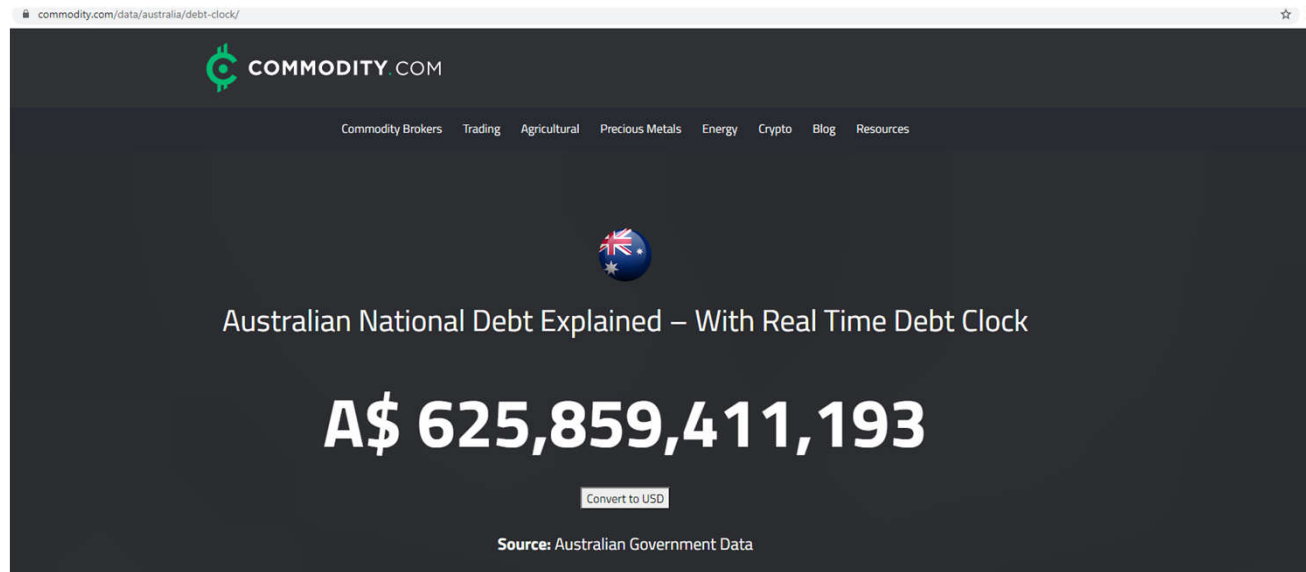


Rethinking Government Debt – An MMT view



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The basics...

To understand how the government is or isn't constrained in response to the crisis (and in general) we need to understand how the process of government spending works.

This will also help us to understand government debt.

The Australian federal government is a currency sovereign – it issues its own freely floating currency and has no significant foreign debt.

This means the federal government can never run out of the currency it issues – Australian dollars.



So, how does a currency sovereign spend?

The federal government creates dollars every time it spends (through its wholly owned subsidiary, the Reserve Bank of Australia).

We can refer to this 'keystroking' the money into existence or 'electronic printing'.

As former chairman of the US Federal Reserve said "we simply use a computer to mark up the size of the accounts":

https://www.youtube.com/watch?v=U_bjDAZazWU

All spending is 'funded' in this way. Taxes and borrowing do not fund spending. They perform other functions.

Lets look at the accounting entries that take place for the government and for the relevant private bank and private entity when the government spends.

Ok, before we look at the accounting entries, what are they?

Accounting entries increase or decrease the assets, liabilities or equity an entity has.

Broadly, assets are what we own, liabilities are what we owe and equity or net worth is assets minus liabilities.

