'MODERN MONETARY THEORY'

WEBINAR PRESENTATION

24TH AUGUST 2021

SAUL ESLAKE

What is 'Modern Monetary Theory'?

- 'Modern Monetary Theory' (MMT) is (to its proponents and adherents) a way of looking at, or thinking about, the way that a 'fiat money' system (that is, a system in which the government defines what 'money' is, and isn't, and has a monopoly on the supply of it) operates
 - the name 'Modern Monetary Theory' was coined by one of its earliest proponents, Bill Mitchell, as a reference to a passage in Maynard Keynes' 1930 Treatise on Money, in which he asserts that "all modern states" have had the ability to decide what is money and what is not for at least 4,000 years"
- □ The principal tenet of MMT is that a government which can create its own currency (by printing it, and mandating it as 'legal tender') can never 'run out of money'
 - and that hence it doesn't <u>need</u> to raise taxes or issue bonds (borrow) in order to fund whatever level of government spending it wishes to undertake
 - although levying taxes is one way that governments can force people to use the currency they create (ie, to pay taxes)
 - and they may <u>choose</u> to impose taxes for other reasons (for example to affect income distribution or discourage smoking)

□ MMT also holds that a government budget deficit is necessarily offset by a private sector surplus

- and that as a result, attempts by governments to run budget surpluses will 'cause' recessions
- note this proposition only holds in a 'closed economy' (ie no foreign trade or cross-border capital flows)
- Another important corollary of MMT (according to its proponents) is that governments don't face 'financial constraints', only 'real' (resource) constraints (but only if the economy is operating at 'full capacity')
 - governments don't need to worry that their borrowings will push up interest rates and thus 'crowd out' private spending (MMT proponents argue that interest rates should normally be set at zero)
 - but they do have to be aware of limits on total spending imposed by the availability of 'factors of production' (labour and capital) – and that if those limits are exceeded, the result will be inflation



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The five intellectual progenitors of 'Modern Monetary Theory'



Georg Friedrich Knapp (1842-1926)

- German economist
- Founder of 'chartalism'

 which holds that money's value stems from its issuance by governments rather than its use as a means of exchange or store of value



THE BANKING LAW JOURNAL DEVOTED TO BANKING, FINANCE AND LAW Published Monthly at 27 Thames Street, N. Y. City. ALFRED F. WHITE.

VOL. XXXI. JANUARY, 1914. No. 1.

The Credit Theory of Money. BY A. MITCHELL INNES.

Alfred Mitchell-Innes (1864-1950)

- British diplomat and economist, sometime advisor to King Chulalongkorn of Siam
- Held that money is simply debt that governments reclaim through taxes



Abba Ptachya Lerner (1903-1982)

- Russian-born, Britishtrained, American economist
- Proponent of 'functional finance' – the idea that government should finance itself to stabilize the business cycle and achieve full employment



Hyman Minsky (1919-1996)

- American economist
- Now known mainly for his insights into the instability of financial systems
- But also a supporter of the 'chartalist' interpretation of monetary systems



Wynne Godley (1926-2010)

- British economist
- Predicted the 1973-74 recession and 2008 GFC
- Creator of the 'sectoral balances approach' which holds that government deficits are offset by private sector surpluses
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Two of the main 'intellectual centres' of Modern Monetary Theory

The Levy Economics Institute of Bard College





- The Levy Economics Institute at Bard College (located at Annandale-on-Hudson, about 145kms north of New York City) was founded in 1986 by Leon Levy, owner of one of the first Wall Street hedge funds
- Hyman Minsky and Wynne Godley both worked at Levy during the latter part of their careers
- Larry Randall Wray, a former student of Hyman Minsky and one of the leading American proponents of MMT, is Professor of Economics at Bard College – the Levy Institute has published many of his papers, and many others by MMT advocates

The University of Missouri – Kansas City





- UMKC's Economics Department <u>describes itself</u> as "one of the leading global proponents" of MMT
- UMKC hosts the <u>Center for Full Employment and Price</u> <u>Stability</u> which has been partly funded by Warren Mosler, one of the contemporary co-founders of MMT
- Larry Randall Wray was Professor of Economics at UMKC from 1999 to 2016
- Another leading MMT proponent, Stephanie Kelton (above right), was on the UMKC Economics Department faculty, and Chair of the Department 2012-2016 (Kelton is also a research associate at the Levy Institute)

