993). It also implemented a personal income tax cut (worth 5.5 trillion yen) in 1994, which was "paid for" by increasing the consumption tax (first implemented in 1989) from 3 percent to 5 percent in 1997 (Posen 1998, 50). Two additional stimulus measures were implemented in 1995: the first "consisted of a 2.7 trillion yen increase in actual government spending and a 0.1 trillion yen (800 yen, or less than \$8 per capita) tax cut," while the second package included "8 trillion yen in actual spending for the second half of FY1995 and into FY1996" which amounted to over 1.6

8

<sup>&</sup>lt;sup>2</sup> The source for output gap data is the Bank of Japan.

percent of GDP (Posen 1998, 45–46). According to Posen (1998, 49), these measures boosted real GDP growth to 3.6 percent in 1996 (compared to 0.9 percent in 1995), which was higher than the major forecasts.

By 1997, when the contractionary consumption tax went into effect, Japan had already reversed the stimulatory course of fiscal policy as the 1996 budget cut 3 trillion from public works (compared to 1995) followed by another cut of 1.5 trillion yen in 1997 (Posen 1998, 50). Posen (1998, 37–38) notes "the fiscal reversal of 1996–97 was actually opposite and more than equal to the stimulus of 1995 (the structural deficit in 1995 was 2.6 percent of GDP, and in 1997, 2.3 percent)." The combined contraction in investment, consumption, and government spending placed a drag on the economy equal to 2.3 percent of GDP (Posen 1998, 51).

In 1998, Japan announced another stimulus package of 16 trillion yen; however, actual spending and tax measures were only 12 trillion at best (this number also included 1.5 trillion of public works spending the central government requested of local governments without providing the funding) (Posen 1998, 51). It amounted to merely 1.1 percent to 1.6 percent of GDP "depending on local government participation" (Posen 1998, 53). Posen (1998, 44) estimates that the actual stimulative portion of the stimulus packages of the 1990s amounted to "23 trillion yen, or 4.5 percent of a year's GDP."3

The 1997 consumption tax hike wasn't the last one; Japan embarked on two more increases in 2014 and 2019, bringing the rate to 10 percent. As Bill Mitchell (2019) explains, the consumption tax was introduced in 1989 as a measure to "pay for" rising welfare spending as the society aged. The hike in 1997 was due to the fear of rising deficits, while the "ageing society" argument was used again in 2014 (Mitchell 2019). Thus, the rationale for implementing and later raising the consumption tax are not consistent with MMT, which does not view taxes as a source of funding for government spending or high deficits as a problem in and of themselves.

<sup>&</sup>lt;sup>3</sup> Posen (1998, 33–34) argues that the automatic stabilization is much less effective in Japan because of how the labor market is structured. Apparently, instead of firing workers companies retain them with a pay cut. So, these people continue paying taxes and don't collect unemployment benefits, although their income and consumption go down. He also claims their unemployment insurance and social welfare spending is not generous.

Table 1 shows the contribution of the economy's four sectors to GDP growth over the last four decades. As we can see, the contribution of both household consumption and net exports has been on a steady decline. The government sector's contribution, instead of filling the gap left by the other two sectors, has been decreasing as well. Indeed, while the government sector contributed 0.5 percentage points to GDP growth in the 1980s, this number has decreased to almost half of that in the 2010s (a decade that included the Great Recession).

Table 1. Sector Contribution to GDP Growth (percentage points)				
Decade	Household Consumption	Capital Formation	Government Final Consumption	Net Exports
1980–89	1.93		0.50	0.46
1990–99	0.96	0.04	0.43	0.15
2000–09	0.45	-0.51	0.30	0.29
2010–19	0.38	0.53	0.27	0.11

**Source:** OECD; capital formation for the decade of the 1990s is the average over 1995–99 due to lack of data.

#### 4. DEFICITS AND DEBT DESPITE MISMANAGEMENT OF FISCAL POLICY

Figure 3 shows Japanese government revenue and expenditures as a share of GDP and the rate of economic growth. As we observe in this graph, tax revenue as a share of GDP has been mostly flat, climbing up somewhat in the 2010s. Expenditures have not increased very much either as a share of GDP. After an initial increase in 1990s, they remained largely flat in 2000s, only to increase again in the aftermath of the Great Recession. We can also see that the period of high growth in the 1980s coincides with increasing tax revenues and decreasing government expenditure (even leading to a budget surplus by the late 1980s). At the same time, the anemic growth that has characterized the Japanese economy since then has led to increasing expenditures and flat or even decreasing tax revenue as a share of GDP.