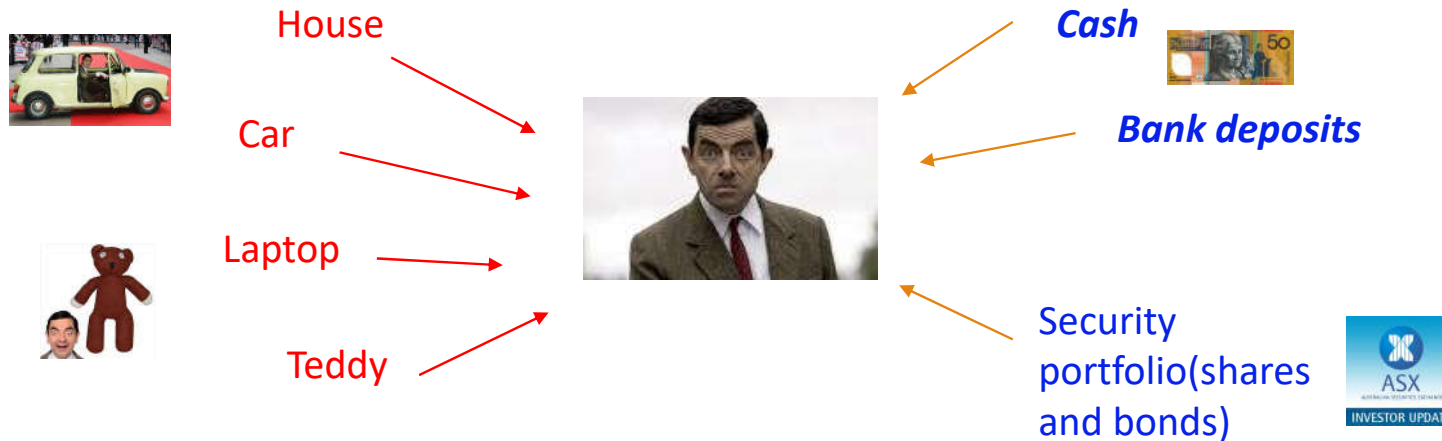
$ASSETS = LIABILITIES + EQUITY$. This equation is known as the balance sheet.

T – accounts are a way of representing this equation.

Assets = Liabilities + Equity

Your assets are what you own. *Same for Mr Bean.* Lets assume his total assets are worth \$1m, including the items below

They include **real things** you can see and touch and use, and **financial assets**



Your liabilities are what you owe. *Same for Mr Bean.* Lets assume he has an outstanding mortgage of \$0.6m.

- Your equity is your assets minus liabilities or net worth. For Mr Bean this is $\$1m - \$0.6m = \$0.4m$

T-accounts

A T-account is a way of representing the balance sheet, with assets on the left and liabilities and equity on the right, as below:

Assets	Liabilities + Equity

Mr Bean's balance sheet

Assets	Liabilities + Equity
\$1m	\$0.6m Mortgage \$0.4m Equity

We can construct T accounts (balance sheets) for all individuals, businesses and government bodies, that is for the whole economy.

Importantly, there are inter-relationships between balance sheets across the economy. One entity's liability is another's asset. For example, Mr Bean's \$0.6m mortgage is clearly his liability, but an asset of his bank.

T-accounts

We can also use T-accounts to track the changes that occur to balance sheets after transactions.

Every transaction has a double impact on each entity involved in the transaction, and after each transaction the balance sheet or T-account must remain in balance ($A = L + E$).

Lets assume that the government pays \$0.1m to Mr Bean for providing some advice about social distancing.

Mr Bean's **opening** balance sheet

Assets	Liabilities + Equity
\$1m	\$0.6m Mortgage \$0.4m Equity

Changes to Mr Bean's balance sheet

Δ in Assets	Δ in Liabilities + Equity
+ \$0.1m (cash)	+ \$0.1m Equity

Mr Bean's **closing** balance sheet

Assets	Liabilities + Equity
\$1.1m	\$0.6m Mortgage \$0.5m Equity

As well as seeing the impact of this government spending on Mr Bean's balance sheet we can also look at the impact on the (consolidated) government sector's balance sheet.

Activity

Discuss what assets, liabilities (and hence net worth) the following entities might have (\$ not required!):

1. A middle income average Australian household (2 adults and 2 children)
2. BHP Billiton
3. The Australian government (Hint: the major liabilities are Australian dollars issued and bonds)

If you get time – how would you draw up T accounts?

Money is an IOU

When the government paid Mr Bean for the work he did, it is like a theatre company 'paying' you with a ticket (imagine you worked for the theatre).

That ticket is very valuable to you and you keep it safe. They owe you a show to watch!

When you go to the theatre to watch the show and redeem your ticket, it is of no value to the theatre company, who dispose of it (or at best put it in the recycling bin). But it evidences your claim on the theatre and you could not watch the show without it.