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Some of the 'foundational texts' of 'Modern Monetary Theory'





Modern Monetary Theory and Practice



Modern Monetary Theory and the Birth of the People's Economy STEPHANIE

KELTON

Warren Mosler

 former Wall Street hedge fund manager and sometime car designer, student of Arthur Laffer

Bill Mitchell

 Professor of Economics and Director of the Centre for Full
 Employment & Equity Economics at University of Newcastle (NSW)

□ Larry Randall Wray

 Professor of Economics at the University of Missouri-Kansas City and more recently the Levy Economics Institute at Bard College (upstate NY), student of Hyman Minsky

□ Stephanie Kelton

 Professor of Public Policy & Economics at Stony Brook University (upstate NY), adviser to Bernie Sanders











Whether budget deficits (and how they are financed) 'matter' to MMT proponents depends on the circumstances

| MMT | | Is the economy fully employed? | | |
|--|-----|--------------------------------|------|--|
| | | YES | No | |
| Does the nation enjoy monetary sovereignty? | Yes | Real | None | |
| | NO | | | |

Yes

Real

Financial/Real

Case 1: US economy after the GFC

Yes

NO

Does the nation enjoy

monetary sovereignty?

The shaded boxes indicate whether there are any constraints on governments' ability to spend freely

Case 3: German economy at full employment



- To MMT proponents, budget deficits (and how they are financed) 'matter' in situations like cases 2 and 3 but not in situations like case 1
- Deficits also matter when a country doesn't have 'monetary sovereignty' as in cases 3 and 4

NO

None

Financial

Note: 'monetary sovereignty' means a country issues its own currency, has a floating exchange rate, issues government debt only in that currency, and sets its own interest rate. Source: Adapted from Bill Mitchell, "It's Modern Monetary Theory time! No, it has always been", 23rd March 2020.



What was done in Weimar Germany in 1922 is not an example of MMT



Gutschein über

DIESER GUTSCHEIN WIRD VON DEN STADTISCHEN KASSEN IN ESCHWEILER USTOLBERG SOWIE VON DEN BANKEN DES ESCHWEILER STOLBERGER INDUSTRIEG. IN ZAHLUNG GENOMMEN ER VERLIER SEINE GUTIGKEIT VIER WOCHEN NACH AUFRUE DURCH DÖFENT BLÄTTER

Reichsmarks per US\$, 1910-22



Price of bread, Berlin

| | RM |
|-------------------|-----------------|
| December 1918 | 0.5 |
| December 1921 | 4 |
| December 1922 | 163 |
| January 1923 | 250 |
| March 1923 | 463 |
| June 1923 | 1,465 |
| July 1923 | 3,465 |
| August 1923 | 69,000 |
| September 1923 | 1,512,000 |
| October 1923 | 1,743,000,000 |
| November 1923 | 201,000,000,000 |

German inflation, 1910-22



Prices of some other goods, Berlin

RM

| Item | Summer 1923 | November 1923 |
|-------------|-------------|--------------------|
| 1 egg | 5,000 | 80,000,000,000 |
| 1 kg butter | 26,000 | 6,000,000,000,000 |
| 1 kg beef | 18,800 | 5,600,000,000,000 |
| Pair shoes | 1,000,000 | 32,000,000,000,000 |





... nor was Robert Mugabe's Zimbabwe ...



Zimbabwe money supply, 2001-08



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Zimbabwe inflation, 2001-08



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... and nor has been Hugo Chávez' and Nicolás Maduro's Venezuela



Venezuelan bolivar per US\$, 2006-2021



Venezuela inflation, 2006-2021







In each of these cases, 'printing money' led to hyper-inflation because it occurred in the face of a collapse in the economy's "supply side"

