

Emerging Fiscal Paradigms and their Implications for Microeconomic Reform

‘Stephanie Kelton and Gary Banks walk into a bar...’

Lachlan McCall

ANU Crawford School of Public Policy
Economist | Department of Foreign Affairs and Trade



Australian
National
University



Abstract

This paper examines the implications of central bank reserve accounting operations for microeconomic reform and productivity. Keen's MINSKY model is used to quantitatively evaluate the hypothesis of endogenous public finance advanced by Mosler and Kelton, before considering complementarities between Kelton's sector-specific "bottleneck" approach to inflation management and the policy recommendations of neoclassical microeconomists such as Banks in competition policy and price transparency. The paper argues the operations of the existing Treasury-central bank reserve accounting system afford policymakers in currency sovereign economies greater capacity to pursue productivity-enhancing reforms than previously considered possible under earlier theoretical frameworks, both in terms of greater latitude for revenue-negative reforms, and politically-distributionally in terms of capacity to compensate groups detrimentally affected by reform. Expansion of the production possibility curve, rather than revenue maximisation, determines fiscal capacity in the long run. The paper therefore presents an alternative to the post-crisis revenue constraint argument on microeconomic reform articulated by Henry. It finally posits that if productive capacity and inflation, rather than insolvency, ultimately constrain fiscal policy in a currency sovereign economy, then microeconomic reform and productivity growth assume an elevated importance to the policy space available to macroeconomic policymakers and the long-run conduct of macroeconomic policy. The paper proposes two fiscal policy rules accordingly: a 'Kelton' Rule for short-run inflation offsets at the top of the target band, and a Productive Capacity Rule for long-run inflation offsets at the bottom of the target band achieved through productivity growth.



Structure

1. Overview: Introduction and Hypothesis
2. Assessing the endogenous public finance (Kelton-Mosler) hypothesis using Keen's mathematical model
3. Implications for microeconomic reform:
 1. Productivity growth—not the intertemporal budget constraint—determines fiscal capacity
 2. Microeconomic reform is always fiscally affordable
 3. Monetary sovereigns can always afford to compensate the “losers” of reform – Henry revisited
 4. Sector-specific inflation bottlenecks
4. Policy recommendations
 1. Fiscal Policy Rule 1: the Productive Capacity Rule
 2. Fiscal Policy Rule 2: the ‘Kelton’ Inflation Offset Rule
 3. General recommendations



1. Overview

Paper's hypothesis

1. Government spending is automatically financed by money creation (the endogenous public finance hypothesis)—the “money printing” debate is moot.
2. Such governments (Australia, Japan, the US) can therefore always afford to close the output gap (Lerner's Functional Finance).
3. Productivity growth and the production possibility frontier—not insolvency—constrains fiscal policy.
4. The currency issuer can **always afford productivity-enhancing microeconomic reform**, and can **always afford to compensate detrimentally-affected groups**.
5. Fiscal policy rules and budget processes should be reformulated around short-run price stability (and full employment) goals and long-run productivity goals.



“[Re]Emerging Fiscal Paradigms”

“Fundamentally the new theory... is extremely simple. **Indeed it is this simplicity which makes the public suspect it as too slick.** Even learned professors who find it hard to abandon ingrained habits of thought have complained that it is ‘merely logical’ when they could find no flaw in it.”

“The central idea is that **government fiscal policy**, its spending and taxing, its borrowing and repayment of loans, its issue of new money and its withdrawal of money, **should be undertaken with an eye only to the *results* of these actions on the economy** and not to any established doctrine about what is sound and unsound.”

“The first responsibility of the government is to keep the total rate of spending on goods and services neither greater nor less than the rate which at current prices would buy all the goods which it is possible to produce. **If total spending is allowed to go above this there will be inflation, and if it is allowed to go below there will be unemployment.**”



“[Re]Emerging Fiscal Paradigms”

“Fundamentally the new theory... is extremely simple. **Indeed it is this simplicity which makes the public suspect it as too slick.** Even learned professors who find it hard to abandon ingrained habits of thought have complained that it is ‘merely logical’ when they could find no flaw in it.”

“The central idea is that **government fiscal policy**, its spending and taxing, its borrowing and repayment of loans, its issue of new money and its withdrawal of money, **should be undertaken with an eye only to the *results* of these actions on the economy** and not to any established doctrine about what is sound and unsound.”

“The first responsibility of the government is to keep the total rate of spending on goods and services neither greater nor less than the rate which at current prices would buy all the goods which it is possible to produce. **If total spending is allowed to go above this there will be inflation, and if it is allowed to go below there will be unemployment.**”

–Abba P. Lerner (1943), ‘Functional Finance and the Federal Debt’, on Keynes’ *General Theory*



Endogenous Public Finance Hypothesis

- Currency-issuer governments always spend by automatically creating money (reserves), i.e. endogenously—surpluses and deficits are self-financing.
- Money creation, not taxes and borrowing, finances all currency-issuer government spending.
- Government net spending creates the funds used to purchase bonds.
- Bond sales are a reserve drain (an asset swap between securities and reserves), not a funding operation.
- Positive (descriptive), not normative (prescriptive).
- Mosler (1995), Kelton (1998, 2000), Wray (1998).



