

Debt Management in the UK and Australia: Breaking the Nexus between Fiscal and Monetary Policy?

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ABSTRACT

The Global Financial Crisis evolved into a real economic crisis that enveloped advanced economies, notably the USA, UK and the Eurozone. Deficits grew in most advanced countries during 2009 and 2010 mainly due to the operation of automatic stabilisers. Some countries enacted fiscal stimulus measures. This was followed by strong pressure from Inter-Governmental Organisations, notably the OECD, IMF and EU, for all countries facing growing deficit and debt ratios to adopt austerity measures.

Eurozone countries are required to finance budget deficits by borrowing, whereas some sovereign countries, including the USA, UK and Australia, have adopted institutional arrangements which appear to interfere with their capacity to adopt Lerner's principles of functional finance.

This paper argues that the economic principles underpinning the imperative for austerity measures in *all* high debt ratio countries are flawed and ignore the insights of Modern Monetary Theory. Non-sovereign countries, such as those in the Eurozone, which are subject to EU policy rules, specifically the Stability and Growth Pact, have limited scope to pursue public purpose through full employment policies. On the other hand, sovereign countries, including Australia and the UK, are monopoly suppliers of their own independent fiat currencies under flexible exchange rates. Notwithstanding the Debt Management Office in the UK and the Australian Office of Financial Management which manage debt issue in the light of so-called financing requirements, these sovereign governments are not budget constrained, even though these institutional arrangements appear to break the nexus between fiscal policy and monetary conditions. These countries cannot become insolvent and could choose not to issue debt.

Thus, rather than pursuing public purpose, the UK and to a lesser extent Australia have pursued austerity measures under the misleading guise of responsible economic management.

1. Introduction¹

The Global Financial Crisis (GFC) was rapidly transformed from a regulatory crisis, associated with the failure of some major financial institutions, into a real economic crisis that enveloped Western economies, including the USA, UK, Japan and the Eurozone countries, and, to a lesser extent, Australia. In 2008, both the major Inter Governmental organisations (IGOs), the OECD and IMF, supported the adoption of fiscal stimulus measures by a number of countries but within rather vague constraints imposed by their prevailing deficit and debt to GDP ratios.² Amongst others, the USA, UK and Australia, and Eurozone countries, Spain and Luxembourg, adopted stimulus measures between 2008 and 2010 (OECD, 2009:109). In addition, countries enacted financial bailouts and monetary policies that pushed central bank-controlled rates close to zero (Pollin, 2012:161-162).

Orthodox thinking was rapidly reasserted by these IGOs through their advocacy of fiscal consolidation measures to achieve *fiscal sustainability* (OECD, 2010; IMF, 2010a; Sharpe and Watts, 2012), ostensibly due to the blowout of the deficits and debt ratios in most Western economies largely resulting from the operation of automatic stabilisers.

Sluggish growth and rising unemployment, particularly in the Eurozone countries in 2011 and 2012, led to calls from the major IGOs for a slower timetable of austerity measures (OECD, 2011a; IMF, 2011a), but the IMF and OECD argued that the so-called restoration of the public finances in the medium term remained the priority in all countries, without differentiating between Eurozone and non-Eurozone countries (Sharpe and Watts, 2012).³

OECD (2009) explored the macroeconomic impact of medium term scenarios for each member country based on *fiscal consolidation* at a rate depending on the initial *fiscal imbalance* which, in turn, reflected the impact of the recession, and also the removal of any fiscal stimulus (see also OECD, 2011a). These scenarios capture an extreme form of austerity in that fiscal policy is pro-cyclical, being designed to counter the cyclical impact on the budget, whereas a balanced budget over the cycle, which is supported by both orthodox and some (allegedly) progressive economists, is counter-cyclical with a deficit in the recession and a surplus in the boom (see Section 2). New terminology, including fiscal fatigue, fiscal space and fiscal buffers, was introduced apparently to give additional intellectual gravitas to this policy imperative.⁴

Following the May 2010 election the UK Conservative Party formed a coalition with the Liberal Democrats to secure office. The Conservatives had campaigned on a platform of fiscal austerity in the context of a commitment to the Big Society.⁵ Notwithstanding poor recent growth performance (ONS, 2012) there has been no policy concessions by the UK government, with Osborne, the Chancellor, even claiming that the UK Government had run out of money (Daily Telegraph, 2012). Similarly in Australia, following a period of fiscal stimulus (2008-2011), there has been a consensus on the part of the major political parties, that a budget surplus should be restored through the 2012-2013 budgetary process, despite a slowing economy and an overall rate of labour underutilisation of 10-11%.⁶

Thus, notwithstanding the severe impact of the GFC, the nostrums of neo-liberalism remain largely intact with respect to policy design (Sharpe and Watts, 2012). Under the dominant New Consensus Macroeconomics model (see, for example, the Bank of England Model, BoE, 2005; and Woodford, 2009), monetary policy is ceded to an independent central bank, and the Treasury is left with a largely non-discretionary fiscal role based on an emphasis on principles of sound public finance, except it would appear in extreme economic circumstances, albeit temporarily. Adherence to these policy principles is engendering an extreme form of institutionalized neo-liberalism in the form of pro-cyclical fiscal policy, particularly in the Eurozone countries with their notional limits on debt and deficit ratios (Sharpe and Watts, 2012).

The claim that fiscal austerity is required in all countries with high deficit and/or debt to GDP ratios ignores the distinction between sovereign countries with their own fiat currencies⁷ and those countries which have voluntarily given up their independent fiat currencies and, in the case of Eurozone countries, have accepted further constraints on their operation of macroeconomic policy. The UK, Australia, the USA and Japan are not subject to the same fiscal imperatives as countries, such as Ireland, Greece, Portugal, Spain and Italy which trade in the euro, cannot undertake independent monetary policy, and are subject to severely circumscribed fiscal policy. This distinction is rarely made in the orthodox literature.