- □ When the French occupied at the beginning of 1922 (depriving Germany of its principal means of acquiring the foreign exchange required to meet the reparations obligations imposed by the Versailles Treaty), the Weimar Republic's strategy of simply printing more reichsmarks to exchange them for francs and pounds led to the collapse of the exchange rate, and thence to hyper-inflation
- When egregious mis-management of Zimbabwe's and Venezuela's economies led to the destruction of much of their productive capacities, attempts to sustain demand by printing money again led to a collapse in the exchange rate and hyper-inflation
 - the story behind other hyper-inflations in different Latin American countries over the past fifty years is essentially the same
- The same thing has invariably happened when the governments of countries whose productive capacity has been devastated by war seek to continue financing spending (including on the conduct of wars) by printing money
 - in the Confederacy during the latter stages of the US Civil War,
 - in Hungary at the end of World War II (the highest inflation ever recorded of 41.9 quadrillion (10¹⁶)% in July 1946)
 - in Japan at the end of World War II
 - in Nationalist China in the final years of the Chinese Civil War (1946-49)
- □ Hyper-inflation has also often occurred in the aftermath of institutional/societal collapse
 - as in Russia and most post-Soviet republics in the aftermath of the collapse of Communism between 1989 and 1992
- □ Contrary to what's often said, these are <u>not</u> examples of Modern Monetary Theory
- However, the first half of the 20th Century does provide two examples of where MMT has been tried and worked – until it didn't



'Takahashi finance' in Japan between 1929 and 1936 <u>was</u> an early practical application of the tenets of MMT



Takahashi Korekiyo (1854-1936)

- Governor of the Bank of Japan 1911-13
- Finance Minister, 1913-21
- Prime Minister, 1921-22
- Finance Minister, 1927-36



Inflation



Public debt



Money supply



Yen per US\$



Takahashi was assassinated by militarists on 20th February 1936, after he sought to rein in deficit spending (especially on Japan's incursions into Manchuria) having (in effect) concluded that Japan has returned to 'full employment'

Sources: Òscar Jordà, Moritz Schularick, and Alan M. Taylor, <u>Macrohistory Database</u>, University of Bonn; <u>Japan Center for Asian Historical Records</u>; Myung Soo Cha, <u>Did</u> <u>Takahashi Korekiyo Rescue Japan from the Great Depression</u>?, The Journal of Economic History, Volume 63, No. 1, March 2003, pp. 127-144); Corinna.



'Takahashi finance' in Japan between 1929 and 1936 was an early practical application of the tenets of MMT – and also of its potential dangers

% of GDP



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- Governor of the Bank of Japan 1911-13
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- Prime Minister, 1921-22
- Finance Minister. 1927-36





1925 1928 1931 1934 1937 1940 1943 1946



Takahashi was assassinated by militarists on 20th February 1936, after he sought to rein in deficit spending (especially on Japan's incursions into Manchuria) having (in effect) concluded that Japan has returned to 'full employment'

1925 1928 1931 1934 1937 1940 1943 1946

Yen per USS

10

100

US

T ¥ per US\$ (inverted log scale)

Sources: Oscar Jordà, Moritz Schularick, and Alan M. Taylor, Macrohistory Database, University of Bonn; Japan Center for Asian Historical Records; Myung Soo Cha, Did Takahashi Korekiyo Rescue Japan from the Great Depression?, The Journal of Economic History, Volume 63, No. 1, March 2003, pp. 127-144); Jeff Kinaston, 1936 coup failed, but rebels killed "Japan's Keynes", The Japan Times, 20th February 2016; Corinna.



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Hitler's Germany provides another historical example of the application of MMT's tenets – and it worked, for a while – but it again provides a warning



Hialmar Horace **Greeley Schacht** (1877 - 1970)

- President of the Reichsbank 1923-30 and 1933-39
- Reichsminister without Portfolio 1937-43
- Interned Ravensbrück. Flossenbürg & Dachau, 1944-45

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Real GDP per capita



Inflation



Public debt



Money supply



Reichsmarks per USS



After 1936, when Schacht began urging Hitler to wind back monetary financing of the Nazis' re-armament program, he was gradually sidelined in favour of Goëring, removed as Reichsbank President in 1939. and ended up in a concentration camp in 1944

Sources: Oscar Jordà, Moritz Schularick, and Alan M. Taylor, Macrohistory Database, University of Bonn; Robert L Hetzel, German Monetary History in the First Half of the Twentieth Century, Federal Reserve Bank of Richmond Economy Quarterly, Volume 88, No. 1, Winter 2002; David Marsh, The Bundesbank: The Bank that Rules Europe, 1992, pp. 108-121; Liaguat Ahamed, Lords of Finance, 2009, pp. 480-81; Corinna.