Posen (1998, 34–35) argues that the debt Japan accumulated during the 1990s was not due to major discretionary spending, but rather the fall in tax revenues due to the recession and austere fiscal policy. The difference between structural and total budget deficits demonstrated that a

great deal of the deficit was due to the economic cycle rather than any runaway spending by the government. In fact, from 1993–99, the central government's budget remained around 77 trillion yen, which is 15 percent of GDP. Koo (2003) agrees that the collapse in tax revenue due to contractionary fiscal actions caused deficits to swell in the 1990s.

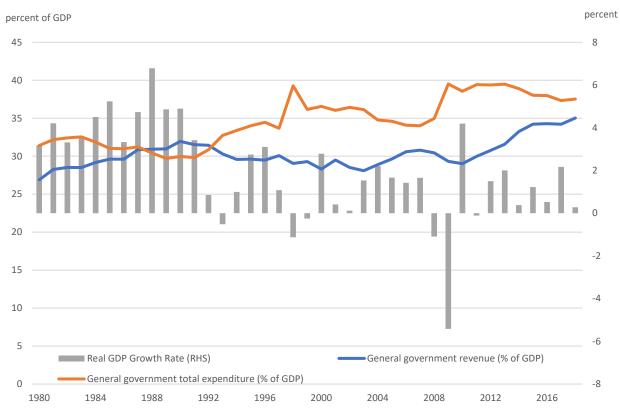


Figure 3. Government Revenue, Expenditure, and GDP Growth Rate

Source: IMF-WEO (IMF lists the source as Cabinet Office of Japan via Haver database).

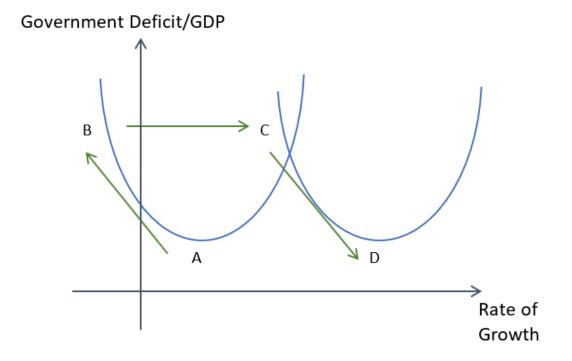
#### 4.1 Wray Curves: Two Paths to Deficits

We can further demonstrate the relationship between GDP growth and government deficits in figure 4. Starting at point A (a lower deficit point), we could move to a higher deficit point either the "good" way or the "ugly" way. For instance, if the government decided to engage in austerity by cutting its spending or raising taxes to reduce the deficit or balance the budget, this could hurt growth. We could then move up to point B—with negative growth and a higher deficit ratio as tax revenues collapse and nondiscretionary (social safety net) fiscal spending increases. The growing deficit can put a floor under aggregate demand, allowing the economy to recover (albeit

slowly). The deficit can keep growing for years until the economy eventually turns around, reducing the deficit due to growing tax revenues and lower transfer spending (Wray 2019; Wray and Nersisyan 2021).

This is the ugly way to produce a bigger deficit (and higher debt–GDP ratios), and unfortunately it has been the Japanese way over the past generation. As explained above, the government's fiscal actions were inadequate given the size of the problem and were not sustained as it reversed course at first signs of an economic recovery (and even adopted contractionary measures, such as the consumption tax increase). It was the stop-go nature of fiscal policy, which did not support a robust recovery, that caused the deficit to grow due to automatic stabilizers rather than the intentional discretionary policy actions. The ultimate result of this policy mismanagement was the highest debt-to-GDP ratio in the world and an economy that has never really recovered since the 1990s.

Figure 4: The "Wray Curve"



The "good way to get to higher deficit, i.e., to point C, would be to engage in proactive and adequately-sized stimulus spending, such as spending on public works, infrastructure, and direct job creation. That would be more consistent with MMT's approach to fiscal policy. A measured and targeted stimulus would lead to rising household and firm incomes that would eventually boost optimism enough to increase discretionary spending. Ramping up the Social Security safety net (that is relatively weak in Japan), as well as a commitment to secure jobs and decent pay, would further encourage households and firms to spend. Indeed, Japanese households' saving behavior might be due to their uncertainty about retirement and job security. What's important is that the deficit in this case is self-limiting, as growth leads to higher tax revenues (due to rising incomes), shifting the economy to point D in figure 4 (as the curve shifts to a higher growth rate) with lower deficits and higher growth.

In sum, we propose there are two different growth rates consistent with a given deficit ratio. A nation can achieve a particular growth rate either the ugly way or the good way. Japan continually operates its economy to produce ugly deficits—precisely because it fears fiscal expansion. America's deficits are often, but not always, prettier (that is, occur with higher growth).