This distinction between sovereign and non-sovereign countries is central to the principles of Modern Monetary Theory (MMT) (see, for example, Wray, 1998 and Mitchell and Muysken, 2008). MMT argues that sovereign countries operate with their own independent fiat currencies under flexible exchange rates, so that, as the monopoly issuers of their own currencies, these countries cannot become insolvent by running deficits, should they issue debt denominated in their own currencies. In line with the principles of functional finance, sovereign governments should pursue sustained full employment by filling the aggregate spending gap created by the private sector's desire to net save, irrespective of the effect on the budget deficit and the accumulated debt.

The simplest exposition of MMT principles entails the treatment of the Central Bank and Treasury as a single entity, thereby suppressing the transactions between these two entities. Within the heterodox economics literature, however, some of the underlying premises of MMT with respect to the macroeconomic policy sovereignty of countries with their own fiat currencies have been challenged. The consolidation of the Treasury and Central Bank into a single institution is argued to lead to a misrepresentation of the nexus between fiscal policy and monetary conditions for countries, such as the USA, Britain and Australia, which, as a consequence of domestic political processes, have imposed limitations on their conduct of fiscal policy (see Van Lear, 2002/3, Lavoie, 2011; Fiebiger, 2012). As a consequence some of the claims of MMT have been challenged, including bond issue not being designed to finance deficits and the need for governments to spend before they can tax (Lavoie, 2011), although Pilkington (2011) views some of the MMT claims as rhetoric, which has contributed to 'selling' MMT in what has been a hostile environment for non-orthodox economic ideas.

MMT advocates acknowledge that no single model can capture the different institutional arrangements prevailing in these countries, but the relevant question to ask is whether the MMT depiction of the operation of macroeconomic policy misrepresents the intrinsic features of a modern monetary system, namely 'the government as a currency issuer or monopoly producer of the currency, with the exclusive power to increase the non-government sector's holdings of *net* financial assets' and the non-Government sector operating as a currency user (Kervick, 2012).

Drawing on Wray (2011), Lavoie (2011) acknowledges that the US Treasury is capable of securing the means by which to run budget deficits⁸, although a different sequence of transactions is required than is depicted in the simple MMT representation of the conduct of fiscal policy. This process commences with Treasury bonds being sold to the non-government sector which causes an increase in Treasury deposits at the Federal Reserve thereby enabling desired net Government spending to take place.

In the last 30 years debt management arrangements have changed in both the UK and Australia. Under the pretext of transparency and accountability, the UK chose to 'fully fund its financing requirement' (HM Treasury, 2011) in 1998, through the establishment of the Debt Management Office. In Australia in 1982, for similar reasons the tap system for the sale of Government debt was replaced by the auction system (Mitchell, 2009b). Prior to 1998, when the Australian Office of Financial Management (AOFM) was established to manage Australian Government debt, the Central Bank had that responsibility.

Under the consolidation of the Central Bank and Treasury, debt issue is an interest rate maintenance mechanism, and the sale of debt is demand determined, whereas under full 'financing' of deficits, anticipated government spending and tax receipts largely determines the amount of debt which must be sold (see below).

In this paper we want to investigate whether, in the light of the insights of, amongst others, Fullwiler (2006), Wray (2011), Lavoie (2011) and Fullwiler et al (2012), these two countries can still pursue sustained full employment through active fiscal policy or whether, under their current institutional arrangements, one or other could be unable to obtain funding for its fiscal commitments and/or become captive to the international bond markets, by facing increasing interest rates on its debt which would threaten its solvency.⁹ If so, sustained full employment would be unachievable, so that domestic institutional reform would be necessary.

In the next Section we demonstrate, using standard macroeconomic accounting identities, that budget deficits will be a characteristic feature of advanced economies seeking to attain sustained full employment. We then outline the principles of MMT and investigate the critiques of MMT, specifically the consolidation of the Treasury and Central Bank. In Section 4, we briefly outline the principles of monetary management in the UK and Australia. This is followed by the exploration of the operation of the Debt Management Office (DMO) in the UK and the Australian Office of Financial Management, which appear to impose constraints on the conduct of fiscal policy in these countries, by imposing an institutional break on the nexus between fiscal and monetary conditions. We examine whether these arrangements mean that these countries face economic, as well as political impediments to their pursuit of sustained full employment. Concluding comments complete the paper.

2. The Role of Fiscal Policy

Introduction

The fundamental economic problem in most countries, including Australia and the UK, remains the absence of income security due to the scarcity of paid work opportunities for a significant cohort of the population, in particular the young. Unemployment of this cohort has increased significantly in the UK since the advent of the GFC (Bell and Blanchflower, 2011) and in the Eurozone countries, in particular Spain, Greece and Ireland, and will further increase as the austerity measures continue to impact on these economies.¹⁰ Australia's economic growth was buttressed by the stimulus measures and, to a small extent, the booming sale of minerals to China, although the current account has remained in deficit, but by mid-2011 unemployment had started to increase (Mitchell, 2011b).

Inadequate access to employment opportunities has many detrimental economic and social consequences which include poverty, lack of self esteem, poor health, risky behaviour, social isolation and more generally the absence of a meaningful stake in society, which can promote dysfunctional behaviour. Mitchell and Muysken (2008) argue that governments should pursue public purpose,¹¹ by policies to achieve sustained full employment, that is 2 percent unemployment, no hidden unemployment, and no underemployment), along with price stability, poverty alleviation and environmental sustainability (see also Billy Blog <http://bilbo.economicoutlook.net/blog/>).

Algebraic Relationships

Using the macroeconomic accounting identities, we can show that a balanced budget is typically incompatible with sustained full employment. Thus the absence of a government budget constraint is crucial to the pursuit of full employment.

