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**A paradigm shift in Macroeconomics is underway – a cause
for celebration**

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“A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it ...”

German physicist Max Planck, *Scientific Autobiography and other Papers*, 1950, p. 33-34.

1. Introduction

The once-in-a-century pandemic hasn't given us been much to celebrate in 2020. One cause for celebration, perhaps, is that we might finally jettison the mainstream economics fictions about government deficits and debt, which have hampered prosperity over several decades.

Max Planck's observation is often shortened to “Science progresses one funeral at a time”. For macroeconomics, we might think of progress as occurring one crisis at a time, because it is the sequence of crises – 1991 recession, the Global Financial Crisis (GFC) and, now the pandemic – that has generated an accumulated awareness of the failure of mainstream macroeconomics and progressively opened the door for Modern Monetary Theory (MMT), the emerging rival paradigm.

The conjecture here is that while some want to hang on to the debt and deficit scaremongering that has cruelled policy choices and left a trail of human damage over the last four decades, it is increasingly obvious to people that there is little substance in those narratives.

The way out of the current crisis which addresses the health challenges, the socio-economic consequences and the underlying climate crisis, that has been pushed to the back of our attention at present, will require an almost orthogonal shift in policy thinking driven by a paradigm shift in economic theory.

This essay introduces MMT as a framework for understanding the policy choices that will help Australia regain prosperity in a post-carbon world.

2. From full employment to neoliberal stagnation

The Great Depression taught us that without government intervention, capitalism is inherently unstable and prone to delivering lengthy periods of unemployment. The spending and wage cuts in the early 1930s deepened the crisis. Only the military spending and fiscal deficits of the late 1930s, ended the Depression and brought full employment. The challenge was to maintain that in peacetime.

The Australian government's 1945 White Paper on Full Employment articulated those lessons with its nation-building plan. Everyone now understood that fiscal deficits, which supplemented private spending, could produce sufficient jobs for those who desired them. It was also understood that public infrastructure (transport, energy, etc), health and education, would underpin strong private investment, strong productivity and real wages growth, and declining inequality.

Full employment became a collective responsibility of society. However, the low unemployment in Australia in the decades that followed was not the exclusive outcome of strong private employment growth and a career public service. During this period, a buffer of public sector jobs for the least-skilled workers was also available for those who could not find work elsewhere.

This consensus faltered in the late 1960s, as corporate lobbies considered the social democratic gains to workers impinged on their desired profits. The resulting global resistance by capital exploited the dislocation that followed the OPEC oil price hikes to advance a new economic paradigm – Monetarism. If this sounds conspiratorial, then readers are referred to the 1971 Powell Manifesto, which articulated a strategic campaign to restore the ‘power’ of American capital viz labour. This strategy became global.

The new economic ideology advanced its political agenda by creating a ‘fictional’ economic world, that was then imprinted on the public psyche through skilful framing and language. A series of interlinked myths about debt, deficits, and inflation, appealed to our intuition as managers of household finances.

This ideology, now loosely termed neo-liberalism, claimed that the nation state was powerless in the face of globalisation of capital. Accordingly, government policy should aim to appease the interests of capital, lest it creates economic crisis. The victims of the spending cuts – the unemployed - were demonised as ‘bludgers’ - in control of their own destiny.

The view was swallowed, ‘hook-line-and-sinker’ by social democratic forces who began to articulate a macroeconomic narrative that was indistinguishable from the conservatives. They sought to differentiate themselves on identity issues but the contest over macroeconomic policy virtually disappeared.

The paradigm shift was framed as a shift from a powerless state to an efficient market. The idea of national sovereignty was promoted as a relic of the past. But closer scrutiny reveals that the state was never overpowered by the market. Neoliberalism has not entailed a retreat of the state but rather a reconfiguration of the state, aimed at placing the commanding heights of economic policy under the control of finance capital (Mitchell and Fazi, 2017).

It is self-evident, that the neoliberal agenda would not have been possible if governments - and in particular social democratic governments - had not resorted to a wide array of tools to promote it: the liberalisation of goods and capital markets; the privatisation of resources and social services; the deregulation of business, and financial markets in particular; the reduction of workers’ rights (first and foremost, the right to collective bargaining) and more generally, the repression of labour activism; the lowering of taxes on wealth and capital, at the expense of the middle and working classes; the slashing of social programs, and so on.