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But perhaps Indonesia is pursuing a form of MMT?

- Last year, in response to Covid-19, Indonesia's Parliament approved 'Law No 2' which gave the government the authority to breach previous legal limits on its budget deficit, and gave Bank Indonesia the authority to purchase long-term government securities (SBNs and SUNs) on the primary market
 - BI calls this 'synergistic monetary expansion'
 - two Joint Decrees (KB) between BI and the Minister of Finance provide a series of mechanisms designed to ensure that direct BI financing of the budget deficit is the 'last resort' option, rather than the first
 - these require BI to continue to have regard to inflation, and to the "credibility and integrity of economic, fiscal and monetary management"
- In 2020, Bank Indonesia directly financed (through SBN/SUN purchases in the primary market) just over 45% of the government's budget deficit
- So far this year BI has directly financed just under 15% of the government's deficit
- □ There's no evidence (as yet) that this 'synergistic monetary expansion' has had any undesirable consequences
 - lending to the private sector has declined, so money supply growth has remained stable
 - inflation has remained at or close to record lows, below BI's target

BI bond holdings



Bank lending



Money growth



Inflation



Sources: Perry Warjiyo (BI Governor), <u>Synergize to Build Optimism for Economic Recovery</u>, Speech to Bank Indonesia Annual Meeting, 3rd December 2020; <u>Bank</u> <u>Indonesia's response to Covid-19</u>, Chapter 14 in Bill English, Kristin Forbes and Angel Ubide (eds), Monetary Policy and Central Banking in the Covid Era, Centre for Economic Policy Research, 2020, pp. 255-307; Bank Indonesia, <u>Indonesia's Economic and Financial Statistics</u>; Statistics Indonesia, <u>Consumer Price Indices</u>.

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'Quantitative Easing' (QE) as deployed by many 'advanced' economy central banks since 2008 <u>isn't</u> MMT

- Quantitative easing' refers to the use by a central bank of its balance sheet with a view to easing monetary and financial conditions in order to stimulate economic activity and raise inflation, as an alternative to cutting 'official' interest rates (usually when interest rates are as low as they can practically go)
 - the most common form of 'QE' is central bank purchases of government bonds
 - but central banks have also bought other debt securities (eg mortgage-backed securities or corporate bonds), made loans to banks (and in some cases others) and (in Japan) bought equities (via exchange-traded funds)

□ There are a number of important differences between 'QE' and MMT

- In particular, 'advanced' economy central banks are purchasing bonds from existing holders in the socalled 'secondary market', not directly from governments in the 'primary market'
 - which means that governments do have to fund their spending by collecting taxes, or selling bonds contrary to one of the principal policy prescriptions of MMT (when there is 'excess capacity' in the economy)
 - central bank purchases of bonds in the 'secondary market' <u>do</u> (normally) have the effect of lowering bond yields, and hence indirectly reduce the cost to the government of financing its deficits
 - and because the central bank is owned by the government, the government eventually 'gets back' the interest it pays on bonds held by the central bank when the central bank pays dividends to the government
- In addition, it's the (independent) central bank which decides whether to undertake 'QE', how much it will undertake, and for how long it will undertake it
 - whereas under MMT, those decisions are made by the government and the central bank does what it's told
 - thus, MMT represents a clear break with the notion of 'central bank independence' which has become widely-accepted in the last three decades
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'Modern Monetary Theory' and the 'Job Guarantee'