We can write the ex post accounting relationship for an open economy as:

$$\mathbf{S + T + M + R_f \equiv I + G + X} \quad (1)$$

where S, T, M, R_f, I, G, X denote private sector saving, taxes, imports, net overseas income flows, private sector investment, government expenditure (capital and consumption) and exports, respectively. We assume that these magnitudes correspond to full employment. Then, if the business cycle has been excised, the government should continually run a balanced budget.

Saving is motivated by the wish of the private sector to acquire claims on wealth. The public holds (non-interest bearing) fiat money (cash), interest bearing bank deposits, and other private financial assets or government securities which are convertible to fiat money. Below we shall show that the only entity that can guarantee to provide the non-Government sector with net financial assets, because it wants to net save, but also eliminate unemployment, is the Treasury. It does this by net spending i.e. running fiscal deficits.

Rewriting the identity, we can see that if the private sector (households and firms) wishes to engage in net saving $(I-S) < 0$ at full employment¹², then, if the budget is balanced, a trade surplus must be achieved.

$$\mathbf{I - S \equiv (T - G) + (M + R_f - X)} \quad (2)$$

-ve 0 -ve

Only countries that run consistent trade surpluses of an adequate size can enable their private sectors to engage in net saving and hence acquire net assets over the long term in the presence of a balanced (or perhaps even surplus¹³) budgets. However few countries are able to secure consistent trade surpluses to enable net saving to occur. Further, if prudent economic policy is identified with consistent balanced or, in some instances, surplus, budgets, then all countries cannot simultaneously run trade surpluses, which undermines any claim that such a policy can be implemented universally.

Full employment can persist with say a balanced budget and a trade deficit in the short term, as long as the private sector is willing to sustain net expenditure (ie $I-S > 0$). This entails running down existing wealth and/or becoming increasingly indebted. Once debt-servicing costs reach a threshold, the private sector would feel over-indebted and would wish to restore its balance sheet, by reducing its spending, which would drive the economy from full employment, unless fiscal policy changed.¹⁴ This is precisely what has happened in many countries during the GFC.

Wray (2012) notes that, on six out of seven occasions, continued US federal government budget surpluses were followed by a depression; and in the seventh instance of a sustained surplus, the GFC followed. Also recessions almost always follow tightening fiscal budgets.

3. Interaction of Fiscal and Monetary Policy: Modern Monetary Theory

Introduction

The previous section demonstrated that sustained full employment typically requires budget deficits. If institutional arrangements cannot be designed to enable this to be achieved, then countries must relinquish this policy objective with the consequent economic and social costs.

Modern Monetary theory (MMT) offers an ‘accounting-consistent, operationally-sound theoretical approach to understanding the way fiat monetary systems work and how policy changes are likely to play out’ (Mitchell, 2011, quoted in Sharpe, 2011). MMT combines the principles of Chartalism (see Minsky, 1986; Wray, 1998) and Functional Finance (see Lerner, 1943, 1947, 1951; Forstater, 1999). Functional finance is based on the premise that fiscal policy should be utilised to counteract economic fluctuations and secure full employment and price stability, without consideration of the impact on deficits or the accumulated debt (Lerner, 1943:354).

These principles apply to sovereign countries that issue their own non-convertible fiat currency which is subject to a flexible exchange rate, so that monetary policy is freed from both the need to defend foreign exchange reserves and maintain a desired exchange parity (Mitchell and Muysken, 2008). In a fiat currency system money is accepted as a means of exchange, even though it has no intrinsic value because governments require ‘its use to relinquish private tax obligations to the state’ (Mitchell, 2009a:9). The only constraint on government spending within a sovereign economy is the availability of real goods and services, denominated in the national currency (Mitchell and Muysken, 2008).¹⁵

Fiscal and Monetary Policy

We now build on the preliminary discussion of MMT, and examine the interaction of monetary and fiscal policy (see, for example, Mitchell and Muysken, 2008; Wray, 2011; and Fullwiler et al, 2012). For conceptual simplicity, the Central Bank and the Treasury are treated as a single entity in the first instance, so that transactions between them can be ignored. We are differentiating between the central government as the *currency issuer* and the non-government sector as *currency users* (Kervick, 2012).

As the monopoly issuer of the fiat currency, when the Treasury spends, it credits the domestic bank accounts of firms and households that sell goods and services to the Government. This expenditure is not ‘financed’ by collecting tax or selling financial assets. These vertical transactions between the Treasury and the non-government sector increase the reserve balances or *system liquidity*. These payments include not only spending on goods and services by the Treasury, and interest payments on its debt, but also the purchases of securities by the Central Bank from the non-government sector and interest paid on bank reserves. Treasury receipts from the non-government sector include taxation, payments for some public goods and services, as well as revenue from the sale of Treasury debt. The Central Bank receives payments for the repurchases of securities and other interest payments by commercial banks in replenishing their reserves, as well as payments of interest on any securities it owns (Kervick, 2012).

Government expenditures and the receipt of taxes are unlikely to be synchronised, so that reserves will be rising or falling on a daily basis. Increased reserve balances and hence an increased stock of High Powered Money is generally created when government expenditure exceeds taxes on a given day. While institutional arrangements vary across countries, for purposes of exposition we are here assuming that commercial banks are not subject to any formal quantitative reserve ratios but must secure sufficient funds to finance their daily interbank transactions.