Working Paper No. 244

Can Taxes and Bonds Finance Government Spending?

by

Stephanie Bell*

Cambridge University Visiting Scholar, The Jerome Levy Economics Institute

July 1998

“This paper investigates the commonly held belief that government spending is normally financed through a combination of taxes and bond sales. The argument is a technical one and requires a detailed analysis of reserve accounting at the central bank. After carefully considering the complexities of reserve accounting, it is argued that **the proceeds from taxation and bond sales are technically incapable of financing government spending and that modern governments actually finance all of their spending through the direct creation of high-powered money.**”



Endogenous public finance restated (Blanchard)



Olivier Blanchard @ojblanchard1 · Nov 5, 2019

Taking again the risk of discussing an MMT proposition, and fully expecting to be told that I have not understood....

One of the propositions of MMT is that, in contrast to standard mainstream arguments, government spending is automatically financed by money creation.

23 183 358



Olivier Blanchard @ojblanchard1 · Nov 5, 2019

(This typically comes with statements that one must carefully look at the flows, but that once one has looked, the proposition is obvious)

I believe the proposition is both right, and utterly irrelevant.

8 20 46



Olivier Blanchard @ojblanchard1 · Nov 5, 2019

It is right: When the government buys something or pays somebody, it draws on its Treasury account at the Fed (so long as there are funds on the account, as the account cannot go negative). This indeed automatically increases central bank money in circulation.

4 18 41



Olivier Blanchard @ojblanchard1 · Nov 5, 2019

So, in this sense, the spending is automatically financed by money.

It is however utterly irrelevant, because of what happens next.

4 17 30



Endogenous public finance restated (Blanchard)

 **Olivier Blanchard** @ojblanchard1 · Nov 5, 2019 ...

In the olden days (i.e before bank reserves paid interest), the Fed targeted the funds rate. When the additional funds were deposited at the banks, and, as a result, the amount of central bank money in circulation was too high, it would intervene through an open market operation.

2 18 28

 **Olivier Blanchard** @ojblanchard1 · Nov 5, 2019 ...

It would decrease central bank money by selling bonds. So, at the end of the day (literally the day), the money supply was unchanged. The amount of government bonds in the hands of the public was higher. Higher spending led to higher interest-paying debt of the government.

2 17 36

 **Olivier Blanchard** @ojblanchard1 · Nov 5, 2019 ...

Replying to @ojblanchard1

Nowadays, bank reserves pay interest. As banks are willing to hold interest-paying reserves, the Fed does not need to intervene. So, after the initial increase in central bank money, the additional funds are held by banks as interest-paying reserves.

2 15 28

 **Olivier Blanchard** @ojblanchard1 · Nov 5, 2019 ...

From a fiscal viewpoint however, the increase in interest paying bank reserves is like an increase in gvt bonds: Both pay roughly the same rate. As in the olden days, higher spending leads to higher interest-paying debt of the consolidated gvt (central gvt and central bank).

6 20 39

 **Olivier Blanchard** @ojblanchard1 · Nov 5, 2019 ...

In short, what happens initially is irrelevant for what happens later.

12 16 59

Summary:

- Endogenous public finance hypothesis is correct, “but irrelevant”, because CBs pay interest (deposit rate) on reserves.
- However, this objection is itself irrelevant...



Endogenous public finance restated (Macfarlane)



“...the spending came first, that part is correct. A lot of people are surprised when they hear that, but **that has always been the case...** If you divide the economy into two halves, the government (the central bank plus the Treasury) and the other half, which is the banks and their customers, **if one half has a deficit** (the government), then **the other half has to have a surplus**. They have to add up to zero. This is an accounting identity. It’s true by definition... But most people aren’t really convinced by an identity. So the alternative way is to **follow the money, from the Treasury to the central bank to the bank to the bank customer.**”

Let’s take an example where the government decides to spend a billion dollars. The first step is the government or the central bank has to transfer that billion dollars to the banks of whoever the money is intended for, it goes to the bank, it doesn’t go directly to them. The central bank has to debit the government’s account at the central bank by a billion dollars, and credit that bank’s account at the central bank by a billion dollars. So the banks have got a billion dollars more, it’s an asset, but they’ve also got to credit it to their customers, the liability of a billion dollars. But the crucial point is that the banks have got this billion dollars extra on deposit at the Reserve Bank. That’s a loan [liability] to the Reserve Bank. And that’s the bit that a lot of people leave out when they’re trying to understand how the spending occurs, but the spending, dollar for dollar, that deficit spending has to show up as a borrowing from the private sector. Initially it shows up as a loan from the banks to the central bank [reserves are assets of the banks and liabilities of the central bank].”