A process of depoliticisation, as an essential aspect of their desire to gain greater control for global capital, was pursued, which led to policies that have constrained existing national sovereignty and curtailed popular-democratic mechanisms. The aim was to insulate macroeconomic policies from popular contestation.

These policies were systemically pursued throughout the West (and imposed on developing countries) with unprecedented determination, and with the support of all the major international institutions and political parties. The public justifications were all about creating more jobs and reducing poverty, but the reality was different.

The ‘Neoliberal Report Card’ detailing the consequences of this shift doesn’t read well (Table 1).

Table 1 The Neoliberal Report Card

'Surplus-obsessed' governments	✓
Stagnant economic growth	✓
Stalled productivity growth	✓
Elevated unemployment and underemployment	✓
Precarious work with flat wages growth	✓
Rising income and wealth inequality	✓
Unsustainable private debt levels	✓
Education and training systems degraded	✓
Public services and infrastructure degraded	✓
Regions and communities left behind	✓
Indigenous poverty unresolved	✓
Social and environmental failure	✓

Most people are unaware that at the time the forces of neoliberalism were mounting their assault on the Keynesian consensus, a major event occurred that changed the way monetary systems worked and undermined the veracity of all the key neoliberal propositions about debt and deficits.

In an effort to achieve currency stability at the end of World War 2. the fixed exchange rate system (Bretton Woods) was introduced in 1946. All participating currencies were valued against the US dollar, which was then convertible at a fixed value into gold, which was the system's price anchor. That system collapsed in August 1971 when President Nixon abandoned US dollar gold convertibility.

The relevance here is that central banks had to carefully manage the amount of their currencies in the system to ensure they maintained the agreed parities with other currencies. An excess supply of say, Australian dollars (pounds before 1966) in foreign exchange markets required the Reserve Bank of Australia (RBA) to purchase dollars with foreign currency reserves and increase domestic interest rates to attract foreign investment (and demand for dollars).

But the money supply contraction and higher interest rates pushed unemployment up and if expansionary fiscal policy was used too aggressively to reduce unemployment – putting currency back in the system – it would compromise the RBA's efforts to maintain currency stability. As a consequence, without an increase in gold reserves, increased government expenditure (injecting currency) had to be matched ('financed') by taxation and if they wanted to spend more than their tax revenue, they had to issue debt (draining currency).

The collapse of the Bretton Woods system dramatically altered the opportunities available to currency-issuing governments.

First, under a fiat monetary system, 'state money' no longer had any intrinsic value (no longer convertible into gold). For an otherwise 'worthless' currency to be acceptable in

exchange (buying and selling things) some motivation was required. That motivation emerges because the sovereign government requires its use to relinquish private tax obligations.

Second, as the monopoly issuer of the fiat currency, the Bretton Woods restrictions to offset spending with taxation and/or borrowing are no longer binding because the central bank no longer has to defend the floating currency. There is no financial constraint on government spending. The government can buy any goods and services that are available for sale in its currency including all idle labour. The only meaningful constraint is the 'inflationary ceiling' that is reached when all productive resources are full employed. This is a dramatic change.

The Australian government cannot run 'out of money' and all notions of not having enough 'ammunition in the locker' because the government has been running deficits (spending in excess of tax revenue) are inapplicable.

Accordingly, we traverse from thinking about financial constraints on government spending and all the negative narratives about the need to 'fund' spending, to a focus on **real resource constraints** defined in terms of available productive resources and available final goods and services. Another dramatic shift in thinking.

Third, logically, the government no longer needs to issue debt, given it is the issuer of its own currency. Debt issuance serves other purposes which evade public scrutiny.

Crucially, politics is freed from the perennial: 'How are we going to pay for it' question.

The questions we now ask are different and relate to functional outcomes we desire from public spending and available real resources.

These insights about the modern fiat monetary systems run counter to the core claims by mainstream economists about debt and deficits that are wheeled out on a daily basis to disabuse us of government action. So, what is going on?

