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Framing Modern Monetary Theory

Louisa Connors and William Mitchell[1]

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Centre of Full Employment and Equity
Charles Darwin University, Casuarina NT Australia
Home Page: http://e1.newcastle.edu.au/coffee
Email: coffee@newcastle.edu.au

1. Introduction

Macroeconomics concepts, such as real GDP, inflation and unemployment rate, the budget deficit, and the interest rate make headlines on a daily basis. Finance segments on national news broadcasts increasingly discuss macroeconomic issues with frequent recourse to complex terms that are that are not well understood by the majority of media commentators or the public. Consequently, the public discourse reflects significant errors that render it almost impossible for participants to make informed assessments of macroeconomic developments independent of the politics involved.

Economic concepts such as the government budget deficit contain nuances that make unambiguous assessment of their meaning difficult. One cannot conclude, for example, that a deficit equal to 2 per cent of GDP signals a more expansionary fiscal stance by government than a deficit of half the size. These complexities are lost to the public but are fundamental to an accurate understanding of the issues.

Social media exacerbates this problem. The so-called blogosphere is populated with self-styled macroeconomic experts who make claims about such things as the state of the federal budget that are erroneous at best. Reliance on "common sense" logic or intuition becomes a dangerous guide in these cases and not all opinion should be given equal privilege in public discourse. Our propensity to generalise from personal experience, as if the experience constitutes general knowledge, continually leads these "Facebook" macroeconomic debates into combative dead-ends of false reasoning.

Problems in communicating the complexities of economic concepts and evidence are amplified by the ideological assumptions that dominate the public debate. Economics as an academic discipline and profession has come to be defined by a set of beliefs that are associated with the dominant free market paradigm. The consequence of this is a narrow debate that excludes the lessons of history and alternative economic paradigms that offer realistic insights into current economic conditions and related policy options.

Conservative think-tanks and media outlets produce an array of 'research' or 'policy' reports such that the public understanding has become straitjacketed by orthodox concepts and conclusions that, in themselves, are erroneous, but also lead to policy outcomes that undermine prosperity and subvert public purpose. The willingness to tolerate mass unemployment, rising income inequality and poverty is a manifestation of this syndrome.

Prior to the global financial crisis (GFC), mainstream economists pronounced the business cycle dead and declared hat we had entered a period of "great moderation" (Stock and Watson, 2002; Lucas, 2003). These economists categorically failed to foresee the catastrophic consequences of the labour market and financial deregulation they promoted.

It is reasonable to expect that professional failure on the scale of the GFC would lead to a re-evaluation of the paradigm within which these economists work, and major changes in economic curricula and research. Mainstream economists, however, have re-energised their anti-government free-market biases and effectively reconstructed what was a private debt crisis into a sovereign debt crisis, obscuring their role in the crisis and deflecting attention from the flaws in their model. The dynamics that created the crisis (deregulation, reduced financial oversight, etc) continue to be advocated by the mainstream as solutions.

The fact that mainstream macroeconomics has retained its hegemonic status in the face of its failure to resonate with reality is, in no small way, due to the way economic debates are framed in the public discourse. Framing refers to the way an argument is conceptualised and communicated by speakers and listeners. Processes of conceptualisation proceed by way of adaptive reasoning on the basis of models and representations. Research in cognitive philosophy and cognitive linguistics suggests that the models that constrain our thinking operate at a largely unconscious level, and that the abstract concepts we draw on are "largely metaphorical", "imaginative", and "emotionally engaged" (Lakoff and Johnson, 1999: 3-4).

Proponents of neo-classical macroeconomics have been extremely successful in their use of common metaphors to advance their ideological interests. What is, in fact, a myth that is designed to advance a narrow ideological interest, is constructed and accepted by the public as a verity. Thus ideology triumphs over evidence and we accept falsehoods as truth.

Recent psychological studies have highlighted the extent to which pre-existing biases influence the way in which we interpret factual information, including straightforward statistical data (for example, Kahan *et al.*, 2013). This presents a problem for the communication of research outcomes that bear on public policy design, particularly where findings may be counterintuitive, or may challenge a dominant or controversial discourse, as in the case of economic austerity or climate change.

The communication of progressive points of view is complicated by the tolerance of diversity characterises progressive politics: this diversity is reflected in extremely fragmented rhetoric. Often the language that is used to advocate a progressive alternative actually serves to reinforce conservative myths (see Lakoff, 2010; Wray, 2013). Shenker-Osorio (2012) considers the progressive side has no coherent story to tell and has been diverted by its failure to adopt a progressive language.

Wray (2013) explores the metaphors that underpin the language commonly used to describe macroeconomic operations and outcomes. Some commentators have suggested that there is a need to develop new terms that are not associated with orthodox economics in order to communicate a new progressive macroeconomics. But there is a tension between the benefits that may or may not flow from the development of a new language and the necessity to engage with the mainstream in relation to economic outcomes. There remains a role for better education of essential concepts in addition to a reconsideration of how the concepts are related.

We argue that Modern Monetary Theory (MMT) has a coherent story to tell about the operations of the macroeconomy and provides new insights into the opportunities available to a government and its citizens concerning full employment, and accessible high quality health, education and other infrastructure. This paper argues that MMT has struggled to gain traction in wider economic and political debates due to:

1. An incomplete understanding of key macroeconomic terms amongst economic commentators, especially journalists, and the wider community (lack of education); and
2. The deployment of key macroeconomic terms (incorrectly) in the context of pervasive cultural metaphors to support policy interventions that effectively benefit a privileged few at the expense of the majority.