These hypothetical scenarios have played out in Japan, as figures 5–7 show. Figure 5 shows the relationship between the government balance outcome and the real GDP growth for the decades of 1980–90 and 1990–2000. As we can see in the graph, the high-growth decade of the 1980s (average real GDP growth rate of 4.4 percent) led to a steady decrease in the government deficit from about 4 percent of GDP to a surplus of 2 percent of GDP in 1990. In other words, the relatively good growth moved the budget toward a surplus.

12 sign reversed) 1998 10 2000 Government net lending/borrowing (% of GDP, 1999 -6 198 0 1991 1990 -1 3 5 Real GDP growth (%) 1990-2000 --- 1980-1990

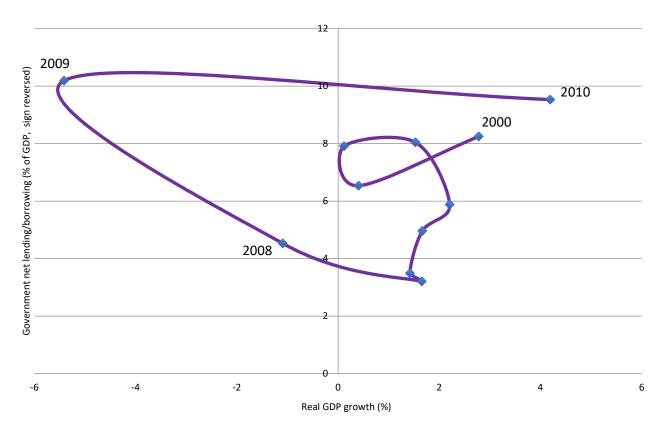
Figure 5. Real GDP Growth and Government Net Lending/Borrowing, 1980-2000

**Source: IMF-WEO** 

The recessionary period of the 1990s, on the other hand, was characterized by increasing deficits as growth rates plummeted. The growth rate fell from 3.1 percent in 1996 to 1.01 percent in 1997 and to negative 1.13 percent in 1998. Recall that the consumption tax hike went into effect in 1997 together with other contractionary measures, such as spending cuts put in place in 1996 and 1997. The deficit went from about 5 percent in 1996 to 3.5 percent of GDP in 1997, only to increase to 10.2 percent in 1998 (partly due to the discretionary stimulus put in place to counteract the recession caused by the tax increase, but also because of the loss of revenues due to slower growth).

As GDP growth stayed more or less in positive territory in the 2000s, the deficit shrank again, only to increase in 2008 and 2009 due to the Great Recession. By 2010, however, the rising deficits got the economy growing again, which eventually led to shrinking deficits between 2010–18, as seen in figure 7.

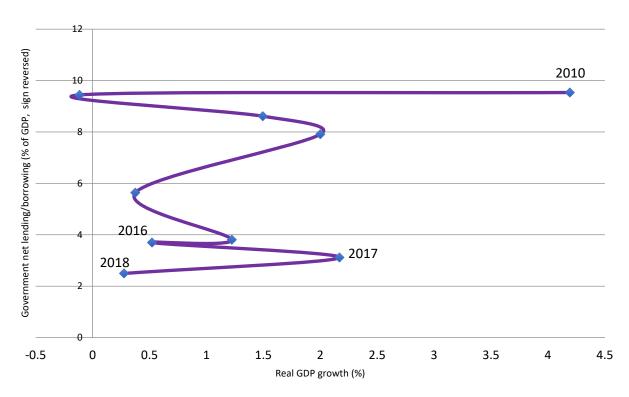
Figure 6. Real GDP Growth and Government Net Lending/Borrowing, 2000-10



**Source: IMF-WEO** 

We can see from figure 6 and figure 7 that the general trend since 1990 has been for slower growth and higher budget deficits. The highest growth rate Japan has achieved since then was 4.2 percent in 2010 (still lower than the average in the 1980s), while the highest growth rate in the 2010s was 2.2 percent in 2017. Meanwhile, the average deficits have gone up from 3.2 percent of GDP in the 1990s to 6.3 percent and 6.03 percent of GDP in 2000s and 2010s, respectively.

Figure 7. Real GDP Growth and Government Net Lending/Borrowing, 2010-18



Source: IMF-WEO

Of course, all this is consistent with traditional Keynesian theory: the deficit should move in a countercyclical manner to stabilize the economy. And it is best if this happens automatically, as discretionary policy would take too long to react. What this means is that there is no "natural" deficit ratio toward which policymakers ought to try to move. Indeed, each deficit ratio is consistent with more than one growth rate— an ugly one versus a good one. Simply by observing any given deficit ratio, we cannot tell whether it has resulted from too much spending or from too little growth. We cannot infer anything about policy from a deficit outcome. However, if we observe a falling deficit ratio, it will pull demand out of the economy and is likely to be followed by slower growth; a rising deficit ratio will inject demand into the economy and will probably generate higher growth.