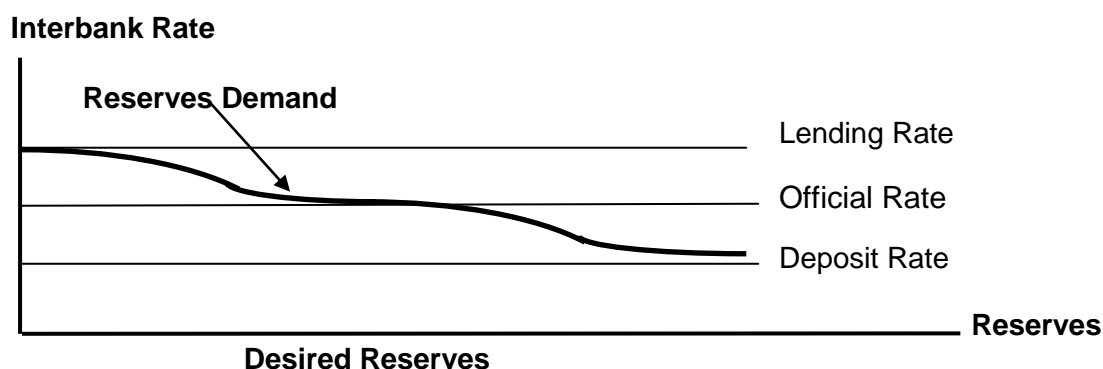
These fundamental relationships between the government and non-government sectors can be missed if the focus of analysis is the Treasury and not the *whole* government (Kervick, 2012). He notes that much US Treasury debt which is sold to the private sector is subsequently purchased by the Federal Reserve, and so it becomes ‘both an asset and liability of the unified government at the same time, which represents neither positive nor negative value and can be rolled over indefinitely as a bookkeeping operation’. As a bank, the purchases of the Central Bank (Federal Reserve) do not need to be *financed* by the collection of revenues from other sources, even though it does receive revenue from its

ownership of financial assets. Thus its ability to spend is not constrained by the amount of revenue it has or will collect.

Kervick (2012) points out that the consolidated government, as a *currency issuer*, can run what he defines as a *pure deficit* – an excess of spending over receipts that does not diminish its monetary stocks and does not impose new debt liabilities. Also a *pure deficit* represents the creation of net financial assets (via vertical transactions) which are held by *currency users*, the non-government sector. On the other hand, *currency users* can only generate *financial deficits*, when spending more than their incomes, which necessarily either diminishes asset holdings or increases debt, (via horizontal transactions), so that there is no net increase in financial assets held by the non-Government sector. He concludes that this consolidated view of government is essential for a clear understanding of its role within the economic system.

The monetary management arrangements, under which different Central Banks operate, vary across countries and in the USA changed markedly during the GFC (Lavoie, 2010). There are, however, common underlying principles. At regular intervals (monthly in most cases) the Central Bank announces the Official Rate. This risk-free short term rate underpins the term structure of interest rates. The Central Bank makes an explicit commitment to maintain the overnight rate close to this announced rate through its day-to-day monetary management. Given the prevailing Official Rate, arbitrage determines the rate on government financial assets of longer maturity.

Figure 1: Interbank Market: Presence of Interest Rate Corridor



Source: BoE (2010, Chart 1) but no reserve targets required for UK banks since December 2010.

For illustrative purposes, we have depicted the Corridor System in Figure 1, which currently operates in Australia and briefly operated in the USA in 2008 (Lavoie, 2010:11). There is a corridor of between the Lending Rate, Official Rate and the (support) rate paid by the Central Bank on (excess) reserves. Then in the presence of excess reserves, say from net Government spending, the overnight rate would fall below the Official Rate thereby compromising the pursuit of monetary policy. The support rate usually represents the floor for the overnight rate, but see Lavoie (2010:11).

The Central Bank does not sell assets to finance the net government expenditure. The asset sales represent an interest rate maintenance mechanism, because they drain the excess reserves, thereby removing the downward pressure on the overnight interest rate (Wray, 1998; Fullwiler, 2006; Mitchell and Muysken, 2008; Mitchell, 2009a; Lavoie, 2010; Fullwiler and Wray, 2010). Debt issued by sovereign governments is popular in financial markets because it represents a risk-free interest-bearing asset which represents a benchmark for pricing risky financial assets, and to balance the risk structure of investment portfolios (Sharpe, 2011).¹⁶

A budget deficit does not place upward pressure on interest rates, no matter how high the deficit may go, because higher government expenditure increases system liquidity and hence competition is not intensifying to borrow a constant stock of loanable funds. Hence MMT incorporates the fundamental insight that net government spending actually increases bank reserves and places downward pressure on interest rates (Mitchell and Muysken, 2008) in the presence of a support rate below the target rate. On the other hand, if a budget surplus is achieved, this typically causes a shortage of bank reserves, which tends to push up the overnight rate above the target (Official) Rate. Central Banks typically have a number of measures, which include Open Market Operations (OMOs), to ensure that sufficient reserves in total are made available so that commercial banks can finance their interbank transactions.

The above is a summary description of how monetary and fiscal policy could be conducted by a sovereign country with its own independent currency under the consolidated operations of the Treasury and the Central Bank. Again it is important to emphasise that whether reserves earn interest and relatedly the relationship of the Deposit and Lending Rates to the Official Rate varies across countries.

Heterodox Critique

Within the heterodox literature there has been a number of papers critical of the MMT characterisation of the nexus between fiscal policy and monetary conditions.¹⁷ MMT advocates are alleged to misrepresent the capacity of governments to conduct fiscal policy in countries with their own fiat currencies which have voluntarily adopted particular institutional arrangements through their domestic political processes.