We provide a conceptual basis for understanding how the language we use constrains our thinking and examine some of the key metaphors used to reinforce the flawed message of orthodox economics. We examine key ideas of modern monetary theory – an apolitical model of macroeconomic operations – and propose effective ways of expressing those key ideas in a progressive social and economic framework.

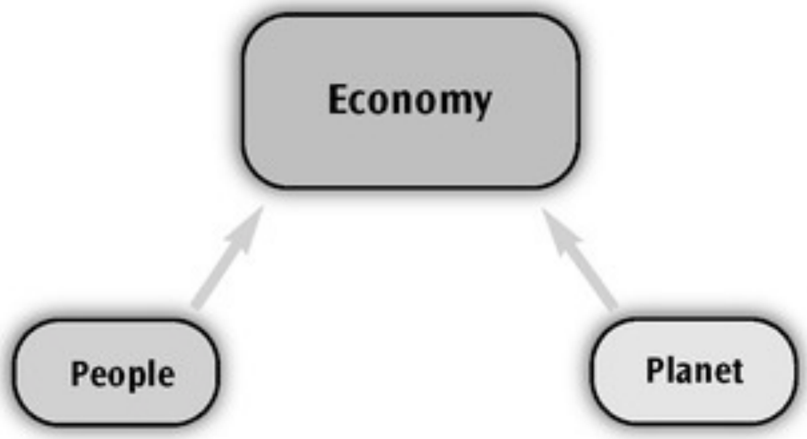
2. Two visions of the economy

Shenkar-Osorio (2012) juxtaposes two models of the economy. Figure 1 represents the conservative view, where the basic assumption is that "people and nature exist primarily to serve the economy" (Shenker-Osorio, 2012: Location 439). This narrative tells us that a competitive, self-regulating economy will deliver maximum wealth and income if "allowed" to operate with minimum intervention. The economy is figured as a deity that is removed from us though it recognises our endeavours and rewards us accordingly. We are required to have faith (confidence), work hard and make the necessary sacrifices for the good of the "economy": those who do not are rightfully deprived of such rewards.

The economy is also figured as a living entity. If the government intervenes in the competitive process and provides an avenue where the undeserving (lazy, etc) can receive rewards then the system becomes 'sick'. The solution is to restore the economy's natural processes (its health), which entails the elimination of government intervention such as minimum wages, job protection, and income support.

The key messages are "self-governing and natural", which force the obvious conclusion that "government 'intrusion' does more harm than good, and we just have to accept current economic hardship" (Shenker-Osorio, 2012: Location 386). Although subscribers to this view would have us believe this is a rational narrative, in fact it represents a type of 'magical thinking' more appropriately associated with medieval views on the relationship between individuals and the world.

Figure 1 The conservative economic construction



Source: Shanker-Osorio (2012).

In the orthodox view, the hallmarks of a successful country are whether real GDP growth is strong irrespective of whether "this comes at the expense of air quality, leisure time, life expectancy, or happiness … all of these are secondary" (Shenkar-Osorio, 2012: Location 439). The narrative teaches us that our own outcomes are dislocated from the success of the system and so success and failure are both represented as due primarily to our own efforts. The extent to which private wealth can be seen as linked to socioeconomic status and stable, high quality infrastructure is minimised. Similarly, the unemployed are seen as being responsible for their jobless status, when in reality a systemic shortage of jobs explains their plight.

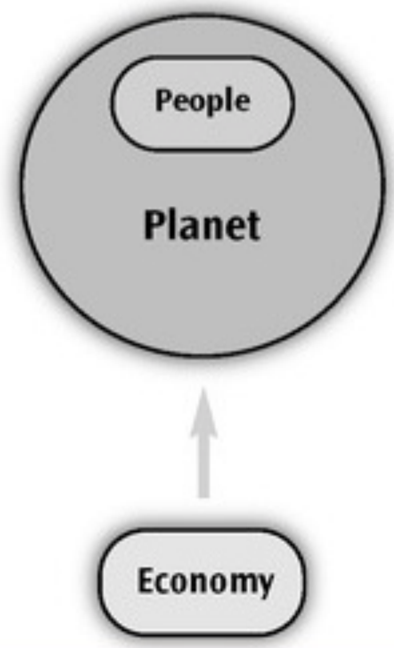
This narrative is so powerful that progressive politicians and commentators have become seduced into offering ‘fairer’ alternatives to the mainstream solutions rather than challenging mainstream assumptions root-and-branch. For example, progressives timidly advocate more gradual fiscal austerity when they should be comprehensively rejecting it on the basis of evidence that it fails, and advocating larger deficits to solve the massive rates of labour underutilisation that burden most economies.

Progressives and conservatives are hostage to the same erroneous beliefs about the way the economy operates, yet the public is compelled to believe there is no alternative (TINA) to the damaging economic policies being introduced.

Figure 2 represents an alternative view of the economy, where the economy works for us as our construction and people are organically embedded and nurtured by the natural environment. Shenkar-Osorio (2012: Location 1037) says

> This image depicts the notion that we, in close connection with and reliance upon our natural environment, are what really matters. The economy should be working on our behalf. Judgments about whether a suggested policy is positive or not should be considered in light of how that policy will promote our well-being, not how much it will increase the size of the economy.

Figure 2 The economy is Us



Source: Shenker-Osorio (2012).

In this view, the economy is seen as a ‘constructed object’ and policy interventions should be appraised in terms of how functional they are in relation to our broad goals, which a progressive vision would articulate in terms of advancing public wellbeing and maximising the potential for all citizens with the limits of environmental sustainability. The focus shifts to one of placing our human goals at the centre of our thinking about the economy. This perspective echoes the principles of functional finance (Lerner, 1943). Consistent with this, MMT highlights the irrelevance of a narrow focus on the budget balance without reference to a broader human context.