Similarly Mr Bean will look after his IOU very carefully and will need it to pay his taxes. Once paid, though, it has no value to the government, who simply bin it.

Government spending – what happens to T accounts when the government spends?

Using the same example, and assuming Mr Bean banks with Eastpac:

Government (Treasury)		RBA		Consolidated government sector	
Δ in Assets	Δ in Liabilities + Equity	Δ in Assets	Δ in Liabilities + Equity	Δ in Assets	Δ in Liabilities + Equity
- \$0.1m Op RBA	- \$0.1m Equity		- \$0.1m SA (Govt Dep) + \$0.1m ESA (Eastpac Dep)		+ \$0.1m ESA (Eastpac Dep) - \$0.1m Equity

Hence government spending creates new dollars. It creates new private sector financial assets. Taxation and / or government “borrowing” (although it is not really borrowing at all) comes later.

Eastpac		Mr Bean		Consolidated private sector	
Δ in Assets	Δ in Liabilities + Equity	Δ in Assets	Δ in Liabilities + Equity	Δ in Assets	Δ in Liabilities + Equity
+ \$0.1m ESA	+ \$0.1m SA B Dep	+ \$0.1m SA Dep at Eastpac	+ \$0.1m Equity	+ \$0.1m ESA	+ \$0.1m Equity

Note that the RBA is 100% owned by the government.....

The screenshot shows the Reserve Bank of Australia (RBA) website. At the top, the RBA logo and name are displayed. Navigation links include 'Careers', 'Education', 'Media', 'Q&A', 'Glossary', and 'Contacts'. A search bar is present with the text 'Search RBA website'. Below the navigation, a blue bar contains links for 'About Us', 'Monetary Policy', 'Market Operations', 'Financial Stability', 'Payments & Infrastructure', 'Financial Services', and 'Banknotes'. The breadcrumb trail reads 'Home > About Our Role'. The main content area is titled 'In Questions & Answers' and features a sidebar with links: 'About Our Role', 'About Banknotes', 'About Surcharging', 'About Our Gold Holdings', 'About Our Publications', 'About Our Information Services', 'About the Website', and 'About Search'. The main heading is 'Questions & Answers About Our Role'. The first question is '1. What is the Reserve Bank of Australia and who owns it?'. The answer states: 'The Reserve Bank of Australia is Australia's central bank. Its role is set out in the *Reserve Bank Act 1959*. The Bank conducts the nation's monetary policy and issues its currency. It seeks to foster financial system stability and promotes the safety and efficiency of the payments system. It also offers banking services to government. The Bank is a body corporate wholly owned by the Commonwealth of Australia. For more information see [about the RBA](#).' The sentence 'The Bank is a body corporate wholly owned by the Commonwealth of Australia. For more information see [about the RBA](#).' is circled in green.

RESERVE BANK OF AUSTRALIA

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Questions & Answers

About Our Role

1. What is the Reserve Bank of Australia and who owns it?

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Accounting entries for federal taxation

Let's assume that Mr Bean pays tax of \$70,000.

Government (Treasury)		RBA		Consolidated government sector	
Δ in Assets	Δ in Liabilities + Equity	Δ in Assets	Δ in Liabilities + Equity	Δ in Assets	Δ in Liabilities + Equity
+ \$70,000 O/S (RBA)	+ \$70,000 Equity		+ \$70,000 A (Govt Dep) - \$70,000 ESA (Eastpac Dep)		+ \$70,000 Equity - \$70,000 ESA (Eastpac Dep)

Hence taxation destroys dollars. It decreases private sector financial assets. It does not 'fund' government spending – how can it given we need the dollars before we can pay them back?!

Eastpac		Mr Bean		Consolidated private sector	
Δ in Assets	Δ in Liabilities + Equity	Δ in Assets	Δ in Liabilities + Equity	Δ in Assets	Δ in Liabilities + Equity
- \$70,000 ESA	- \$70,000 B Dep	- \$70,000 Dep at Eastpac	- \$70,000 Equity	- \$70,000 ESA	- \$70,000 Equity

What happens if the government borrows?