Fiebeger (2012) has been highly critical of the claims made by MMT advocates which are mainly premised on the consolidation of the Central Bank and Treasury (see also Lavoie, 2011, for a more measured discussion). Fiebeger argues that the US Treasury has an account at the Federal Reserve and the level of these deposits limits the capacity of the Treasury to net spend, unless (additional) borrowing is undertaken. Although, the Federal Reserve has the capacity to create credit, it is explicitly precluded from operating on the primary market for Treasury bonds. The need to secure finance from bond issue and sale to the non-government sector, rebuts the claim that bond issue is purely an interest rate maintenance mechanism.¹⁸

In reference to the USA, Fiebiger (2012:7) mounts a curious argument in claiming that HPM is not increased, when payments of the consolidated government exceed receipts. He rightly claims that arbitrary definitions (of money) should not underpin the construction of theory. He then criticises Bell (2000:615), who argues that the Treasury emits 'money' when it spends, because her claim is premised on the observation that the Treasury writes checks on an account held at the Federal Reserve 'that does not comprise part of the money supply or high-powered money'. Fiebiger claims (p.3) that in these circumstances only the composition of the Federal Reserve's liabilities has changed, so that HPM, which he appears to redefine to incorporate all Federal Reserve liabilities, would be unchanged. The key point here is that there has been an increase in the net financial assets of the non-government sector (see Fullwiler et al, 2012), which clearly is meaningful from a theoretical perspective. Fiebeger (2012:2) concludes that MMT does not offer an alternative to fiscal austerity measures.

Lavoie (2011:6-7) highlights areas of consensus between the MMT advocates (neo-chartalists) and Horizontalist post-Keynesians and the Circuitists, but also acknowledges that there is some uneasiness both about the monetary views of the MMT advocates and their claim that the State can operate as an Employer of Last Resort, due to the absence of financial constraints on net Government spending. Like Fiebiger (2012), Lavoie (2011) highlights the institutional arrangements prevailing in the USA which justify the analysis of the Treasury and the Federal Reserve as separate entities.

Table 1: The modified neo-chartalist view government deficit spending¹⁹

Stage	Central Bank		Commercial Banks	
	Asset	Liability	Asset	Liability
1			TBs + 100	G deposits +100
2		G deposits +100 Banks' deposits - 100	TBs + 100 Reserves - 100	G deposits 0
3	TBs + 100	G deposits +100	TBs 0 Reserves 0	G deposits 0
4	TBs + 100	Banks' deposits + 100	Reserves + 100	Household deposits +100
5	TBs + 19	Banks' deposits + 9 Banknotes +10	Reserves +9 TBs + 81	Household deposits +90

Source: Reproduced from Lavoie (2011:18, Table 3). Column 1 has been added for clarity.

Notes: The figures with their positive or negative signs indicate the changes in the corresponding assets or liabilities.²⁰

Lavoie (2011:12-18) explores the balance sheet consequences of the prevailing US institutional arrangements. It is assumed that notwithstanding existing deposits at the Central Bank, Treasury must sell \$100 worth of Treasury Bills to the Commercial Banks in order to engage in its chosen level of net spending (see Table 1, Stage 1). In Stage 2, the additional Government deposits in the Commercial Banks are transferred to the Central Bank. The Commercial Banks now suffer from a shortage of reserves, which can be addressed by the Central Bank purchasing the \$100 of Treasury Bonds from the Commercial Banks on the secondary market (Stage 3), as argued by Wray (2011). The balance sheet outcomes in Stages 3, 4 and 5 correspond to those obtained from the neo-chartalist perspective, namely that within the consolidated Treasury and Central Bank, Treasury can sell Treasury Bills to the Central Bank. This will increase Treasury's deposits at the Central Bank, thereby enabling their chosen level of spending. Households then choose to hold 10% of their additional net assets as notes and coins, and the Commercial Banks choose (or are required) to hold 10% of additional deposits (liabilities) as reserves at the Central Bank.²¹

Thus, despite the initial need to sell Treasury Bills to the Non-Government Sector, the balance sheet outcomes are the same, because the Central Bank subsequently purchases Treasury Bills from the Commercial Banks on the secondary market.

Theory or Rhetoric?

Pilkington (2011) argues that the motivation of MMT advocates who consolidate the Treasury and Central Bank is ideological in that they are highlighting the distinction between the prevailing institutional arrangements in countries such as the USA and UK, which reflect their earlier commitment to the gold standard and are 'fairly inconsequential' anyway, and the arrangements which should prevail. He draws an parallel with neo-liberalism which provided a clear prism within which to view the world and a toolkit to achieve the the objective of self-equilibrating markets. Its strength has been in its prescriptive capacity which is designed to achieve this neo-liberal vision which accords with what should be.

On the other hand, Pilkington argues that MMT has more modest objectives, namely the reform of the the 'monetary system so that a functional finance approach can be taken to policymaking'. MMT advocates 'again raise fundamental questions about the role of government in advanced capitalist economies'. By reframing the terms of the debate, MMT advocates have been successful in attracting many non-academic supporters.

To retreat from these fundamental questions because MMT advocates ‘currently have no say in obscure institutional practices between certain Treasuries and their Central Banks, is a gross error; the equivalent of Friedman fleeing from his prescriptions for controlling the money supply because central bankers were then not adopting this approach.’ (Pilkington, 2011).

4. Monetary Management in the UK and Australia

The BoE and the RBA adopt similar principles in their day to day monetary management, even though there are differences in their respective institutional arrangements. The BoE’s core objectives are to ensure financial stability, which are achieved by maintaining the integrity of monetary policy, as reflected in the monthly decisions of the Monetary Policy Committee which sets the Bank Rate, and also by ensuring the smooth operation of the payments system. The BoE is able to undertake these tasks because it is the sole supplier of ‘central bank money’ (fiat currency) in the UK. Central bank money consists of banknotes used in everyday transactions and the balances (‘reserves’) that are held by commercial banks and building societies (‘banks’) at the Bank.