In this narrative, people create the economy. There is nothing natural about it. Concepts such as the 'natural rate of unemployment, which imply that it should be left to its own equilibrating forces to reach its natural state are erroneous. Governments can always choose and sustain a particular unemployment rate. We create government as our agent to do things that we cannot easily do ourselves and we understand that the economy will only serve our common purposes if it is subjected to active oversight and control.

The two visions of the economy can be summarised in value terms as individualistic (Figure 1) and collectivist (Figure 2). For a progressive, collective will is important because it provides the political justification for more equally sharing the costs and benefits of economic activity. Progressives have historically argued that government has an obligation to create work if the private market fails to create enough employment. Accordingly, collective will means that our government is empowered to use net spending (deficits) to ensure there are enough jobs available for all those who want to work.

The contest between the two visions outlined in Figures 1 and 2 has spawned a long-running debate in the academy. It played out during the Great Depression, which taught us that policy intervention was elemental in order to reign in the chaotic and damaging forces of greed and power that underpin the capitalist monetary system. We learned that so-called 'market' signals would not deliver satisfactory levels of employment and that the system could easily come to rest and cause mass unemployment. We learned that this malaise was brought about by a lack of spending and that the government had the spending capacity to redress these shortfalls and ensure all those who wanted to work could do so.

From the Great Depression and responses to it we learned that the economy was a construct – not a deity – and that we could control it through fiscal and monetary policy in order to create desirable collective outcomes. The Great Depression taught us that the economy should be understood as our creation, designed to deliver benefits to us, not an abstract entity that distributes rewards or punishments according to a moral framework. The government is therefore not a moral arbiter but a functional entity serving our needs. Our experiences during the period of the Great Depression led to a complete rejection of neo-classical macroeconomics.

The OPEC oil price hikes in the 1970s provided the switch point that saw the conservative ideas represented in Figure 1 regain ascendancy (see Mitchell and Muysken, 2008), despite them being cast into disrepute during the 1930s by the work of Keynes and others.

The ways in which governments around the world have responded to the GFC, in contrast to responses to the Great Depression, offer insights into the extent to which orthodox economic rhetoric has come to define economics as a profession and the public's understanding of the policy options that flow from this, guiding societies away from a model of the economy that serves to maximise collective well-being.

The resurgence of the free-market paradigm has been accompanied by a well-crafted public campaign where framing and metaphor triumph over operational reality or theoretical superiority. This process has been assisted by business and other anti-government interests, which have provided significant funds to emergent conservative, free-market "think tanks" (Quirk, 2011). Beder (1999: 30) argues that these institutions fine-tuned "the art of 'directed conclusions', tailoring their studies to suit their clients or donors" (Beder, 1999: 30). Politicians parade these so-called 'independent' research findings as the authority needed to justify their deregulation agendas. Organisations such as the Peterson Foundation and the Cato Institute (US) and the Centre of Independent Studies (Australia), among many similar bodies, continue to distort policy debates with their erroneous claims.

3. Cognitive frames and economic commentary

An overview of the assumptions that underpin cognitive linguistics and cognitive philosophy can help explain why it has been difficult to mount a coherent challenge to orthodox macroeconomic views. Lakoff and Johnson (1999: 3) make three basic claims:

1. The mind is inherently embodied
2. Thought is mostly unconscious
3. Abstract concepts are largely metaphorical

The embodiment hypothesis presumes that there are a large number of concepts that are embodied in neural structures such as motor structures or perceptual structures, and that all other concepts derive their inferential structure via mappings from these embodied structures (Chang *et al*., 2004: 1). It reflects the centrality of physical and perceptual systems in cognitive processes. Findings in neurobiological and behaviour research support the notion of embodiment and the significance of perceptual and motor systems in relation to language and understanding (Chang *et al*., 2004: 4).

Embodiment relates to everyday activities like grasping something with our hands, or standing and walking. These actions lead to the development of sensorimotor concepts that are extended into abstract theoretical domains through primary metaphors, which are embodied through our experience of being in the world. For example, Lakoff and Johnson (1999: 96) explain that we combine the subjective experience of feeling warm while being held with the experience of sensing affection. The sensorimotor domain of temperature is thus mapped onto the subjective judgment of affection. In this example, the sensorimotor domain is the source domain, and the domain of subjective experience is the target domain. The fundamental role that metaphor plays in linking perception, cognition, and linguistic expression leads to the conclusion that the mind is fundamentally metaphorical and that all language is essentially literary.

The role of metaphor and associated imaginative capacities are central to the process of conceptualisation and reasoning. Lakoff and Turner (1989: 107) note "Metaphors are conceptual mappings. They are a matter of thought, not merely language". The fact that human experience is embodied leads to the formulation of basic-level categories, like "containers", "paths", "links", "forces", and "balance" (Lakoff, 1987: 267), which are mapped onto experience in other domains in a process that is fundamentally metaphoric. The metaphors are not arbitrary social constructs. Rather, they are "highly constrained both by the nature of our bodies and brains and by the reality of our daily interactions" (Lakoff and Johnson, 1999: 96).

Metaphors are thus powerful and pervasive. These primary metaphors guide our most basic assumptions in relation to all thinking, including thinking about the economy.