Let's assume that the government sells bonds worth \$25,000 to Mr Bean (Almost equivalent to the size of the 'deficit')

Government (Treasury)		RBA		Consolidated government sector	
Δ in Assets	Δ in Liabilities + Equity	Δ in Assets	Δ in Liabilities + Equity	Δ in Assets	Δ in Liabilities + Equity
+ \$25,000 A at RBA	+ \$25,000 Bonds		+ \$25,000 A (Govt Dep) - \$25,000 ESA (Eastpac Dep)		+ \$25,000 Bonds (Liability) - \$25,000 (ESA Eastpac- Liability)

The government is swapping one liability (IOU) for another, and the private sector is swapping one asset for another.

Eastpac		Mr Bean		Consolidated private sector	
Δ in Assets	Δ in Liabilities + Equity	Δ in Assets	Δ in Liabilities + Equity	Δ in Assets	Δ in Liabilities + Equity
- \$25,000 ESA	- \$25,000 B Dep	- \$25,000 Dep at Eastpac + \$25,000 (Bonds)		- \$25,000 ESA	+ \$25,000 (Bonds)

Nothing of real substance is happening and government bond issuance is not necessary.

What happens with QE?

Let's assume that the RBA (on behalf of the govt) buys bonds worth \$20,000 from Mr Bean

Consolidated government sector

Δ in Assets	Δ in Liabilities + Equity
	- \$20,000 Bonds (Liability)
	+ \$20,000 (ESA Eastpac- Liability)

The government is swapping one liability (IOU) for another, and the private sector is swapping one asset for another.

Eastpac

Δ in Assets	Δ in Liabilities + Equity
+ \$20,000 ESA	+ \$20,000 Mr B Dep

Mr Bean

Δ in Assets	Δ in Liabilities + Equity
+ \$20,000 Dep at Eastpac	
- \$20,000 (Bonds)	

Consolidated private sector

Δ in Assets	Δ in Liabilities + Equity
+ \$20,000 ESA	
- \$20,000 (Bonds)	

Nothing of real substance is happening and QE is not necessary.

If taxes don't fund spending, why do we have taxation?



To create demand for the currency - the reason we value our currency is because we can use it to extinguish tax liabilities.



To control inflation – if private and government spending becomes too great relative to productive capacity then inflation may result. Taxation acts to remove some private spending power.



To re-distribute income



To provide incentives and disincentives

What does a government deficit really mean?

It means the contribution that the government has made (in one year) to the stock of private sector net financial assets.

It is best thought of as a private surplus.

If the government manages to run a surplus it will mean a private sector deficit.

The accumulated deficits through time are the total private sector net financial assets.

Hence, generally speaking the 'debt clock' would be better referred to as a 'wealth clock' (the total private sector net financial assets).

GOVERNMENT DEBT CLOCK OF AUSTRALIA



A\$ 580,071,576,332

[Convert to USD](#)

Money is an IOU (again)....

All 'money' is debt (an IOU), like Henry the shopkeeper's token that he must have used to pay for material or labour with.

Locals would accept Henry's token because they trusted him to make good on the debt it represented. However, it would not have circulated far afield because of a lack of knowledge and trust in Henry from those further away.

The difference with government 'money' or debt is that the government 'makes good' on its debt by accepting it in payment of taxes. Whilst Henry would have to provide goods (which he could run out of), the government relies on the power of coercion to levy tax liabilities, which return (revenue) of the tokens extinguishes.



Money is an IOU (again)....

If a government operates a gold standard or a fixed exchange rate, then it becomes rather like Henry, in the sense that it can run out of something that the government's tokens can be exchanged for.

Governments in this position may choose to issue an alternative form of IOU, one that cannot be exchanged for gold or forex, but that offers a superior interest rate. This is a government bond.

In a floating exchange rate system, there is no need for a government to issue bonds for this reason.

Why, then, do we still auction treasuries?