3. The paradigm shift in economics

These post-1971 insights form the core propositions of Modern Monetary Theory (MMT), which challenges the dominant belief systems in economics. Successive crises have brought MMT to the centre of the debate as it becomes clear that mainstream economics cannot offer solutions to our problems.

But there is visceral resistance from the mainstream macroeconomists across the globe to any change. Much of the criticism is of the 'straw person' variety because confronting the core ideas of MMT is too damaging to the mainstream.

The resistance to change is not surprising. Social psychologists have long identified patterned behaviour called Groupthink that attempt to maintain the status quo even when it no longer adequately explains the facts.

Think about neurogenesis. The clinical treatment for patients with brain injury before the 1990s was predicated on the view that adult brains, once damaged, do not create new neurons.

In the early 1960s, American biologist Joseph Altman showed this presumption was false, but his research was fiercely denied by senior professors and clinical practice continued as before. It wasn't until the phenomenon was 'rediscovered' by Elizabeth Gould in 1999, that neurogenesis emerged as one of the most significant advances in neuroscience.

Charles Gross (2008: 331) wrote “the dogma of ‘no new neurons’ was universally held and vigorously defended by the most powerful and leading primate developmental anatomist of his time.”

Thus, for decades, patients were subjected to clinical practice based on false premises, which prevented recovery. The paradigm shift occurred, only when the weight of evidence became so compelling.

We are at that point in macroeconomics now.

The dissonance between the statements and predictions of mainstream economists and our lived reality is widening, which is why there is increasing focus on MMT, given its congruence with the economic facts.

Various forces are pushing the paradigm shift. First, an anti-establishment revolt is underway as citizens have realised that neoliberalism has failed to deliver prosperity. The Yellow Vests, Trump, Brexit, and the decline of traditional social democratic parties are manifestations. While the Left gave voice to the angst of workers in the C19th, the Right is now articulating these concerns.

Second, the mainstream insistence that monetary policy dominate counter-stabilisation policy (‘inflation first’ strategies) with discretionary fiscal policy biased towards running surpluses has seen central bankers break ranks in recent years and demand that governments use fiscal policy more actively.

They realise that with interest rates around zero or negative there is no further ‘room’ to stimulate spending. Further, the large-scale bond-buying exercises (quantitative easing), which were intended to push inflation higher have also failed.

Third, the financial sector has realised that the mainstream predictions have not materialised, and profits have been sacrificed as a result.

The fiscal austerity bias coupled with relatively ineffective monetary policy has created stagnation, elevated levels of labour underutilisation and subdued inflation rates. Wages growth is flat, and households have accumulated record levels of debt making financial stability more precarious. Stifled public infrastructure development has restricted low-risk investment opportunities that have historically formed the 'bread-and-butter' sources of profit for large investment funds.

Central bankers have responded by progressively cutting interest rates, to the point where negative rates are not uncommon. In turn, we are now seeing negative yields on long-term bonds in many jurisdictions.

Take pension funds, which are now facing increasing maturity mismatch as returns on assets have become compromised by these developments. As a consequence, fund managers are taking riskier investment positions to increase earnings given their contractual liabilities. This is an unsustainable situation and insolvency risk is heightened.

The experience of Japan demonstrates the degenerative nature of mainstream macroeconomics. Japan embraced the neoliberal excesses in the 1980s. In 1991, the excessive private debt caused a massive commercial property collapse. The government’s response pushed economic policies to the extreme of conventional limits – continuously high deficits, high public debt, with the Bank of Japan buying much of it.

Most economists recycled predictions of high interest rates, accelerating inflation and bond market revolts. None came to pass. Japan has maintained low unemployment, low inflation, zero interest rates and strong demand for government debt (see Table 2).