For example, we understand concepts associated with 'more' or 'less' in terms of a direction 'up' or 'down' as a consequence of our physical experience of interacting with our environment. Metaphors concerned with direction are also employed in our reasoning about being happy or sad (as in 'that was an uplifting film' or 'I'm feeling down') and success or failure (as in 'she is climbing the corporate ladder' or 'he has fallen from grace'). We think about quantity in terms of direction such that 'more' is conceptualised as an upward trend, and 'less' is figured as downwards. In relation to our general thinking about money, 'more' is typically good and 'less' is typically bad. The idea that a budget deficit can be a desirable thing is thus counterintuitive in a very basic sense.

Logical flaws in our reasoning are not always apparent. As Lakoff and Johnson argue, "Conceptual systems are pluralistic, not monolithic. Typically, abstract concepts are defined by multiple conceptual metaphors, which are often inconsistent with each other" (Lakoff and Johnson, 1999: 77). The way in which we perceive phenomena can, however, change and develop. In a cognitive framework, a change in perception is described through the process of 'construal'. Meaning depends on a range of factors including background knowledge, an awareness of social and linguistic contexts, imaginative capacities like metaphor, and the construal that is imposed on the linguistic content (Langacker, 1988: 4). Policy opportunities arising from a more complete understanding of macroeconomic terms need to be communicated in a way that exploits our capacity to construe the same information in different ways.

4. Dominant metaphors in economic commentary

The mainstream theoretical models in macroeconomics that reinforce the Figure 1 perspective do not embrace the basic characteristics of the real world economy. The public in general is not aware of the impoverished status of mainstream economic theory.

The dominant New Keynesian models prior to the GFC ignored the banking sector and assumed frictionless financial markets. Buiter (2009) writes "both the New Classical and New Keynesian approaches to monetary theory (and to aggregative macroeconomics in general)" place the efficient markets hypothesis (EMH) at the centre of their analysis. He considers that "EMH is surely the most notable empirical fatality of the financial crisis " and "before 2007, the manifest failure of the EMH in many key asset markets was obvious to virtually all those whose cognitive abilities had not been warped by a modern Anglo-American Ph.D. education" (see also, Mitchell and Muysken, 2008).

The dominance of mainstream macroeconomic~~s~~ narrative in the public domain is achieved through a series of linked myths that are reinforced with strong metaphors. Table 1 shows some of the popular examples of metaphors used by mainstream economists and commentators to focus their attack on government spending, deficits, public debt and income support payments for the most disadvantaged workers. As we learned in Section 3, each of these metaphors is designed to reinforce the main core values that the mainstream paradigm seeks to promote, such as, self-discipline; independence; ambition; wealth and sacrifice (see Figure 1). These metaphors obscure the truth and lead us to support policies that make us worse off even when there are alternatives that would make us all – in a collective sense – better off.

Table 1 Examples of neo-classical macroeconomic metaphors

Focus of Attack	Metaphor	Intent
Government spending	Living beyond means	Excess, Sacrifice needed Cuts needed immediately
	Nation has maxed out its credit card	Run out of money Irresponsible spending
	Spending like a drunken sailor	Wanton irresponsibility delinquent
Budget balance	Budget black hole	Astronomical analogy Collapse of massive star
	Deteriorating state of the budget	Health analogy – illness, emergency TINA – surgery
	Mushrooming budget deficit	Out of control and unbalanced
	The nation has run out of money, it is broke	Government budget is like a household budget – the economy is like us
	Ballooning deficits and debt	Out of control
Public Debt	The US is bankrupt	Nation is a badly managed insolvent firm
	The debt mountain	Huge, insurmountable, significant
	Burdening our grandchildren	Undermining family values
	Mortgaging the future	Undermining future
Income support	Welfare dependency	Drug addiction, ill health
	Dole Bludgers, Skivers	Laziness, undeserving
	Working families	The paragon

5. Face to Face – Mainstream macro and Modern Monetary Theory

Metaphors, such as those in Table 1, reinforce a series of propositions promoted by mainstream economists and conservatives commentators to focus their attack on government intervention. We juxtapose them against the relevant operational reality presented by MMT (see Mosler, 1997-98; Mitchell, 1998; Wray, 1998; Mitchell and Muysken, 2008). The issue we consider in Section 6 is how to communicate the superior conceptual constructs developed in MMT to the wider public.

Proposition 1: The government faces the same budget constraints as a household

The household budget analogy is false. Households use the currency and must finance their spending. A sovereign government issues the currency and must spend first before it can subsequently tax or borrow. A household cannot spend more than its revenue indefinitely because continuously increasing private debt is unsustainable. The budget choices facing a household are thus limited and prevent permanent deficits. A currency-issuing government can never be revenue-constrained in a technical sense and can sustain deficits indefinitely without solvency risk.

The Euro nations are an exception. They surrendered currency sovereignty and thus have to borrow to cover deficits, which make them dependent on bond markets (in lieu of European Central Bank support) and exposes them to solvency risk.

Implications:

- The household budget analogy is inapplicable.
- Our own personal budget experience generates no knowledge relevant to consideration of government matters.
- An alternative narrative must highlight the special characteristics of the government's currency monopoly.

Proposition 2: Budget deficits are bad and budget surpluses are good

Budget deficits are neither good nor bad and, in accounting terms, equal the non-government surplus. In behavioural terms, they are required when spending intentions of the non-government sector are insufficient to ensure full utilisation of available productive resources. The context matters because the budget is a vehicle to achieving socio-economic goals rather than an end in itself.

Similarly, budget surpluses are neither good nor bad and may be harmful in some circumstances. Conversely, for a nation with strong net exports, quality public services, and national income levels sufficient to support the private sector's saving desires, a surplus may be required to contain nominal aggregate demand and avoid inflation.