—Former RBA Governor Ian Macfarlane, *‘The Rise and Fall of Monetary Policy’*, Interview with Joseph N. Walker, Jolly Swagman podcast, 4 October 2020.



Endogenous public finance restated (Macfarlane)

Walker: “You have a unique insight into the plumbing of the banking system... During your time at the RBA... **What does the flow of funds actually look like?** Were you sitting in front of computer screens, seeing the money coming in, money going out, did you used to write it on bits of paper? How is it done?”



Macfarlane: “It’s all real time, it’s instantaneous... Before I was Governor, when I was in the bowels of the Reserve Bank, I used to get involved in this. **For example, every fortnight, the government would pay pensions.** And so what would happen is, in those days they had a **magnetic tape that would come up from Canberra.** On that magnetic tape would be the list of everyone who was going to receive the money, their BSB and account number. **So this tape would come up, that would go to the RBA, and it would go through a computer, and we’d channel it off into each of the banks’ accounts at the RBA [Exchange Settlement Accounts].** And then those banks would do the same thing, and channel it to the pensioners. **So that’s how the system works, [it] comes from Treasury first, then to the central bank, then central bank to banks, then banks to customers.”**

“The other interesting aspect is **the banks can’t get rid of it [the reserves]** unless they do a particular thing, they can’t just spend [or lend] it away. It stays there, unless the banks, or their customers, buy a government bond, [which] draws down the banks’ [reserve] deposit at the central bank and credits the government’s account at the Reserve Bank. **Unless the banks actually buy a newly-created government bond, that loan to the central bank [reserves] stays there.”**

—Macfarlane (2020)



Bond sales are monetary—not fiscal—policy

(A rejoinder to Blanchard)

- Macfarlane: the banking system cannot spend (or lend) out excess reserves. **“Unless the banks buy a newly-created government bond, which draws down the banks’ exchange settlement accounts at the central bank, those [excess] reserves stay there.”**
- Entirely consistent with Wray (1998) and Mosler (1995): **bond sales are a reserve drain operation, not a funding operation.**
 - “If government spending is ‘financed’ through the creation of fiat money [i.e. if Blanchard and Macfarlane are correct]...then why does the government sell bonds? Of course, governments believe they must sell bonds to finance spending. However, this is an illusion, as **the spending must come first**. Bond sales function to drain excess reserves; they cannot finance or fund deficit spending.” (Wray 1998: 85)
 - Bond sales do not fund deficits (reserve creation does, per Blanchard), they drain excess reserves created by the deficit, restoring the cash market’s pre-deficit equilibrium and enabling the RBA to hit a target cash rate above the deposit rate.
- Friedman (1975): **“One of the great mistakes is to judge policies and programs by their intentions rather than their results.”**
- Hail (2014) and Mitchell, Wray and Watts (2019: 326): given their results, **federal bond sale programs “are not really fiscal policy, they’re monetary policy.”**