Table 2 Japanese economic reality 1991 to 2020

Macroeconomic outcome	Mainstream Prediction	Reality
Consistently large fiscal deficits often above 10% of GDP since 1991.	Rising interest rates and bond yields.	Short-term interest rates around zero since 1991. Bond yields consistently low negative out to 10 years. Low unemployment despite exposure to many crises.
Gross public debt to GDP at 250% - largest in world.	Bond markets demanding higher yields to cover increasing risk, leading to an unwillingness to make loans to government and eventual insolvency	Yields across all maturities consistently falling towards zero. Private bids in auctions consistently multiples of actual offer. Huge demand for JGBs
Bank of Japan has expanded its purchase of JGBs in secondary markets. Has been 'funding' fiscal deficits since around 2012. Bank of Japan now owns 45% of all Japanese government bonds.	Accelerating inflation from 'money printing'. Loss of credibility of central bank.	Fighting deflation (falling prices) since 1991. Mostly zero or very low inflation. Bank of Japan maintains total control of interest rates and yields to suit its policy purposes.

The ‘textbook’ models driving these predictions failed to understand that a currency-issuing government can always meet any liabilities in its own currency and never faces insolvency. Further, they failed to understand that the Bank of Japan can maintain yields and interest rates at very low levels, indefinitely. A similar story played out during the GFC.

Bond markets can never overpower the financial capacity of the treasury and the central bank. Bond investors only determine yields if governments allow them to.

Undeterred, mainstream economists continue to promote their ‘fictional’ world, keeping citizens in the dark about the true capacity of government and the consequences of using that capacity to sustain full employment. They manufacture fear about public debt and deficits, predict government insolvency, use the words – Weimar or Zimbabwe – to invoke fears of hyperinflation. They rehearse false moral arguments about today’s government spending burdening our grandchildren. None of their predictions ever materialise for they were lies to begin with.

Which is why we are hearing more about MMT. It has an impeccable record of prediction and offers answers that the economic orthodoxy fails to provide. An MMT understanding makes it easy to appreciate these dynamics. It also demonstrates that reliance on monetary policy at the expense of discretionary fiscal policy is an ineffective counter-stabilisation approach and undermines private investment opportunities.

A new era of fiscal dominance is the only viable way ahead as Capitalism labours under state life support. The ‘market’, the centre of the neoliberal ideology, has failed and will provide no cure.

Citizens will have to get used to the fact that the only thing between total catastrophe and a long-drawn out recovery is the fiscal support offered by their governments. The age of worrying about fiscal deficits and public debt ratios will have to give way to a new era of large, continuous deficits supported by the monetary capacity of the other arm of government – the central bank.

The current neoliberal obsession with fiscal surpluses, buttressed by voluntary fiscal rules that restrict the flexibility of fiscal policy – in both good and bad times – is counterproductive and the next period has to see more fiscal stimulus from governments.

Only MMT economists have provided a body of work that is consistent with this ‘new normal’.

4. MMT is about the world we live in

MMT is not some sort of regime or a set of policies. A government does not suddenly ‘apply’, ‘switch to’ or ‘introduce’ MMT.

Rather, MMT is a lens which provides a better understanding of the fiat monetary system and the capacity of the currency-issuer. By linking institutional reality with behavioural theories, it provides a more coherent framework for assessing the consequences of government policy choices.

MMT allows us to appreciate that most choices that are couched in terms of ‘budgets’ and ‘financial constraints’ are, in fact, just political choices.

Given there are no intrinsic financial constraints on a currency-issuing government, we understand that mass unemployment is a political choice. Imagine if citizens understood that.

An MMT understanding lifts the ideological veil imposed by mainstream economics that relies on the false analogy between an income-constrained household and the currency-issuing government.

Households always have to finance their spending choices, through earned income, savings, asset sales or through borrowing. A currency-issuing government spends by instructing its central bank to type numbers electronically into relevant bank accounts.

All the elaborate accounting structures and institutional processes that are put in place to make it look as though tax revenue and/or debt sales fund spending are voluntary smokescreens, which serve the purpose of imposing political discipline on government spending.

Insiders know this, but actively decline to share that knowledge with the public.

Renowned British journalist Martin Wolf (2020), commenting on MMT, recently wrote: “In my view, it is right and wrong. It is right, because there is no simple budget constraint. It is wrong, because it will prove impossible to manage an economy sensibly once politicians believe there is no budget constraint.”