There are two problems with using the term budget deficit. First, the budget outcome is determined by the state of overall activity and is, largely, beyond the control of government. If private spending is weak then the deficit will typically rise as tax revenue declines irrespective of what government does. The endogeneity of the budget militates against the use of arbitrary and rigid fiscal rules. Movements in the budget balance are thus ambiguous. A given budget outcome can be signal that the deficit is 'good', if it has arisen as a result of discretionary fiscal policy decisions by government to maintain full employment given the spending and saving decisions of the non-government sector; or 'bad', if it has arisen because non-government spending has fallen and the automatic stabilisers have led to a decline in tax revenue and an increase in unemployment. When private spending collapses and the deficit rises, the correct response is to increase discretionary net public spending not cut it.

Second, the term has a negative connotation because a deficit signifies a shortfall, which while accurate in an accounting sense, is highly misleading in the context of the positive contribution that a deficit makes to non-government sector net financial wealth. Government deficits are the sole source of net financial assets for the non-government sector. All transactions between agents in the non-government sector net to zero. This accounting reality means that if the non-government sector wants to net save in the currency of issue then the government has to be in deficit.

The sectoral balances derived from the national accounts generalise this result and show that the government deficit (surplus) *always* equals the non-government surplus (deficit). The systematic pursuit of government budget surpluses is necessarily manifested as systematic declines in non-government overall savings. Budget surpluses either destroy private wealth by forcing the private sector to liquidate its wealth to get cash, or destroy liquidity (debiting reserve accounts), which is deflationary. With an external deficit, budget surpluses result in increasing private domestic sector debt levels.

This cannot be a viable long-term growth strategy because the financially constrained private domestic sector is unlikely to be able to sustain on-going deficits. Ultimately, the decision by the private domestic sector to increase its net saving and reduce its debt levels will interact with the fiscal drag coming from the surpluses and force the economy into recession. The cyclical component of the budget will then push the deficit back into a (bad) deficit.

Implications:

- Understanding the context in which a particular budget outcome occurs is crucial to a reasoned assessment of the appropriateness of the fiscal position.
- The fact that a budget deficit allows the non-government sector to save overall and a budget surplus destroys non-government wealth should be promoted.

Proposition 3: Budget surpluses contribute to national saving

A currency-issuing government does not save in its own currency. Budget surpluses do not represent "public saving", which can be used to fund future public expenditure. Saving is an act of foregoing current spending to enhance future spending possibilities and applies to a financially constrained non-government entity, such as a household.

A currency-issuing government never needs prior funds in order to spend and thus never needs to 'save'. Budget surpluses provide no greater capacity to governments to meet future needs, nor do budget deficits erode that capacity. The constraints on government spending are not financial but are defined by the availability of real resources that are available for sale in the currency that the government issues (see Proposition 7).

Implications:

- Budget surpluses destroy non-government wealth.
- Budget deficits increase non-government wealth.

Proposition 4: The budget should be balanced over the economic cycle

Recognising that the budget outcome is endogenous means that the government cannot realistically target a budget outcome because changes in private spending, for example, can thwart any efforts made by the government to achieve that target. The responsible strategy for a government is to allow its budget to adjust to the level of net spending required to achieve full employment, given the spending decisions of the non-government sector, irrespective of the state of the business cycle.

The national accounts tell us that for a nation with an external deficit, a balanced budget rule is tantamount to requiring the private domestic sector record a deficit of equal magnitude to the external deficit. This is unlikely to be a sustainable strategy.

Further, a counter-cyclical fiscal strategy does not require the government to achieve a surplus. The concept of counter-cyclicality more correctly refers to the direction of change rather than the level of the budget outcome. The government should not increase its discretionary net spending if the economy is already at full capacity and it is satisfied with the private spending mix. Such an expansion would be pro-cyclical.

But holding a steady deficit where the external deficit is steady and the private domestic sector is saving overall and content with that outcome is desirable.

Implications:

- Fiscal rules defined in terms of public debt or deficit ratios are unlikely to be consistent with the responsible management of fiscal policy.
- A currency-issuing government should pursue functional targets and allow its budget outcome to adjust accordingly.

Proposition 5: Budget deficits drive up interest rates and crowd out private investment because they compete for scarce private saving

This is a specific version of Proposition 2. There is no competition for finite savings between public and private borrowers. First, government deficits stimulate growth and private savings as national income grows. Second, the funds that the government borrows from the non-government sector ultimately originate from the net financial assets created by past deficits. Third, bank lending is not 'reserve constrained' and banks will extend loans to any credit worthy customer. If the banks are short of reserves then they borrow from each other in the interbank market. Ultimately, they can always borrow from the central bank.

History shows that Japan has run large deficits since the early 1990s while simultaneously maintaining zero interest rates and low inflation. Further, budget deficits have risen sharply in recent years in most nations but interest rates have remained close to zero. The reality is that the central bank sets interest rates, not the market.

Moreover, deficits place downward pressure on interest rate. Debt-issuance serves to allow the central bank to maintain a positive target interest rate by providing investors with an interest-bearing asset that drains the excess reserves in the banking system that result from deficit spending. If these reserves were not drained (that is, if the government did not borrow) then in an environment of government deficits, the overnight interest rate would fall (due to competition by banks to rid themselves of the non-profitable reserves) and this may compromise the central bank's target interest rate, unless it offers a return on excess reserves, which most do.