Prior to December 2010, the UK commercial banks were required to nominate a reserves target (for interbank transactions) each month and were penalised if their actual reserves departed more than a prescribed percentage from the target. Now the commercial banks are not required to disclose a target to the BoE and all reserve balances attract the Bank Rate²² which is designed to establish a benchmark, short-term, risk-free rate (see Figure 2). Thus, there is no downward pressure on the market rate following the increase in reserves, above the level required for inter-bank transactions.

Consequently if the UK Treasury was not subject to the ‘full financing’ requirement and chose to run a budget deficit, no financial assets would need to be sold by the BoE to avoid compromising monetary policy. However, the DMO sells debt in line with an announced schedule in accordance with its financing requirements (see Section 5 for more discussion). On the other hand, in Australia the support rate which is paid on excess reserves is set at 25 basis points below the target rate, which necessitates the issue of debt in the presence of excess reserves to avoid monetary policy being compromised, irrespective of whether fully financing requirements are in place or not.

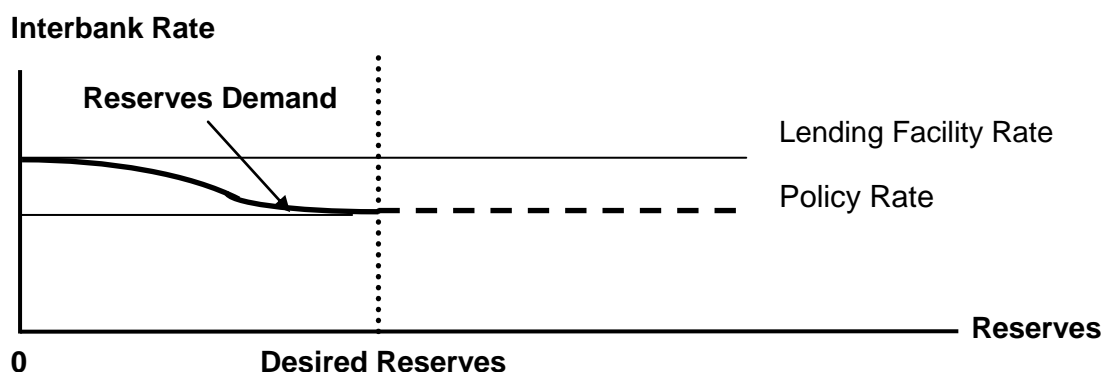
The BR conditions the rates that the commercial banks are willing to charge or pay on short-term loans or borrowings in the market. ‘In implementing monetary policy, the Bank normally seeks to affect only the risk-free element of market rates and seeks to avoid distorting the credit and other spreads established in the market.’ (BoE, 2010:3). Defining the schedule of debt sales and associated maturities is commensurate with this objective.

The BoE ‘must maintain overnight (interbank) interest rates (the rates at which banks transact with each other) in line with Bank Rate, so there is a flat risk-free money market yield curve to the next MPC decision date, and there is very little day to day or intraday volatility in market interest rates at maturities out to that horizon.’ (BoE, 2010:4). Otherwise the intent of monetary policy is undermined.

As long as the BoE continued to supply reserves in excess of the quantity required for day to day liquidity needs (Desired Reserves), the interbank rate would stay in line with Bank Rate. There are various mechanisms by which the individual banks can alter the liquidity and maturity structure of their assets, to ensure that they will have sufficient funds to resolve their daily interbank transactions. Same day, interest free financing is available if a commercial bank has a temporary shortage of funds. If a bank was not able to repay its intra-day

borrowing by the end of the day, it can use the Operational Standing Facility²³ to borrow overnight from the Bank, but at a rate above the Bank Rate.

Figure 2: Interbank Market: All Reserves Paid Bank Rate



Source: BoE (2010, Chart 3).

The RBA also has the responsibility of ensuring that the overnight rate coincides with the announced Official (Cash) Rate, which necessitates the use of OMOs to ensure that the total level of aggregate reserves are consistent with the desired holdings of the Commercial Banks. This is clearly outlined by RBA (2012).²⁴ As noted above, in contrast to the BoE, the RBA must purge any excess reserves via debt sales, whether or not subject to ‘financing’ requirements.

5. Impact of Debt Management on Fiscal Policy in the UK and Australia

Introduction

In April 1998 the Debt Management Office was set up. The management of the UK gilt (Treasury Bond) market was transferred from the Bank of England (BoE) to the DMO. Earlier in May 1997, the responsibility for setting official UK interest rates had been transferred from HM Treasury to the BoE.

As noted in the Introduction, in Australia the tap system for the sale of Government debt was replaced by the auction system in 1982, which meant that the responsible Government agency could specify the quantity and maturity structure of the debt for sale but not the yields. The Australian Office of Financial Management (AOFM) assumed this responsibility in 1998. We now consider the impact of these arrangements on the conduct of the operation of fiscal policy in each country.

Debt Management

United Kingdom

The DMO is legally part of HM Treasury (HMT), but being an executive agency, the Chief Executive makes operational decisions on debt and cash management, and day-to-day management of the office. On the other hand, the Chancellor of the Exchequer determines the policy and financial framework within which the DMO operates. The DMO’s objective is ‘to minimise, over the long term, the costs of meeting the Government’s financing needs, taking into account risk, while ensuring that debt management policy is consistent with the aims of monetary policy.’ (HM Treasury, 2012:6).

‘An overarching requirement of debt management policy is that the Government fully finances its projected financing requirement each year through the sale of debt. This is known as the ‘full funding rule’. HM Treasury (2012:8) provides the following rationale.

- ‘that the Government believes that the principles of transparency and predictability are best met by full funding of its financing requirement; and
- to avoid the perception that financial transactions of the public sector could affect monetary conditions, consistent with the **institutional separation between monetary policy and debt management policy.**’ (my emphasis).