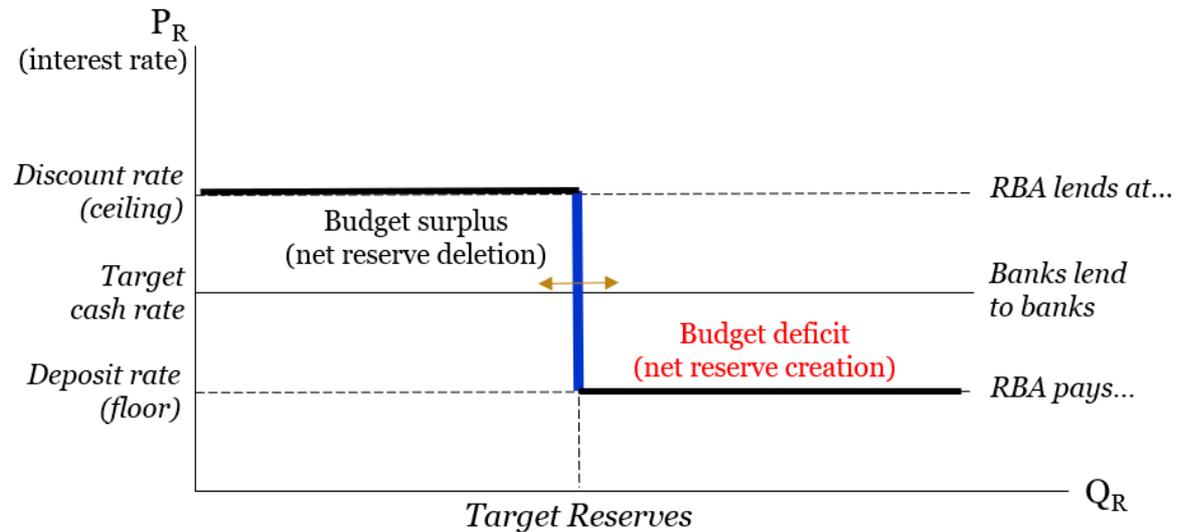


Bonds, interest rates and liquidity management

Graphical treatment of the overnight cash market

- Government spending creates and adds reserves to the banking system. Taxation deletes reserves.
- Therefore, deficits flood the cash market with reserves, pushing interest rates *down*, not up.
- AOFM bond sales relieve this downward pressure by draining excess reserves, restoring equilibrium and returning P_R to the RBA's target rate.

Figure 1. Impact of fiscal deficits and surpluses (before bond sales) on the cash market (pre-QE) under a corridor system



Source: Hail (2019)



2. Testing the hypothesis

KEEN'S MATHEMATICAL MODEL OF MONETARY OPERATIONS

Keen's mathematical model

- 'Minsky' dynamic financial systems modelling software (open source)
- Tracks the flow of funds in a stock-flow consistent manner (Godley and Lavoie 2012).

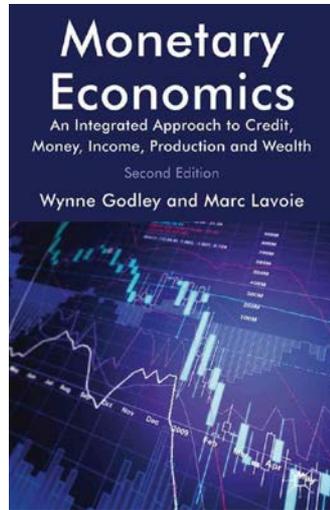
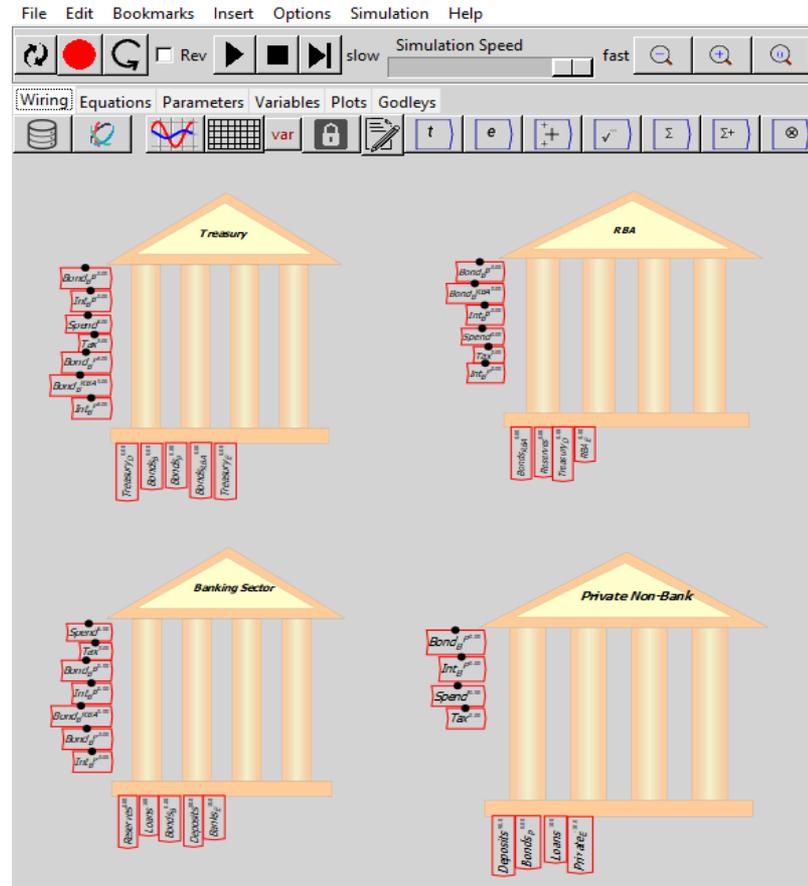


Figure 2. 'Minsky' modelling software, institutional interface



Source: Author



Keen's mathematical model

Under *current* institutional arrangements (even pre-COVID, pre-QE), the fiscal deficit creates money directly.