Famous US economist Paul Samuelson said something similar during an interview (Blaug, 1988):

I think there is an element of truth in the view that the superstition that the budget must be balanced at all times ... Once it is debunked takes away one of the bulwarks that every society must have against expenditure out of control. There must be discipline in the allocation of resources or you will have ... anarchistic chaos and inefficiency. And one of the functions of old fashioned religion was to scare people by sometimes what might be regarded as myths into behaving in a way that long-run civilised life requires.

These are profound statements of how a ‘fictional’ world is promoted by mainstream economists to serve as a brake on political volition. While MMT exposes these fictions many economists still think it is better to keep the public in a state of ignorance.

An MMT understanding must be combined with a set of values to define a set of policies. Two people from the extremes of the ideological spectrum can share an MMT understanding but articulate radically different policy mixes.

Thus, it makes no sense to talk about a suite of MMT policies.

5. MMT exposes the fictional world of mainstream economics

The definitive MMT textbook *Macroeconomics* (Mitchell *et al.*, 2019) clearly shows how MMT differs from the mainstream.

Mainstream economists claim that governments, like households, have to live within their means. They say fiscal deficits have to be repaid, requiring onerous future tax burdens on our children. They claim government borrowing (to “fund” deficits) competes with the private sector for scarce available funds, driving up interest rates and ‘crowding out’ (reducing) private investment. They conclude that public use of scarce resources is wasteful because governments are not subject to market discipline. Finally,

they assert that if government 'print money' inflation accelerates. Taken together, the mainstream litany supports a bias towards fiscal austerity.

These claims are ingrained in public debate by decades of miseducation and daily onslaughts from the conservative media. Anyone who dares advocate larger deficits is vilified as being incompetent and/or a dangerous socialist.

MMT rejects all these entreaties.

First, while the household analogy resonates strongly with voters because it attempts to relate the more amorphous finances of a government with our daily household finances, it is wrong at the most elemental level.

We intuitively understand that we cannot indefinitely live beyond our means and neoliberals promote the analogy because they know we will judge government deficits as reckless. But the Australian government is not a big household. It can consistently spend more than its revenue because it creates the currency.

There is no government spending 'out' of taxes or out of bond sales or 'money printing'. In 2009, the US 60 Minutes program asked Federal Reserve Chairman Ben Bernanke: "Is that tax money that the Fed is spending?" He replied: "It's not tax money. The banks have accounts with the Fed ... we simply use the computer to mark up the size of the account ..." The same applies for all government spending.

Second, all government and non-government spending carries an inflation risk. If nominal spending growth outstrips the productive capacity of the economy, then inflationary pressures will emerge.

Consider two scenarios. First, all available productive resources are currently fully employed. While government spending is not financially constrained, if it competes for productive resources with the non-government sector, then there will be inflationary pressures.

To increase its use of productive resources, but avoid inflationary pressures, the government has to deprive the existing users and 'free up' resources for transfer into the public sector. Deprivation can be achieved in a number of ways, but taxes are an important tool.

Taxes reduce non-government purchasing power but do not provide any extra financial capacity to government. They just create real resource space which the government can spend into without creating inflation.

In the second scenario, idle productive resources can be brought back into productive use with, say, higher deficits. There are no financial or resource constraints on government spending. These resources have zero bid in the market and deploying them introduces no inflationary pressures. The responsibility of government in this case is to spend up to full employment.

The point is clear: if nominal spending growth outstrips the capacity of firms to respond by producing goods and services for sale then there will be inflationary pressures. Won't continuous deficits be inflationary? The basic rule of macroeconomics is that spending equals income equals output. If the non-government sector desires to save overall (that is, not spend all its income) then output will fall unless that desire is funded by government deficits. As long as government deficits are scaled to fill the non-government spending gap then they are both desirable and sustainable.

Further, a significant source of inflationary pressure comes from administrative dictates – think about health insurance levies outpacing the CPI movements. Australia recently recorded deflation (prices falling) because of the administrative decision to provide free childcare!

What about government debt? After 1971, government no longer needed to match its deficits with debt issuance. Public borrowing is better thought of as corporate welfare, providing risk-free assets where investors can safely park funds in uncertain times. We saw that clearly in 2001, when the Australian government agreed to continue issuing debt at the behest of the large investment banks despite running surpluses.