The Government therefore issues ‘sufficient wholesale and retail debt instruments to enable it to meet its projected financing requirement.’ (HM Treasury, 2012:8). ‘The projected net financing requirement comprises the CGNCR (Central Government Net Cash Requirement), maturing debt and any financing required for additional Official Reserves.’

‘The DMO has responsibility for pre-announcing the details of its debt issuance plans to the market, including an auction calendar setting out the dates and gilt type of auctions for the year ahead, and details on planned average auction sizes’ (HM Treasury, 2012:8).

The gilt issue is auctioned, so a minimum price is determined and the successful Gilt-edged Market Makers (GEMMS), who are the primary dealers in conventional gilts, purchase the gilts at the prices that they offered.²⁵ The net financing requirement is updated during the financial year following revisions to the forecast fiscal policy aggregates.

HM Treasury (2011:23) is quite clear that the issue and sale of public debt to ‘finance’ net government spending is a policy choice: ‘The Government’s annual decisions on the structure of the financing remit are determined in accordance with the debt management objective .. and **its policy to fully fund its financing requirement.**’ (my emphasis), which is based primarily on its estimated deficit.

The Office for Budget Responsibility (OBR) which was set up in mid-2010 after the election of the Cameron Government acts as an ‘official independent fiscal watchdog’ by examining and reporting on the sustainability of the public finances, but the OBR has been reliant on the Treasury forecasting model. Specifically the OBR is required to provide an independent assessment of whether fiscal policy is consistent with a greater than 50 per cent chance of achieving the fiscal mandate; and a greater than 50 per cent chance of meeting the target for debt (HM Treasury, 2012:5).

Australia

Prior to 1982, debt sales were based on a *tap system* so that the government would set the interest rate and maturity of the debt which was for sale, so that the quantity sold was demand determined. If the quantity sold was less than that desired by the authorities, extra funds were essentially secured from the RBA. (Mitchell, 2009b). The use of the *tap system* with the Reserve Bank as the residual buyer on the primary market was criticised because it obscured the extent of Treasury profligacy with bond purchases no longer rising \$ for \$ with the public sector deficit. The Treasury had access to cheap funds from the central bank, which was considered to have inflationary consequences (Mitchell, 2009b).

This led to the adoption of the auction system and so-called full funding, which was viewed as representing sound financial management. The AOFM assumed responsibility for debt management in 1998. It is ‘a specialised agency within the Treasury portfolio responsible for management of Australian Government debt. The AOFM’s debt management activities include the issue of debt securities such as Treasury Bonds and Notes. It also operates a securities lending facility which lends Treasury Bonds to financial market participants

through the Reserve Bank of Australia.’ (AOFM, 2012). The AOFM outlines the issuance program for the following financial year but emphasises that it is indicative only, so that the government agency ‘reserves the right to amend details for any reason’.

Mitchell (2009c) challenges the notion of full funding by the non-government sector, arguing that the ‘The funds that the non-government sector uses to buy the bonds come from the government in the first place. ... The Government is just running a system where \$-for-\$ the net spending is matched by government debt issue which constrains to some extent the financial asset portfolio mix in the non-government sector’. This is the scenario subsequently traced out by Lavoie (2011) and Wray (2011), see Figure 1 and also Kervick (2012). Further ‘The bond drain meant that competition in the interbank market to get rid of the excess reserves would not drive the interest rate down’ (Mitchell, 2009b).

The Impact of Bond Markets

Both countries have voluntarily imposed arrangements which require debt sales to the non-Government sector, when Treasury’s net expenditure exceeds its deposits at the Central Bank (see footnote 20). Both agencies operate within their respective Treasuries, so in broad terms Treasury spending is constrained in the same manner in the UK and Australia, as in the USA. The key question is whether this exposure to bond markets in practice can limit the capacity of these countries to conduct macroeconomic policy consistent with sustained full employment.

Both countries have conceded some control over rates on longer term Treasury securities, by operating an auction system to ensure that the target level of sales of securities occurs.²⁶ Fullwiler et al (2012:23) acknowledge that ‘the interest on these bonds is *largely* determined by arbitrage against the Fed’s target rate’.

At this point orthodox economists would outline the dangers associated with being captive to bond markets and adverse debt-dynamics (see, for example, Escalano, 2010; Ley, 2010; and for an opposing view, Watts and Sharpe, 2012). Central to whether the debt ratio can become unsustainable for a country which is required to borrow to ‘finance’ its deficits is whether the real interest rate exceeds the real growth rate, but, in most specifications of the debt-dynamics, the stock of High Powered Money (HPM) is treated as constant, on the grounds that increases in the stock are inflationary (see Escalano, 2010; Ley, 2010). Whether HPM grows when Treasury engages in additional net expenditure depends on the preferences of the non-Government sector (see Figure 1). Thus, notwithstanding the highly questionable relevance of orthodox debt-dynamics to a solvent sovereign country, a commitment to full employment would maximise the sustainable growth rate and if accompanied by low official interest rates, would lead to benign debt dynamics, even in the absence of a rising stock of HPM.

Net government expenditure is limited by the productive capacity of the economy in the context of planned private sector spending which includes spending by bondholders out of post-tax interest income. In practice, the likelihood of bondholder spending imposing major constraints on government net spending and therefore the pursuit of its political objectives is remote (see Fullwiler, 2006), given the influence of official rates on longer term bond rates, noted above, and second that a government can vary tax rates in order to release sufficient real resources so that its programs can be implemented. On the other hand, a significant level of bondholder spending reduces the spending gap to be filled by fiscal policy.

Adverse debt dynamics would only occur if the primary market traders believed that the long term solvency of these sovereign countries was at risk and drove up bond rates under the auction. Recent evidence suggests that bond markets can distinguish between Eurozone countries and sovereign countries.