A related claim is that the sovereign issuer of currency is at risk of default if the public debt ratio rises above some threshold (often construed as 80 per cent). As long as the government only issues debt in its own currency and provides no assurances about convertibility into another currency, the default risk is zero.

Implications:

- Public debt is used as part of an interest-maintenance strategy by central banks and does not fund government spending.
- There is no default-risk for debt issued by a government in its own currency.
- Currency-issuing governments do not need to borrow.

Proposition 6: Budget deficits mean higher taxes in the future

Taxes serve many purposes (reducing private sector purchasing power; reducing consumption of harmful goods and services such as tobacco; etc) but none of these purposes relate to funding government spending.

In a fiat monetary system, where the currency has no intrinsic worth, the government needs to transfer real goods and services from the non-government to the government sector to facilitate its economic and social program. In this context, a primary function of taxation is to promote offers from private individuals to government of goods and services in return for the necessary funds to extinguish tax liabilities. The crucial point is that the funds necessary to pay the tax liabilities are provided to the non-government sector by government spending. Accordingly, government spending, if sufficient, provides the paid work, which eliminates the unemployment created by the taxes.

Another way of expressing this role of taxes is to recognise that by depriving the non-government sector of purchasing power, they can attenuate aggregate demand so that government spending has the real resource space necessary without incurring inflation.

Importantly, every generation can freely choose the level of taxation it pays because they determine, through the political process, the size of government and the real resource space it will utilise. Past budget deficits never need to be paid back by the current generation.

A related proposition that taxpayer money should not be wasted is flawed as a result of the erroneous causality implied that taxes fund government spending.

Implications:

- Taxpayers do not fund government spending.
- Taxes are required to reduce the capacity of the non-government sector to command real goods and services so that government can utilise them.

Proposition 7: The government will run out of fiscal space (money)

This is related to Propositions 1, 5 and 6. Conservative politicians often claim the government will run out of money if it does not curb spending. They attempt to give this statement authority by appealing to our intuition and experience – that is, they draw on the household budget analogy, and claim that governments, like households, have to live within their means. This analogy resonates strongly with voters because it attempts to relate the more amorphous finances of a government with our daily household finances. We know that we cannot run up our household debt forever and that we have to tighten our belts when our credit cards reach our borrowing limit. We can borrow to enhance current spending, but eventually we have to sacrifice spending to pay the debts back. We intuitively understand that we cannot indefinitely live beyond our means.

As noted above, a currency-issuing government has no financial constraints and can never run out of money. Fiscal space is thus more accurately defined as the available real goods and services available for sale in the currency of issue. These are the "means" available to government to fulfil its socio-economic charter. The currency-issuing government can always purchase whatever is for sale in its own currency.

This is also related to the intergenerational (ageing) population claims that pension and health care systems will be unsustainable in the future. There are no financial constraints on a currency-issuing government providing first-class health care and/or pensions in the future. The challenge of rising dependency ratios will be whether productivity growth ensures there are adequate real goods and services available to maintain growth in living standards with fewer workers available. These are not financial constraints.

A variation on this proposition is that public debt imposes intergenerational burdens when past budget deficits have to be paid back. Deficits are not “paid back” and intergenerational burdens are linked to the availability of real resources. For example, a generation that exhausts a non-renewable resource imposes a burden on the next generation.

Implications:

- Fiscal space is not defined in terms of some given financial ratios (such as a public debt ratio).
- Fiscal space refers to the extent of the available real resources that the government is able to utilise in pursuit of its socio-economic program.

Proposition 8: Government spending is inflationary

All spending (private or public) is inflationary if it drives nominal aggregate demand faster than the real capacity of the economy to absorb it. Increased government spending is not inflationary if there are idle real resources that can be brought back into productive use (for example, unemployment).

Related propositions include the claims that issuing bonds to the central bank, the so-called ‘printing money’ option, devalues the currency whereas issuing bonds to the private sector reduces the inflation risk of deficits. Neither claim is true. First, there is no difference in the inflation risk attached to a particular level of net public spending when the government matches its deficit with bond issuance relative to a situation where it issues no debt, that is, invests directly. Bond purchases reflect portfolio decisions regarding how private wealth is held. If the funds that we used for bond purchases were spent on goods and services as an alternative, then the budget deficit would be lower as a result. Second, the provision of credit by the central bank (in return for treasury bonds) will only be inflationary if there is no fiscal space (see Proposition 7).

Hyperinflation examples such as 1920s Germany and modern-day Zimbabwe do not support the claim that deficits cause inflation. In both cases, there were major reductions in the supply capacity of the economy prior to the inflation episode.

Implications:

- All spending carries an inflation risk and issuing treasury bonds does not mitigate the risk associated with public spending.
- Government deficits should seek to bring idle resources back into productive use.
- The limits of non-inflationary public spending are defined by the fiscal space available.

Proposition 9: Budget deficits lead to big government

Budget deficits may reflect large or small government. Even small governments will need to run continuous deficits if there is a desire of the non-government sector to save overall and the policy aim is to maintain full employment levels of national income.

Economic theory does not specify an optimal size of government. This reflects an ideological commitment with no basis in economic theory. The size of government will reflect the preferences of the population for public provision of goods and services and infrastructure.

Implications:

- The size of government is a political choice rather than an economic necessity.
- Even small governments will typically run continuous deficits to maintain full employment.

6. Framing a progressive macroeconomics narrative

6.1 The progressive challenge

While MMT provides an internally consistent and empirically robust account of the way the economy works it also clearly challenges the way in which humans think about macroeconomic concepts. The task is to frame a progressive macroeconomics narrative, based on MMT concepts, which can overcome these challenges. While MMT provides an accurate description of how the capitalist monetary system operates and can support policies prescriptions consistent with either the individualistic or collective value systems, we prefer to situate this challenge within a collective vision of public purpose.