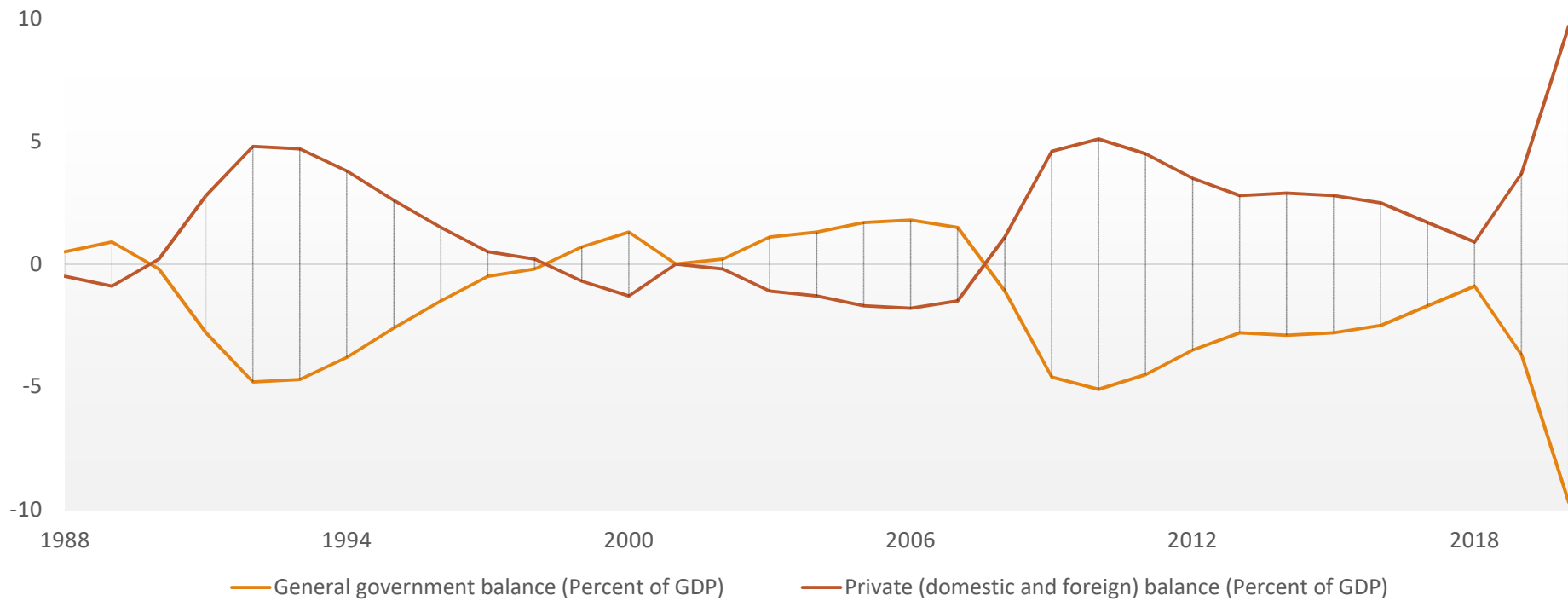
It is not necessary to auction bonds to the private sector to 'pay for' deficit spending.

So why are they auctioned?

- 1) To drain reserves, in defence of the cash rate?
- 2) To provide safe, interest-bearing assets to fund managers and set default-risk free interest rates across the yield curve?
- 3) Or is it just a 'traditional' institutional practice?