We conclude that Japan's relative high deficits over the past few decades are largely achieved in the ugly way and result from low economic growth. The high deficits are not evidence that Japan has followed MMT, but rather result because Japan does not follow MMT. Further, when recovery seems to be underway, policymakers enact policies that slow growth and increase deficits—precisely the opposite of MMT's prescriptions. The fear of deficits and debt seems to encourage policymakers to adopt policy that actually increases deficits. Ironically, recoveries are ended by intentional, and unintentional, austerity. This is the antithesis of MMT policy, which includes strong countercyclical fiscal measures, including a government job guarantee.

#### 4.2 The Sectoral Balances Approach

Figure 8 depicts the Japanese sectoral financial balances for the period of 1980 to 2018: the domestic household and nonprofit balance, the business sector balance, the government balance, and the rest of the world's balance (the ROW balance is shown from the perspective of the ROW, i.e., Japan's current account surplus means ROW has a deficit with Japan). As we can see, the household and nonprofit sectors combined have been in a surplus position for most of the period. That surplus was quite sizable, especially during the first half of this period and was "financed" (offset) by the deficits of firms and the ROW, as well as the government deficit (for some of this period). According to Koo (2003), Japanese corporations, especially nonfinancial ones, had been running persistent deficits and accumulating debt during the speculative boom of 1980s. In the 1990s they tried to deleverage and repair their balance sheets, which meant they aimed to achieve surpluses instead of deficits. Figure 8 shows they were successful in their attempt to do so. These corporate surpluses, as well as the continuing household surpluses, were only possible because of Japan's current account surplus, as well as the government going into persistent and sizeable deficits (voluntarily or not).<sup>4</sup>

What we explained above using the Wray curves can be restated here in terms of sectoral balances leading to the same conclusion that there is nothing natural about any particular deficit ratio: it is always at just the "right" level to balance the other sectoral balances. Further, we

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<sup>&</sup>lt;sup>4</sup> Koo (2003) says that firms have adjusted to the low-growth environment by maintaining low debt levels. They don't want to go into debt because they are not sure they can manage the debt levels given the low-growth environment. That could explain the persistent large surpluses we see in the sectoral balance graph.

cannot speak of the government's balance without reference to the other balances. In case of the United States, which is running a current account deficit, the government deficit has to be at least equal to the trade deficit to allow the private sector (households plus firms) to net save. Given Japan's current account surplus, the government's budget deficit must equal the difference between the domestic private (households and firms) surplus and the current account surplus. It is normally prudent for the private sector to run a surplus—to avoid financial fragility as saving and accumulated financial wealth in the private sector provides security for households and firms. The alternative is to ramp up current account surpluses—a difficult proposition in the face of competition from other Asian exporters. For those reasons, a persistent budget deficit should be expected.

% of GDP 15 10 0 -5 -15 1980 1984 1988 1992 1996 2000 2004 2008 2012 2016 ■ Households and Nonprofit Organizations ■ Financial and Non-financial Corporations ■ Rest of the world General government

Figure 8. Sector Financial Balances, 1980-2018

Source: Cabinet Office of Japan

We can thus see the implications for the deficit/growth relation discussed above. As growth slows, the private sector may try to increase its surplus (due to rising uncertainty about the economy). Domestic recession could increase the current account surplus (as imports fall), but the net impact will likely be a larger government budget deficit (resulting in the ugly way due to slow growth). We could summarize that using Keynesian terminology as a rising leakage to saving that produces a bigger government deficit to counter the leakage. However, as a recovery begins, the fiscal deficit will fall if the domestic private surpluses decline due to rising confidence. The current account surplus will fall, too, as imports rise. Precisely how much the deficit will fall depends on the movement of the private surplus and current account surplus—with the deficit falling to equality with the sum of the domestic and foreign balances.<sup>5</sup>

#### 5. RELIANCE ON MONETARY POLICY

Having seemingly tried fiscal policy measures, Japan then turned to more aggressive monetary policy stimulus, often encouraged by American economists, in the form of some kind of QE. The idea of QE, as initially described, is that once you near a zero interest rate boundary, interest rate "pricing" no longer works. The central bank is then supposed to turn to operating on "quantity" rather than price. This typically involves purchases of prodigious quantities of (mostly) government bonds (and perhaps also private securities). As banks end up with extra reserves, which earn zero or low interest, they would be incentivized to make more loans, which would increase the money supply with a money multiplier effect boosting growth and inflating the economy.