A related advantage for progressives of promoting public awareness in MMT is that the ideological basis of conservative policy agendas would become more transparent. It could no longer be said that fiscal austerity needs to be imposed because the government has run out of money. It is anticipated that if the public were to have a better understanding of how the system actually works and could correctly distinguish between fiscal space constraints and ideological constraints, we would end austerity and demand policy responses that enhanced our collective and individual wellbeing.

The progressive starting point has to be the social purpose of government policy rather than a view of the economy to be a natural entity, separated from us, which gets sick if government attempts to alter its natural course. The social purpose of government policy should be articulated and narrated in ways that will resonate with and activate the frames in our brains that constrain the way we interpret information. That exercise should pre-date the presentation of the facts outlined in Section 5.

As an example, the New Zealand Mayors Task for Jobs developed its policy interventions and said it was "working towards the 'zero waste' of New Zealanders" (see http://www.mayorstaskforceforjobs.co.nz/). They promoted their mission with slogans such as "Our Youth, Our Future". These objectives can easily be generalised to embrace all citizens, with additional goals being defined for those that are not able to work.

Importantly, these mission statements cannot be a reflection of general goals that have almost universal desirability but no associated concrete actions. The debate between conservatives and progressives is not about whether there should be full employment but what that means in action. For example, does full employment mean 5 per cent unemployment or 2 per cent? Who is responsible for its attainment? How should it be attained?

We might think that 'Jobs for all that want to work' is a desirable purpose. Almost everyone would agree on that. But progressives have to relate this generality to a policy action – aggregate demand has to rise by x per cent and y million jobs have to be created. Progressives have to invoke event-causation structures to force the debate to move beyond generalities such as 'free markets will grow the economy and create jobs'. They have to clearly articulate why mass unemployment occurs and how it will not naturally cure itself. Further, by implicating the government as part of the solution they have to counter such claims that governments do not create jobs by detailing public employment initiatives that clearly create productive work.

While the following list might define a progressive expression of collective purposes they have to have be accompanied by clear and consistent action and responsibility statements:

- Jobs for all that want to work
- Price stability
- Income security for those that cannot work
- Fair share of the economic pie for all (fairness not greed)
- Zero waste of people
- More skill development
- More educational access
- Safer cities
- Environmental care

6.2 Progressive language and metaphor

We see the progressive challenge in two parts: (a) a need to better educate the public regarding macroeconomic matters in ways that our learning skills can absorb; (b) develop language that appeals to our intrinsic frames, which foster concern and action (such as economic justice/rights) and connect people with the economy rather than reinforce the Figure 1 idea that the economy is a natural construct that we should fear.

In this vein, a progressive narrative has to use, according to Lakoff (2010), "insight into the nature of unconscious reason and the role of language" to frame the message. In this section, we present some examples of how we might proceed. A future paper will examine this issue in more detail.

The primary metaphor **Purposes Are Destinations** relates to the subjective judgement that we want to achieve purposes and we succeed when we reach a destination.

Progressives must define the destination in terms of people rather than in terms of an independent 'economy'. We define our purpose as having 'zero waste of people'. This destination is reached not when the public debt ratio is x per cent but when unemployment is 2 per cent and zero underemployment. Rather than complain about high unemployment, we must always specify the desired destination, which links with the **Purposes are Desired Objects** metaphor. Accordingly, debating financial ratios such as the size of deficits merely reinforce the conservative frames about sacrifice, solvency, rectitude, and drunken sailors. We must always focus on the desired objects that relate directly to the intrinsic frames.

A key issue concerns language and terminology. As Shenker-Osorio notes, the term 'spending' may be problematic because to 'spend' means 'use up'. This implies that what is spent has then gone and is no longer with us. This language supports erroneous assumptions about what a government that is the sovereign issuer of its own currency does with money (Shenker-Osorio, 2012: Location 452).

Our language needs to reinforce the reality that government spending injects financial assets into the system, which not only meet "critical human needs" but "change hands again and again … [and] have their efficacy multiplied through exchange" (Shenker-Osorio, 2012: Location 452).

We might thus say:

Governments invest to enhance our purposes (rather than spend)

Invest is a term we readily relate to wealth creation – that is, 'building up' not 'using up'.

This invokes the **More is Up** metaphor, which works in reverse for something that is considered 'bad'. We noted that the term – budget deficit - has a negative connotation because it signifies a shortfall. In part, this relates to Proposition 1 – the household analogy. Using 'budget' with 'deficit' triggers this analogy immediately. We should thus only use the term 'government deficit (surplus)' and eschew the use of the accompanying qualifier 'budget'.

The term deficit is clearly accurate in an accounting sense, but highly misleading in the context of the contribution that a deficit makes to non-government sector net financial wealth. But trying to replace the term deficit would almost certainly result in a total loss of meaning, further complicating the challenge to win over the public debate.

We thus consider the progressive challenge is not to invent a new term for deficit, but rather to exploit the **More is Up** metaphor to advantage. First, the household analogy should be debunked regularly – *we* can run out of money but how can the government? A related issue that needs to be debunked is the linked connotation to inflation and printing money. That will be discussed in our next paper.

Second, we can exploit the **More Is Up** metaphor by always relating the government deficit to its non-government manifestation – the rising net financial assets that a deficit provides.

So we should say:

The government deficit rose and generated higher levels of wealth for households and firms.