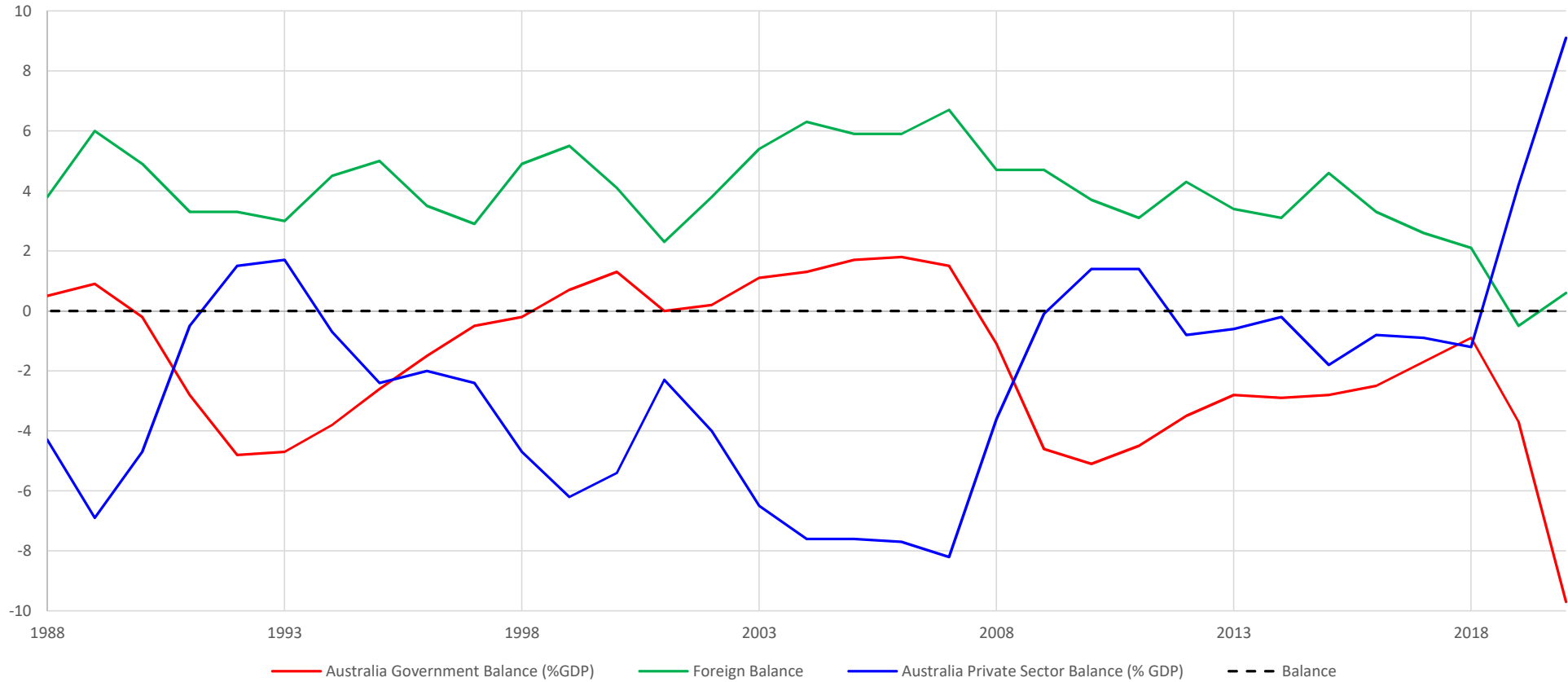
Australia Sectoral Balances (% of GDP)



Source: IMF, including 2020 estimates

Separating out the foreign sector, to make it a little more complicated...

Australia Sectoral Balances (% GDP)



Source: IMF, including 2020 estimates

Quiz

Discuss and answer the following questions:

Are Australian dollars assets of the federal government? Why or why not?

Does the federal government need to tax or borrow to fund spending?

What are the main purposes of taxation?

Why does the federal government issue bonds?

Quiz answers

Are Australian dollars assets of the federal government? Why or why not?

They are not, because the Australian government issues the currency. They are a liability of the government, issued to private entities in recognition of some work done. They can be used by those entities to extinguish tax liabilities.

The government issuing dollars is like a theatre company issuing tickets – the tickets need to be collected to permit entry to the show (like taxes need to be paid) but the tickets are worthless once handed in at the door. Hence the tickets are extremely valuable to the users but not to the issuer.

Does the federal government need to raise currency to fund spending?

Absolutely not! Just like the theatre company does not need to collect tickets for the Friday night show before it issues more for the Saturday night show. When it does collect them, they go in the bin.

What are the main purposes of taxation?

To create demand for the currency, to control inflation, for redistribution and to provide (dis)incentives.

Why does the federal government issue bonds?

To control interest rates, to provide risk free assets to the private sector and because of habit!

Slaying some common myths

It is important to understand that every time the federal government spends a dollar, it is not a choice of whether that dollar comes from taxation, borrowing or keystroking. All government spending is keystroked into existence. Taxing and borrowing perform other functions.

The government is a currency issuer, not currency user.

Government is not a household.

There is no government 'debt' to pay back in any meaningful sense. Currency is an IOU of the government and bonds are an IOU of the government.

Inflation can be a problem, and is an important constraint on government spending.

We can tackle this crisis with high private surpluses, and do not need to worry about having government sector surpluses.