Figure 3. Balance sheets of the banking sector, Reserve Bank, private non-bank firms, and Treasury in a fiscal deficit under current arrangements (Treasury only sells bonds to banks, not to the RBA; Treasury auctions must equal the fiscal deficit, Government's account at RBA cannot go negative)

Banking Sector					
Flows ↓ / Stock Vars →	Asset		Liability	Equity	A-L-E
	Reserves ▼	Loans ▼	Bonds _B ▼	Deposits ▼	Banks _E
Initial Conditions	0	100	0	90	10
Government Spending	Spend			Spend	
Government Taxation	-Tax			-Tax	
Treasury sells bonds	-Bond _B ^B		Bond _B ^B		
Treasury pays interest	Int _B ^B				Int _B ^B
RBA buys bonds	Bond _B ^{RBA}		-Bond _B ^{RBA}		
Banks sell Bonds to Public			-Bond _B ^P		
Treasury pays interest	Int _B ^P				Int _B ^P

RBA					
Flows ↓ / Stock Vars →	Asset		Liability	Equity	A-L-E
	Bonds _{RBA} ▼	Reserves ▼	Treasury _D ▼	RBA _E	
Initial Conditions	0	0	0	0	0
Treasury sells bonds			-Bond _B ^B	Bond _B ^B	
RBA buys bonds	Bond _B ^{RBA}		Bond _B ^{RBA}		
Treasury pays interest to banks		Int _B ^B			-Int _B ^B
Government Spending		Spend			-Spend
Government Taxation		-Tax			Tax
Treasury pays interest to public		Int _B ^P			-Int _B ^P
Banks sell Bonds to Public					

Private Non-Bank					
Flows ↓ / Stock Vars →	Asset		Liability	Equity	A-L-E
	Deposits ▼	Bonds _P ▼	Loans ▼	Private _E	
Initial Conditions	90	0	100	-10	0
Banks sell Bonds to Public	-Bond _B ^P	Bond _B ^P			
Treasury pays interest	Int _B ^P				Int _B ^P
Government Spending	Spend				Spend
Government Taxation	-Tax				-Tax

Treasury					
Flows ↓ / Stock Vars →	Asset		Liability	Equity	A-L-E
	Treasury _D ▼	Bonds _B ▼	Bonds _P ▼	Bonds _{RBA} ▼	Treasury _E
Initial Conditions	0	0	0	0	0
Treasury sells bonds	Bond _B ^B	Bond _B ^B			
Treasury pays interest to banks		-Int _B ^B			-Int _B ^B
Government Spending		-Spend			-Spend
Government Taxation		Tax			Tax
Banks sell Bonds to Public			-Bond _B ^P		Bond _B ^P
RBA buys bonds			-Bond _B ^{RBA}		Bond _B ^{RBA}
Treasury pays interest to public		-Int _B ^P			-Int _B ^P

Source: Author

Figure 4. Differential equations in Keen's model of monetary operations

$$\begin{aligned}
 Tax &= 0 \\
 Spend &= 0 \\
 Int_B^B &= 0 \\
 Int_B^P &= 0 \\
 Bond_B^{RBA} &= 0 \\
 Bond_B^P &= 0 \\
 Bond_B^B &= 0 \\
 Banks_B(0) &= 10 \\
 \frac{dBanks_B}{dt} &= Int_B^B - 0 \\
 Bonds_B(0) &= 0 \\
 \frac{dBonds_B}{dt} &= Bond_B^B - (Bond_B^{RBA} + Bond_B^P) \\
 Bonds_B(0) &= 0 \\
 \frac{dBonds_P}{dt} &= Bond_B^P - 0 \\
 Bonds_{RBA}(0) &= 0 \\
 \frac{dBonds_{RBA}}{dt} &= Bond_B^{RBA} - 0 \\
 Deposits(0) &= 90 \\
 \frac{dDeposits}{dt} &= Spend + Int_B^B - (Tax + Bond_B^P) \\
 Loans(0) &= 100 \\
 \frac{dLoans}{dt} &= 0 - 0 \\
 Private_E(0) &= -10 \\
 \frac{dPrivate_E}{dt} &= Int_B^P + Spend - Tax \\
 RBA_E(0) &= 0 \\
 \frac{dRBA_E}{dt} &= 0 - 0 \\
 Reserves(0) &= 0 \\
 \frac{dReserves}{dt} &= Spend + Int_B^B + Bond_B^{RBA} + Int_B^P - (Tax + Bond_B^B) \\
 Treasury_D(0) &= 0 \\
 \frac{dTreasury_D}{dt} &= Bond_B^B + Tax - (Int_B^B + Spend + Int_B^P) \\
 Treasury_E(0) &= 0 \\
 \frac{dTreasury_E}{dt} &= Tax - (Int_B^B + Spend + Int_B^P)
 \end{aligned}$$