- Many (though not all) MMT proponents also advocate for a 'Job Guarantee' under which the government guarantees to provide a job at a specified minimum wage to anyone who wants one
 - the idea being that the number of people employed in this way would expand (contract) when private sector employment contracts (expands) – so that the Job Guarantee scheme acts as a kind of 'buffer' against fluctuations in employment
 - proponents argue that during economic downturns, people who lose jobs in the private sector would be able to take jobs in the public sector at the minimum wage, thereby preventing unemployment from rising and wages from falling below the specified minimum (thereby preventing 'deflation')
 - and during booms, people would leave Job Guarantee jobs for better-paid positions in the private sector, until the 'Job Guarantee pool' is emptied – at which point the government then seeks to prevent inflation using conventional 'demand management' policies (tighter fiscal and/or monetary policies)
- □ The 'Job Guarantee' idea appeals to economists and others of a 'progressive' disposition because, they argue, it eliminates the 'need' for a 'reservoir of unemployed' to control inflation
 - or, put differently, it obviates the concept of the 'natural' or 'non-inflation accelerating' rate of unemployment (NAIRU)
- MMTers argue that the 'Job Guarantee' can be 'painlessly' funded by government budget deficits financed by issuing currency
 - which (they argue) wouldn't be inflationary because the 'Job Guarantee' automatically phases down as the economy approaches full employment (and 'real' resource constraints start to become binding)
- Some advocates of a 'Job Guarantee' differentiate it from the idea of a 'Universal Basic Income' (a regular government payment to all citizens irrespective of their income) by noting that the 'Job Guarantee' entails an obligation to work

Sources: Bill Mitchell, <u>"Full Employment via a Job Guarantee"</u>, and <u>The Buffer Stock Employment Model and the NAIRU: The Path to Full Employment</u>, Journal of Economic Issues, Volume 32, No. 2, June 1998, pp. 547-555; Pavlina R Tcherneva, <u>The Job Guarantee: Design, Jobs, and Implementation</u>, Working Paper No. 902, Levy Economics Institute of Bard College, April 2018.



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What if the 'limiting factor' determining when the economy has used up all its spare capacity is capital, rather than labour?

- A critical element of Modern Monetary Theory's defence against the criticism that it will end up being inflationary is that, in practice, governments will know when to stop monetary financing of budget deficits when unemployment has fallen to as low as it practically can
 - this is sometimes characterized as "when the last unemployed person walks into the Job Guarantee Office looking for a job", although in reality there will always be some level of 'frictional unemployment' (ie people who are moving between jobs)
- But what if the economy's potential output is constrained not by labour but by the other 'factor of production', capital?
- This is actually what happened in the 1970s the 'productive capacity' of advanced economies was constrained by the capital stock, a significant proportion of which had been rendered redundant by the tripling and then doubling again of oil prices in 1973-74 and 1979
 - confronted with what were the highest levels of unemployment since the 1930s, policy-makers (governments and central banks) assumed that there was still ample 'spare capacity' in their economies, and kept applying stimulatory policies
 - but because the 'limiting factor' was capital, not labour, the result was 'stagflation' (simultaneous high unemployment and inflation)

□ This could happen again in the coming decade

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- Covid-19 may have rendered redundant some of the capital stock which had been in use prior to its onset (civil aviation, public transport, CBD office blocks and apartment towers etc)
- in addition, accelerated moves to de-carbonize economies will also lead to the redundancy of a significant part of the capital stock
- □ In which case the pursuit of MMT would end up being inflationary
 - although that's also a risk with 'orthodox' economic policies



INDEPENDENT ECONOMICS

Direct central bank financing of budget deficits <u>doesn't</u> eliminate the government's exposure to interest rates



US Federal Reserve liabilities

US Federal Reserve assets

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- When the central bank buys bonds whether from an existing holder (as with 'QE') or directly from the government (under MMT) it acquires an asset
- But when it does so it also acquires an offsetting liability a government deposit, cash or an increase in banks' deposits ('reserve balances') depending on what the government does with the 'money' the central bank creates
- Liabilities in the form of banks' reserve balances typically attract interest so the government (as the owner of the central bank) is (contrary to what MMT proponents argue) exposed to fluctuations in (short-term) interest rates, especially once the economy has reached 'full capacity' and interest rates start rising
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Note: Data up to 18th August 2021. Source: US Federal Reserve, Factors Affecting Reserve Balances - H.4.1.