While many economists and politicians think banks "lend out the reserves," those who understand balance sheets know that reserves must stay "in" the banking system and cannot be lent. Further, even mainstream economists and central bankers today acknowledge that QE is supposed to affect the economy through price/interest rate effects, rather than quantitatively, by

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<sup>&</sup>lt;sup>5</sup> Note that from the ROW's perspective, the foreign balance is negative (Japan has a current account surplus against the ROW), so we are summing a positive domestic private sector surplus and a negative foreign balance, which equals, by identity, the government's deficit.

affecting the longer end of the yield curve. Keynesians had long argued that "you cannot push on a string"—you cannot force anyone to borrow, so in recessions monetary policy is weak. All the evidence since 2008 would seem to confirm that wisdom. QE's impact on longer maturity government bond rates, as well as on "market" rates, was comparatively small and lending for economic activity did not recover for a very long period in the West—in spite of trillions of dollars, euros, and pounds of QE. Ditto for Japan.

Some argue that all the "money" (excess reserves) has boosted financial asset prices, with many warning that central banks have fueled excessive speculation in equities markets. In our view, this is largely a pricing, not quantity, result: if interest rate targets remain near zero for nearly a generation and if central banks make it clear they will not raise rates for several more years, the risk of capital loss on longer maturities is very low. Their rates fall precipitously. Money managers (i.e., pension funds, etc.) that expect and "need" returns of 7 percent cannot get those in nearly risk-free bond markets. They turn to speculative activity and fraud to boost returns. It is not at all difficult to explain the booming US stock market even during the COVID-induced economic crisis as the predictable result of speculation.

Notably, the policy of QE/large-scale asset purchases goes against MMT policy recommendations. MMT economists would point out that monetary policy is futile in reviving an economy and inflating it. There is no money multiplier process through which reserves lead to lending for economic activity and QE would not be effective in stimulating the economy (Fullwiler and Wray 2010). It simply reflected a misunderstanding of central banking and overestimating the impact of monetary policy on economic activity. If low long-term rates were desired, all the central banks had to do was to announce low target rates and stand ready to purchase bonds across the term structure at predetermined prices. Few would have been needed to be bought; QE could have been avoided.

Many believe that QE is following MMT recommendations as it is an ex post "money printing to pay for deficits"—an acceptable approach to pandemic response. Mainstream economists are, however, shifting from supporting early efforts at stimulus to worrying about the inevitable hyperinflation that will result from all this "money printing" based on MMT. Some claim Japan

has been "monetizing" the debt (although it hasn't been able to inflate its economy—another false mainstream prediction). However, MMT economists have never argued that we need to change procedures to "pay for" spending by having the central bank finance it (at least not any more than it already does). No change of procedure was needed to pay for the pandemic response. Further, from the MMT perspective QE simply reverses what government bond sales accomplish, which is withdrawing reserves from the banking system (QE injects them back). This is not significant or important when the central bank pays interest on reserves (i.e., there is a floor to interest rates) or if its interest rate target is zero.

MMT argues governments finance spending in one way only: crediting bank accounts. This is not a policy but rather a description. If that is defined as "money printing" then government always spends by money printing. And if it causes inflation, it will not be because of money printing but rather because the demand for resources as exceeded the supply. Government spending can be too high—if it pushes the economy beyond full capacity. There is no immediate danger of that in Japan or the United States. That is not to say that we should never worry about inflation—but pressures will arise only if we exceed resource availability, and not because we "print money."

#### 6. CONCLUSION

In this paper, we have demonstrated that Japan's experience has invalidated mainstream claims about the dangers of "excessive" deficits and debt. While Japan has the highest debt-to-GDP ratio in the world, it has not faced higher interest rates or inflation or been shut of out of credit markets. Instead, the yields on Japanese government bonds track closely the BOJ's policy rate. This is consistent with MMT's arguments that high deficits and debt, as conventionally defined, need not have negative consequences for a country that has its own nonconvertible currency.

On the other hand, the Japanese approach to policy has been the antithesis of MMT. Instead of a strong fiscal boost, which could have gotten its economy out of the recession that followed the 1980s speculative boom, Japan has implemented small and inconsistent fiscal measures,

reversing course more than once. This has led to higher deficits and debt due to automatic stabilizers while growth has stalled. Instead of learning from this experience, Japan has moved further away from MMT's prescriptions by relying on unconventional monetary policy measures, such as QE, which have been largely ineffective in boosting growth or reflating the economy.

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