3. Implications for microeconomic reform

Macroeconomic implications

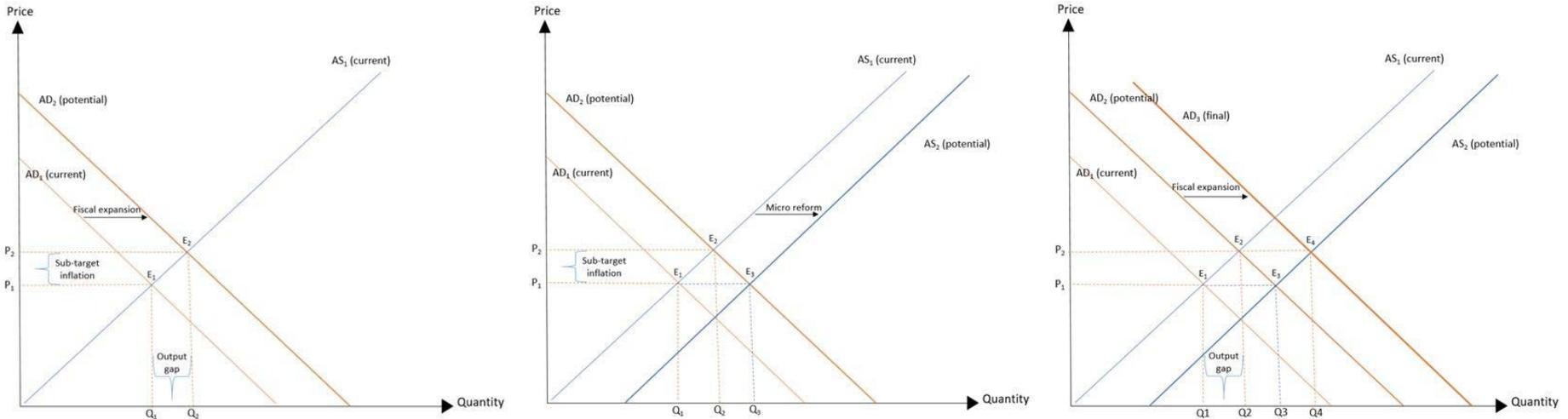
- “The sovereign government cannot run out of money. In spite of operational rules that might be imposed on the Treasury and central bank, procedures have been adopted to ensure that Treasury can make all payments as they come due. Treasury cheques never ‘bounce’ due to insufficient funds.” (Mitchell, Wray and Watts 2019: 327)
- **Hail (2018)’s “two axioms”:** monetary sovereigns face no purely financial constraints, but *all* economies face productive capacity, real resource and ecological constraints (i.e. inflation, ecological breakdown).
- **The currency issuer can always afford to lift AD to the production possibility frontier.**
- **Expanding the production possibility frontier—not equalising spending and revenue—defines fiscal sustainability in the long-run.**



Macroeconomic implications

Productive capacity constraint: graphical treatment

Figure 2: Expansionary fiscal policy with supply-side reform (simple AD/AS model)



Source: Author



Microeconomic Reform Implications

Affordability of reform

- The “How Are You Going to Pay For It?” question is irrelevant in the microeconomic reform debate.
- Endogenously-financed governments such as the Commonwealth can always nominally afford any productivity-enhancing reform, regardless of short-or-long-term impact on the budget bottom line.
- Budget/revenue neutrality is unnecessary, and a self-imposed, counterproductive obstacle in the path of reform.

Affordability of compensation

- Henry (2011): “The number one challenge facing would-be microeconomic reformers is we no longer have the revenue to ‘buy off’ the ‘losers’ of reform.”
- Freebairn (2011): “Reform of the tax and social security systems create some losers as well as winners... Reforms which are sugar-coated with a net increment of dollar returns to the electorate and sold as a gain for everyone, and the associated increase in the budget deficit... have a greater chance of widespread political support. The present government with its target of a return to budget surplus by 2013 has seriously restricted such an option.”
- [Hewson \(2014\)](#), on attempts to “minimise further political difficulties” in the post-1998 implementation of the GST: “the strength of the budgetary position gave the Howard Government the capacity to significantly, indeed over-compensate, the ‘losers’.”
- On the contrary, endogenously-financed governments such as the Commonwealth can always financially afford any transfers necessary to compensate negatively-affected groups and build public support for reform.