Do bond sales reduce the inflation risk of public spending? Mainstream economists claim that if central banks just credit bank accounts on behalf of governments (erroneously called ‘money printing’) without private bond issuance, then inflation will result. That risk is allegedly lower with bond issuance because, of ‘crowding out’. You can see how all the myths are interlinked.

The Japanese experience shows these claims to be ridiculous. The crowding out story is based on Classical theory, which posits that government borrowing competes for finite private ‘savings’ thus pushing up interest rates and damaging interest-sensitive non-government spending.

John Maynard Keynes exposed the fictions of this story in the 1930s by showing that saving rises with income, which government spending stimulates. Moreover, mainstream textbooks erroneously claim that bank deposits provide funds which banks loan out. But in modern banking, loans create deposits. Banks will extend credit to any credit worthy customers knowing they can always get reserves from the central bank to satisfy payment system demands. Banks do not loan out reserves. There is no scarcity of ‘savings’, squeezed by government borrowing.

Fiscal deficits generate excess bank reserves, which influences the way the central bank manages monetary policy. It has only two choices if it desires to maintain a positive policy target rate: (a) it can offer a competitive interest return on excess reserves, or (b) it can drain the excess reserves via open market operations (swapping reserves for government debt). Otherwise, it loses control of its policy target as banks try to rid their excess reserves in the interbank market, which drives the short-term rate down to zero. So, without an open market operation or the functionally equivalent interest support, the interest rate is biased downwards when there are fiscal deficits.

Further, when the government issues bonds to match the deficit, the central bank marks down reserve accounts and marks up a ‘treasury debt’ account. There is no reduction in the deposits created within the banking system by the fiscal deficits. Net worth in the non-government sector is not altered by the bond sales. Only the composition of the asset portfolio held in the non-government sector changes.

None of these events alters the inflation risk inherent in the spending. The funds used to purchase the bonds were not currently being 'spent' on goods and services.

History supports the MMT depiction. Over the last three decades, central banks have been purchasing large quantities of government bonds (quantitative easing) as a strategy to increase inflation. This was based on the mainstream predictions that such behaviour would be inflationary. The strategy failed because the underlying theory was flawed. While these bond-buying programs have effectively been funding fiscal deficits, there were no inflationary consequences because overall spending in the economy remained

within the real resource constraints. Only MMT economists articulated the causation correctly.

MMT stresses that the size of the deficit *per se* should never be the focus. Mainstream economists obsess over financial ratios (public debt to GDP, etc.). But a responsible government will allow deficits to be whatever is required to maintain overall spending at the level consistent with full employment. No more, no less. Fiscal sustainability is about fulfilling the government's responsibility to maintain an inclusive society in which everyone who wants to work can.

6. The way forward

The current circumstances will require elevated fiscal deficits for many years to come. A return to the mainstream surplus obsession is the last thing the government should consider. The only way that Australia will get out of this crisis and drive growth fast enough to absorb the huge pool of unemployed is through sustained fiscal deficits. There is no inflation threat.

Further fiscal stimulus should invest in green infrastructure projects, address the massive shortage of social housing, invest in apprenticeship schemes, properly fund research and innovation, and, most importantly, target job creation.

Apart from expanding the career public service and improving the scope and quality of public services, the government should introduce a Job Guarantee, which would offer a socially-inclusive, minimum wage job to anyone who wants work but cannot find it. These jobs would not compete with the private market and would avoid any inflationary pressure. Job Guarantee workers would enjoy stable incomes and other benefits (holiday and sick pay, superannuation contributions), and their increased spending would boost confidence throughout the economy. The Centre of Full Employment and Equity (Mitchell and Watts, 2020) at the University of Newcastle estimated that for an investment of \$51 billion over 12 months, the unemployment rate could be cut by 6 percentage points (1.2 million jobs). Two hundred thousand jobs would be created in the private sector because the Job Guarantee workers would have higher incomes than before. This would stimulate private investment confidence and the Job Guarantee pool would shrink quickly as private employers sought workers. Only an ideologically blinkered government would choose the massive losses involved with sustained unemployment over the Job Guarantee option.

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