

All-Actuaries Summit

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Consequences of Modern Monetary Theory for Cryptocurrencies and Taxation

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Agenda

- Outline of MMT
- The implications for cryptocurrencies
- Priming the economy
- Managing inflation
 - Taxation
- Policy suggestions

Modern Monetary Theory (MMT)

- Governments cannot go bankrupt by printing money/deficit spending.
 - Can therefore always address unemployment
 - Does not apply if they borrow in another currency
- Sovereign government spending *creates (fiat) money* – it has value:
 - as a liquid asset
 - because it legal tender
 - required to pay taxes
 - may also be backed by investments.

MMT view of private lending

- Bank lending *creates money* (deposits) – value because backed by assets
- Other private sector players can also offer credit which also creates demand

“Legitimate reasons for constraining government spending”

- Too much spending
 - can cause inflation
 - could pressure the exchange rate
 - might leave too few resources for private interests.
- Government should not do *everything* – impacts on incentives could be pervers

Wray (2015)

Purpose of taxation

“Federal taxes can be made to serve four principal purposes of a social and economic character. These purposes are:

- (1) as an instrument of fiscal policy to help stabilize purchasing power ...;
- (2) to express public policy in the distribution of wealth and of income ...;
- (3) to express public policy in subsidizing or in penalizing various industries and economic groups; and
- (4) to isolate and assess directly the costs of certain national such as highways and social security.”

Beardsley Ruml (1946) – Chair of the NY Federal Reserve Bank

Inflation

Differences in manifestation:

- Increase in the price of goods, service or assets

Different causes:

- Supply shortages – particularly energy and wage push
- Demand pull
 - Facilitated by easy money and credit creation
 - Bank creation normally 4 times or more than government
- Sector competition – increased profit margins, wage demands

Cryptocurrency differences

- Asset backed tokens are akin to mutual funds or banks
 - The administration innovative
 - But also regulatory arbitrage that brings risks of fraud and mismanagement
- Bitcoin and other limited issue fiat “currencies” are not:
 - backed by any assets,
 - particularly liquid
 - legal tender, or
 - required to pay taxes.

Implications for cryptocurrencies

- Cryptocurrencies have value if a community 'believes':
 - They will grow in value while the community grows and invests more
 - They will decline in value as the community shrinks or disinvests
 - They will collapse if there is uncontrolled fraud
- Cryptocurrencies can also contribute to demand push inflation

Priming: Deficits & Quantitative Easing (QE)

- Government issues bonds of varying durations
- Central Bank buys government bonds and long term assets
 - Increasing their price and increasing private deposits
 - The hope is that higher asset prices and lower interest rate stimulate spending
- Private sector surplus leads to higher prices of all assets
 - = asset price inflation – seen in higher share and house prices and cryptocurrencies
- Risk of over-stimulation and general inflation
- Central bank mismatches make it difficult to raise interest rates
 - Significantly in the US where 25% of the Fed's assets are 30 year agency mortgages and the rest are government bonds of terms up to 10 years.
 - Much less so in Australia where RBA has bought shorter term assets

MMT suggestions for priming

- As much targeted government expenditure as is necessary to provide full employment and meet those needs that can be met within real resource constraints (not artificial financial ones)
- Standard expenses: Defence, justice, education, health, welfare ...
- Government can explicitly give jobs to the unemployed by a Job guarantee/employer of last resort while creating minimal inflation. Better than unemployment benefits that pay people to do nothing. Also stabilizing as spending increases in downturns
 - i.e Job-keeper plus job-maker, but not job-seeker

MMT suggestions for reducing inflation

- Don't let demand be excessive so aim for **balanced budgets over the cycle** with allowance for growth in money to allow for GDP
- Competition policy to address price gouging (monopoly rents)
- Wage restraint to reduce pressure from unions and others
- Price and wage controls in times of crisis
- Use reserve requirements to limit excess borrowing which in turn increases interest rate of banks.
- **Taxes**
 - Preferably stabilising: progressive income taxes, *tax on unrealised capital gains*

Will higher interest rates reduce inflation?

- No – if it arises from higher commodity prices due to supply constraints
- May be – as a blunt tool to reduce aggregate demand, they will do so if they take money away from spenders to give to savers.
 - Not if government is a major borrower, because it increases private incomes
 - Yes, if Australians are net overseas borrowers as benefits go overseas
 - Yes, if most borrowers are liquidity constrained younger people and most savers are in super where extra income does not increase expenditure
 - No, to the extent that most savers are pensioners who spend their interest income
 - Yes, if higher interest rates discourage investment (but note Keynes's 'animal spirits', and that empirical evidence is scanty.)
- Yes – if the main effect is to push borrowers into insolvency and disrupt the economy along with their lives

The use of taxes to reduce inflation

Taxes may reduce demand but often have negative consequences

- Personal income – reduces demand from wage earners
- Consumption taxes – will lead to higher prices directly and only indirectly reduce spending coming from reduced savings
- Superannuation accumulation – little reduction in demand
- Other financial assets – reduces demand from savers but may lead to capital flight
- Estate taxes – delayed effect and can lead to capital flight
- User charges – tolls, co-payments, increase prices ...
- Corporate taxes – may also reduce investment (some capital flight) and dividends; also encourages debt, which destabilises
- Land taxes (including mining royalties) – cannot be escaped
- Capital (net assets) and capital gains – can lead to capital flight

Taxes on corporations, assets, gains and land directly reduce asset prices

Taxes on capital gains – realised or not

- Strongly counter cyclical and directly address asset price inflation
 - Forces sales when prices rise
 - Injects cash when prices fall
- Can be at whatever rate is required for stimulation/restraint
- Need to prevent potential perverse consequences:
 - Have to ensure unlisted assets are fairly valued
 - Illiquid assets become a much higher risk but exactly what is required to reduce house price increases
 - Exempt own home and farms/ businesses with net worth < \$2m say
- A tax rate of 1% would go a long way to a balanced budget

Inflated asset prices

- Excessive growth in asset prices
 - risks of speculative and Ponzi borrowing
 - distorts incentives and may destabilise markets
 - but can increase consumption and, in the case of shares, greater investment
- Higher house prices are disruptive
 - Reduce standard of living of younger families and renters
 - With knock on effects on family formation and fertility
 - Are of little value to older people who do not downsize
 - More significant as account for 75% of real assets



Demand management suggestions

- Tax on unrealised capital gains to reduce asset inflation, and indicate commitment to a balanced budget over the business cycle
- Long term unemployment directly addressed
 - Job guarantee to be introduced systematically
 - Welfare poverty traps to be removed
 - Focus on rural areas and disabled

Other policy suggestions

- Taxes on environmental harms
 - **Carbon emissions**
 - Waste by-products
- Macro-prudential oversight
 - Avoid further house price increases for the foreseeable future
 - Ensure new credit technologies are regulated – e.g. crypto, BNPL

References

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