Policy Implications: specific examples

- **Unilateral tariff abolition and associated revenue loss** (Productivity Commission various Trade and Industry Assistance Reviews, Banks ‘Productivity To-Do List’, Banks 2017 ‘Of Lists Undone’)
 - Generous compensation for negatively-affected groups
 - Kelton (2018): “There’s nothing wrong with letting the rest of the world be your factory, so long as you take care of domestic employment”—scope for industry policy to replace tariffs as means of manufacturing support, if policymakers so choose.
- **Cash flow tax replacing corporate income tax** (Garnaut, Emerson, Finighan and Anthony; and Auerbach 2017)—removing tax liability from investment (greater capital deepening and productivity growth), removing differential treatment of debt-versus-equity financing (reduced distortion and improved financial system stability)
 - Grant Wardell-Johnson, tax leader KPMG economics and tax centre: would be more viable in three to five years when the budget is in surplus ([Potter, AFR, 10 December 2018](#)).
 - “More-versus-less revenue” debate an obstacle, but redundant; sustainability depends on implications for inflation (short-run) and productivity (long-run), not nominal revenue outlook
- **An Earned Income Tax Credit (EITC)** to remove disincentives and increase labour supply
 - If combined with Employer of Last Resort / Job Guarantee (non-MMT: Quiggin & Langmore 1994, Quiggin 2018, Holden 2019 [cited in [Black, The New Daily](#)], Stiglitz 2019, Skidelsky [2019](#), [2020](#) and Gasperin & Skidelsky [2021](#); pre-MMT: Minsky 1965, 1968, 1973, 1986; MMT: Mosler 1995, Mitchell [1998](#), Wray 1998) which would reduce hysteresis, skill atrophy and labour productivity deterioration from involuntary unemployment:
 - Close labour demand gap *and* increase labour supply—shift both demand and supply curves to the right = significant increase in participation, i.e. the 2nd ‘P’ in the Productivity Commission’s (and IGR’s) ‘Three Ps’.
 - The old ‘exogenous’ theory would imply an EITC + ELR/JG would be financially unsustainable. Endogenous theory suggests this is not only incorrect, but deeply counterproductive: EITC + ELR would substantially lift participation and productive capacity, *reducing* long-run (real) constraints, not exacerbating them (nominal-financial).
- **Increased investment in TAFE, education, and infrastructure** (Productivity Commission 2017 *Shifting the Dial: Five Year Productivity Review*)



The Supply-Side of MMT?

- El-Erian (to Kelton): “MMT has intensified the focus on the demand side. It’s about the deficiency of demand, and it’s taking away attention on the structure of the economy [which] is changing... There are many changes going on, both from the bottom-up and top-down, and demand cannot deal with these. We also have to think much more about how we think about supply. So how do you see the balance between on the one hand it’s great [we’re talking about demand and inflation], but on the other hand, it intensifies that focus on demand and doesn’t give any oxygen to those who say it’s about demand *and* it’s about the structural side as well. How do you see the balance between the two?”
- Kelton: “That’s a very good question. I think maybe for too long we’ve been too complacent, as economists, especially within the Keynesian framework, just sort of assuming that Keynes had it right when he wrote *The General Theory*, that demand creates its own supply and you can take for granted that the structure of the economy will be sufficient to accommodate whatever increased demand pressures are placed on it. I will say that is not something that is I think well worked-out in the MMT literature. I think that probably we have tended to hew more closely to the idea that the capacity constraints are a given, you take those [as given] and then you can grow into your limit, but not beyond.” <https://www.youtube.com/watch?v=tQqArFNQzMs&t=2109s>



The 'sector-specific bottlenecks' approach to inflation

- Inflation is **generally** a sign of $AD >$ productive capacity, however:
- Simple aggregate analysis ($AD \neq AS = \Delta \text{CPI}$) is too crude (see 1970s stagflation; inflation possible even below PPC; slack in some markets, extreme tightness in others)
- Furthermore, the simple aggregate explanation is confounded by the lack of a reliable model of inflation in modern macroeconomics.
- “When we suggest a budget constraint be replaced by an inflation constraint ([Fullwiler 2015](#)), we are not suggesting that all inflation is caused by excess demand. Indeed, excess demand is rarely the cause of inflation. Whether it's businesses raising profit margins or passing on costs ([Klenow and Malin 2010](#)), or it's Wall Street speculating on commodities ([Henderson, Pearson and Wang 2015](#)) or houses, there are a range of sources of inflation that aren't caused by the general state of demand and aren't best regulated by aggregate demand policies.” ([Fullwiler, Grey and Tankus 2019](#), 'An MMT Response on What Causes Inflation')
- Therefore, MMT economists recommend **disaggregating the inflation problem** in both diagnosis and remedy.



Kelton and the ‘sector-specific’ inflation approach

“The least appreciated—but most important—aspect of the political economy of MMT is its treatment of inflation. The standard view embraced by the world’s central banks is that prices rise when aggregate demand for goods and services exceeds an economy’s productive capacity. MMT economists reject this approach [not quite true]. **They argue most inflation is caused by ‘bottlenecks’ in specific sectors. As Stephanie Kelton put it... policymakers have to ‘understand what the source of the inflationary pressure is’ and then craft a ‘policy tool that you think is going to help you get at that inflation.’”**

—Matthew C. Klein, ‘Everything you need to know about modern monetary theory’, *Barron’s*, 7 June 2019

- Implies a far more active and explicit role for microeconomic policy and analysis in future macroeconomic management frameworks (particularly price stability objectives, not merely growth objectives).



The ‘sector-specific’ inflation approach continued: competition and regulation

“The evidence supports Kelton. Almost all of the inflation in the US since 1990 has come from a handful of sectors (Bureau of Economic Analysis, US Department of Commerce) that account for only a third of the total price index: **healthcare** (including **prescription drugs** and **insurance**), **housing**, **education** (including **textbooks**), and ‘**financial services** furnished without payment’, such as bank accounts.