This type of language also more aggressively invokes the **Event-Structure** metaphor, which constructs "purposes as destinations to be reached" (Lakoff and Johnson, 1999: 94). The destination must be prominent in the narrative and then we must specify the causal chains through which the purposes are achieved. Causation is linked to concepts of forced movement where, for example, we might say that the government deficit is the application of a force (the injection of net financial assets), which causes a change of state (higher income, employment, or wealth).

Lakoff and Johnson (1999: 91) say the concept of forced movement suggests to us that the "movement would not have occurred without the application of the force" (that is, the economy is a construct rather than a natural equilibrating system beyond us) and that the improvement in national income or employment was the direct result of the cause (the government stimulus).

People respond to the logic where **Causes are Forces** and **Causation is Forced Movement**. In the 'economy as a natural system or deity' approach, government regulations and interventions are unnecessary and damaging. In the progressive alternative, the same actions force movement towards our desired destinations and without the force the current state does not change and the goals are thus not achieved.

We want government to act on our behalf to move us from State A (less desirable) to State B (closer to our purpose). It is important to note that the economy has no goals. They are *our* goals and *we* use, manage, and control the economy to achieve our goals.

Further, careful choice of frames to promote in the public debate is important. For example, while conservatives focus on concepts such as 'tax relief' to attack government, progressives should frame the debate by emphasising the need for 'unemployment relief' – a frame that makes unemployment painful and a reduction in the pain a desired goal.

Relatedly, progressives should avoid debating within the frames that conservatives use. For example, attacking the British government's pursuit of fiscal policy as being 'too fast' implies that the desirable alternative is more gradual (managed) reduction in the government deficit. The frame is that the budget deficit is bad and has to be reduced. The more productive progressive frame would be to explicate the functional role of government deficits (Section 5). Progressive rhetoric must continually reference the costs to people of conservative policies. A demand for 'relief' from high unemployment reframes the debate and focuses on the failure by conservative forces to reach the desired destination (access to employment). Every statement must reinforce purposes and destinations that define how we feel about policy.

6.3 Fiscal space

Propositions 2 and 6 show that the government deficit **always** equals the non-government surplus, and the government surplus **always** equals the non-government deficit. For most nations, the combination of external deficits and a desire by the private domestic sector to save overall, means that the non-government sector will act as a drain on overall spending in relation to income flows. This means a continuous budget deficit is required to sustain a given level of activity.

A progressive macroeconomics agenda thus has to recognise that a **normal** state will require continuous government deficits over each business cycle rising and falling with fluctuations in non-government sector net spending. Rarely, will a government surplus be appropriate.

Further, government deficits are not just appropriate in times of recession or slow growth. They are required whenever there is a non-government desire for a surplus, which is the typical case.

We might thus continually reinforce the frame:

Government deficits are normal, surpluses are atypical

This means that 'balanced budgets over the cycle' type arguments, which progressives use in order to appear responsible – 'deficits in bad times, surpluses later when times are better' – are destructive and fall into the misleading 'deficits are bad' frame.

Progressives would thus frame the concept of fiscal space in terms of the idle real resources that can be brought into productive use via higher government spending and/or lower taxation. The idle resources signal that the government deficit is too low or the surplus is too large. The desired destination is zero waste and the required action is a larger deficit.

6.4 Costs of a public program

The emphasis on real resource availability as the demarcation of fiscal space is also related to a frame relating to cost.

We often hear or read statements such as:

- Cost to taxpayer
- The new school cost …
- The nation cannot afford the cost of that …

If we were to take a public employment program that required government to spend $x billion in wages, capital equipment, administration and oversight, we might reasonably ask about the cost of that program. The conservative frame tells us that the cost is $x (the figure that appears in the annual budget documents against the program).

The progressive frame considers the $x in the budget papers to be of little interest. The actual cost of the program is the change it causes in the usage of **real resources** - more consumption by the unemployed workers, some equipment etc. An additional cost would be the opportunity costs of such a program (that is, the resources that are diverted from other uses as a result of it) are minimal given the unemployed are idle. These costs are excluded from the conservative frame.

When we ask whether the nation can afford an initiative that a currency-issuing government wishes to implement, we should ignore the $x and consider what real resources are available, as in levels of unemployment, equipment etc. Those available resources constitute the fiscal space. Whenever we talk about fiscal policy it should always be in relation to the fiscal space rather than centred on $x. The fiscal space should then always be related to the purposes to which we aspire, and the destination we wish to reach.

6. Conclusion

MMT provides an accurate description of how the monetary system actually operates. It remains an accurate account of the macroeconomy regardless of whether the policy framework the economy supports is driven by an individualistic or a collectivist value system. Responsible economic management does not entail a commitment to an orthodox economic model, or to a positive or negative figure in a budget.

The decision to pursue a policy framework consistent with Model 1 or Model 2 (as described in Section 2) is purely ideological. Orthodox economic rhetoric associated with Model 1, trades on an incomplete understanding of macroeconomic realities and exploits powerful metaphors to ensure that these realities and related policy opportunities are obscured from vision.

When this economic reality is understood and framed in an accessible way, it is anticipated that decisions to cut spending on welfare, and other public goods care will be seen not as responsible economic management, but ideologically motivated decisions that deprive our children of a future, and rob the most vulnerable members of our society of the opportunity to thrive.

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[1] The authors are Member, Centre for Literary and Linguistic Computing, University of Newcastle (Connors) and Director of Centre of Full Employment and Equity and Professor of Economics at the Charles Darwin University, Australia (Mitchell). William Mitchell also holds the position as Conjoint Professor, University of Newcastle, Australia.