Modern monetary theory implicitly assumes a 'closed economy' and ignores the balance of payments, and exchange rates

How MMT looks at an economy with 'spare capacity'

| MMT | | Is the economy fully employed? | | |
|-----------------------|-----|--------------------------------|-----------|--|
| | | YES | No | |
| Does the nation enjoy | Yes | Real | None | |
| monetary sovereignty? | NO | D Financial/Real | Financial | |

In such circumstances MMT holds that there is neither a 'real' nor a 'financial' constraint on the government's ability to spend

- MMT assumes that when the government spends money and that money is 'created' for it by the central bank – the money will end up in the hands of the private sector (households and/or businesses)
 - if it's used to pay public servants' salaries, pensions, or just to transfer cash to households, it will either be spent by the recipients (and thus end up in the hands of businesses, who will in turn either spend it with other businesses, or deposit it in their bank accounts) or saved (and deposited in their banks)
 - or if it is used to make payments to businesses (for whatever purpose) they will either pay employees with it, purchase goods or services from other businesses, or 'save' it

□ But what if some of this 'money' ends up leaving the country?

- as it will if it is spent on imported goods or services, or used to acquire foreign financial or real assets
- note that because the additional government spending isn't funded by taxes or borrowing from the domestic private sector, there is no offsetting reduction in private spending
- □ If the additional government spending 'leaks' into imports, this will (all else being equal) result in a deterioration in the current account of the (external) balance of payments
 - which (especially if it's an 'emerging' economy with a large current account deficit, could trigger a sharp fall in the exchange rate
 - this is also a risk if the adoption of MMT prompts 'capital flight'



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What some of the critics of MMT say

 $\hfill\square$ "... fallacious at multiple levels ... the voodoo economics of our time"

Larry Summers (Clinton Administration Treasury Secretary, March 2019)

- "There's much that's true, and there's much that's new, but what's true isn't new, and what's new isn't true"
 <u>Paul Krugman</u> (2008 Nobel Prize for Economics, New York Times columnist, May 2021)
- "... the argument goes, if the government needs money to stimulate the economy, the central bank should simply create it in the public interest. The reality, though, is there is no free lunch ... somebody always pays. It certainly is possible for the central bank to change when and how the spending is paid for, but it is not possible to put aside the government's budget constraint permanently"

RBA Governor <u>Philip Lowe</u> (July 2020)

- "Arguing with the MMTers generally feels like playing Calvinball, with the rules constantly changing: every time you think you've pinned them down on some proposition, they insist that you haven't grasped their meaning"
 <u>Paul Krugman</u> (February 2019)
- "Speaking with MMT's adherents is sometimes like watching a football match with friends who insist the ball remains stationary while every other element in the game, including the pitch and goalposts, moves around it"
 <u>The Economist</u> (March 2019)
- "MMT advocates have come to resemble mid-20th-century communists who argued that the Soviet Union could not possibly be a true socialist regime because a true socialist regime could only generate positive outcomes"

Jonathan Hartley (Visiting Fellow at the Foundation for Research on Equal Opportunity, October 2020)



Conclusions

□ 'Modern Monetary Theory' isn't particularly 'modern' ...

- its core concepts have been around for over 100 years
- □ ... it isn't primarily 'monetary' ...
 - it starts with a view about what 'money' is, but it is much more about fiscal policy, and the purposes for which fiscal policy (and in particular government spending) can and should be used
- $\hfill\square$... and it isn't really much of a 'theory'
 - it doesn't amount to a comprehensive model (or even a 'description') of the way 'the economy' functions in the way that Keynesian 'theory' and its derivatives, 'Austrian' economics or 'neo-classical' theory (rightly or wrongly) see to do

□ That's not to say that MMT doesn't contain some important truths and insights

- in particular, direct monetary financing of government budget deficits need not be inflationary when an economy is operating with a large amount of 'spare capacity'
- However, MMT proponents are wrong to suggest that governments which can issue their own currency can spend freely without constraints or consequences
 - in particular, MMT proponents appear not to have given sufficient consideration to the fact that central banks pay interest on banks' deposits (or reserve balances) held with them – and the suggestion (sometimes made by MMTers) that interest rates should be set at zero isn't an adequate answer
- The biggest flaw in MMT is that it assumes (without ever acknowledging it) that politicians can be trusted to decide when the economy's 'spare capacity' has been fully utilized and hence when it is time to cease monetary financing of deficits
 - whereas the weight of historical evidence is that they can't be



Q & A

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