These sectors have several features in common: they are **uncompetitive**, their **pricing is opaque**, they are heavily **subsidised**, and their **supply is tightly constrained by regulation**.

Making it **easier to sell generic drugs**, **boosting competition** among hospitals, **deregulating zoning laws** to encourage more home-building, and **pushing banks to pay depositors higher interest rates** could all have a substantial impact on inflation, potentially more than enough to offset any consequences from higher spending and tax cuts that might boost demand for domestically produced goods and services.”

—KLEIN (2019)



Summary: Kelton's sector-specific inflation approach

- Significant overlap between MMT “sector-specific bottlenecks” approach to inflation and traditional (Productivity Commission) microeconomic reform agenda
- *However*, there is an equally valid heterodox (non-neoclassical) microeconomic theoretical argument to make regarding potential microeconomic policy remedies (Lee 2017, Lavoie 2009 and 2014, Fullwiler, Grey and Tankus 2019)
- Ultimately a theoretical argument between orthodox (neoclassical) and heterodox (Post Keynesian) microeconomics, and a **political economy** argument between deregulation and regulation (beyond the scope of this short paper).
- Recommendation: mainstream microeconomists need to engage with the Post-Keynesian literature (on microeconomics) as much as mainstream macroeconomists (on macroeconomics).



4. Policy Recommendations

INSTITUTIONAL REFORMS AND TWO FISCAL POLICY RULES

Two Fiscal Policy Rules

PRODUCTIVE CAPACITY RULE

- Any fiscal proposal assessed by independent agencies (PBO) as pushing inflation above 2 per cent must be matched by productive capacity-enhancing measures sufficient to absorb (neutralise) the additional AD over the long-run (suggest the forward estimates as possible timeframe, but entirely debatable).
- Pursue expansion of production possibility frontier (productivity growth, LR price stability)
- Precautionary approach to preventing $AD > AS$ that prioritises productivity growth.
- Target long-run outcomes early, rather than reactive policymaking and short-term political gain.

INFLATION OFFSET 'KELTON' RULE

- Any fiscal proposal assessed by the PBO which would push inflation beyond the top of the target band (above 3 per cent) must be matched by inflation-offsetting measures.
- Replaces current budget rules requiring nominal bottom-line offsets for new spending and revenue proposals.
- Shift from 'nominal' to 'real' fiscal offsets.
- Counterinflationary offsets may include fiscal tightening elsewhere, but such offsets are assessed and approved on counterinflationary—not bottom-line—implications.
- Pursue inflation within the 2-3 per cent target band (inflation management, short-run price stability).
- Target short-run inflation outcomes.



General Recommendations

- **Nowcasting:** collect macro and sector-specific inflation data in real-time
 - Resource the ABS to continue and expand ‘nowcasting’ to a) monitor macroeconomic developments in real-time (to improve quality of Functional Finance) and b) identify sector-specific inflation pressures **as they arise**.
- **Inflation Risk Assessment in Budget Procedure:**
 - Empower the Congressional/Parliamentary Budget Office (CBO or PBO) to **assess fiscal proposals for inflation risk, not just budget ‘bottom line’ impact (Kelton’s recommendation)**.
- **Introduce Productivity Impact Analysis by the Productivity Commission into the Cabinet Process:**
 - **Expand the Regulation Impact Analysis (RIA)** process (production of Regulation Impact Statements or RIS) currently conducted by agencies with PM&C’s Office of Best Practice Regulation (OBPR) to include a broader **Productivity Impact Analysis of every Cabinet Submission** conducted by an **independent agency** such as the **Productivity Commission**—vet public policy for productivity impacts **before decisions are made**, not after (a “pre-mortem” role for the Productivity Commission on public policymaking, not just a “black box” post-mortem).
- **Mandate cost-benefit analysis and approval by Infrastructure Australia** for all federal infrastructure spending
- **Strengthen microeconomic analytical resources** of macroeconomic policy agencies
 - See Treasury’s recent recruitment of Applied Microeconomists to the Structural Analysis Branch of the Macroeconomic Analysis and Policy Division—a positive step.



THANK YOU

Contact Information

Lachlan McCall
Graduate Student | Crawford School of Public Policy
Email: Lachlan.McCall@anu.edu.au

Disclaimer: views expressed are those of the author and not those of the Australian Government or the Department of Foreign Affairs and Trade.



Australian
National
University

Special thanks and appreciation to Professor Steve Keen for generously and patiently stepping me through his model; to Professor Stephanie Kelton and Dr. Steven Hail for their mentorship and advice; to Professor Bill Mitchell for my interest in macroeconomics; and to Dr. Jenny Gordon for her kind and positive feedback on the draft.