The Central Bank can always reestablish control of the yield structure by announcing 'explicit ceilings for yields on longer-maturity Treasury debt and enforcing those ceilings by committing to make unlimited purchases of securities (at those maturities) at prices consistent with the targeted yields' (Mitchell, 2010). This could signify a return to the tap system, with the Central Bank as the residual buyer of debt. Alternatively, the requirement to sell debt \$ for \$ in line with the deficit could be scrapped, which means that effectively the Treasury and Central would be consolidated as one entity.

While reserves in the banking system would exhibit more volatility, by bringing the Australian support rate into line with the target rate, the task for the Reserve Bank would be similar to that of the BoE, namely to ensure through its OMOs that there were adequate reserves, thereby maintaining the integrity of the payments system.

6. Concluding Comments

Warren Buffett argued that the failure of the US Congress to raise the nation's debt ceiling before it expired in mid-May 2011, would be that body's 'most asinine act' ever and that imposing a debt ceiling was a mistake in the first place. Further the USA 'is not going to have a debt crisis of any kind as long as we keep issuing our notes in our own currency' (Irish Times, 2011). In other words, no country with its own fiat currency and operating under flexible exchange rates can become insolvent because it always has the capacity to repay debt denominated in its own currency, irrespective of whether the bondholders are its own citizens or foreigners. Meanwhile the IGOs trivialise the conduct of fiscal policy by implying that, like prudent households, *all* national governments are budget constrained.

Ironically in the last 6 months, the main challenge to Modern Monetary Theory, mainly via Blogs, has come from heterodox economists who argue that the MMT advocates misrepresent the institutional arrangements which countries, in particular the USA, make in the operation of macroeconomic policy. It is claimed that these arrangements prevent countries from escaping from the imperative for fiscal austerity. Wray (2011) demonstrated that the necessity for the US Treasury to borrow from the non-Government sector can still lead to the same balance sheet outcomes as those which are associated with the neo-chartalist perspective based on the consolidated Treasury and Federal Reserve (see also Lavoie, 2011).

This paper argues that the institutional arrangements prevailing in the UK and Australia do not preclude these countries from pursuing full employment strategies. The Job Guarantee (Employer of Last Resort) addresses the inherent timing problems associated with Pump Priming (Mitchell, 1998).

It needs to be emphasised is that these institutional arrangements were the outcome of domestic political processes that were driven by a neo-liberal ideology which emphasises the pre-eminence of markets and the need for small government. At face value, however, the full funding of deficits appears to represent prudent behaviour, rather than the outcome of conscious political choices. By reference to to ensure sustained full employment.

Fiscal deficits do entail exposure to bond markets, but sovereign countries issuing their own currency denominated debt can never become insolvent. Further it is extremely unlikely that the relative magnitude of bondholder income would ever undermine the fiscal programs of a Federal Government. Indeed, if there was a serious political commitment to full employment, these institutional arrangements could be rapidly jettisoned, given that the simple macroeconomic accounting identities show that for most countries, ongoing budget deficits are essential

It is somewhat ironic that, in an IMF document, Jacome et al (2012) note that there are three countries where legislation is silent about restrictions on the central bank's provision of credit to the government, namely Australia, New Zealand, and the United Kingdom. The RBA does operate in the primary market for government securities to ensure it has sufficient holdings to conduct Open Market Operations, but while its purchases are relatively small, there is no specified limit.

Finally, it is worthwhile noting an apposite quote from Mitchell (2009b) which was written more than 2 years before the current academic exchanges: 'Government might well enact provisions that dictate relations between changes to spending and changes to tax revenues (a balanced budget, for example); it might require that bonds are issued before deficit spending actually takes place; it might require that the treasury have "money in the bank" (deposits at the central bank) before it can issue a cheque; and so on. These provisions might constrain government's ability to spend at the desired level. However, economic analysis shows that they are self-imposed and are not economically necessary – although they may well be politically necessary.'

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8. Endnotes

¹ This paper builds on and updates an earlier one presented at the Social Policy Association Conference, *Bigger Societies, Smaller Governments?* in Lincoln, England in July (Watts, 2011).

² Little justification is provided by the Inter-Governmental Organisations as to why fiscal stimulus measures were warranted within economies with strong equilibrating properties in the context of a cyclically invariant NAIRU. However, the IMF (2010b:23) acknowledges that temporary joblessness can lead to 'long-term unemployment and to lower potential output growth', which implies a cyclically sensitive (hysteric) NAIRU.

³ OECD (2011c:226) presents an ominous picture with Japan and the U.S., which do not have official medium term fiscal plans, requiring a 10-11 percentage point improvement in their primary balances as a share of GDP from 2010 to stabilise their debt to GDP ratios by 2025 (Sharpe and Watts, 2012).

⁴ These policy documents typically make little or no reference to the impact on unemployment of the proposed measures (e.g. OECD, 2011b; IMF, 2011b).

⁵ This poorly articulated concept appears to be synonymous with a reduced role for Government and an enhanced role for voluntary organisations and the private sector in service provision in the overall context of individuals assuming greater personal responsibility.

⁶ In most countries the official unemployment rate significantly understates total labour underutilisation which also includes the underemployed and the discouraged unemployed. Since some of the unemployed and involuntarily inactive seek part-time work, the appropriate metric to calculate measures of labour underutilisation is 'hours', not 'bodies'. Such measures would also need to take into account underemployed part-time workers who seek extra hours. Hours based measures of labour underutilisation, incorporating underemployment and discouraged unemployment, have been calculated for Australia by the Centre of Full Employment and Equity at the University of Newcastle, NSW, Australia (see <http://e1.newcastle.edu.au/coffee/index.cfm>). A rough rule of thumb is to double the Australian official unemployment rate to obtain an hours based measure of labour underutilisation.

⁷ For example, Argentina sacrificed the sovereignty of its currency between 1991 and 2002 with its Currency Board pegging the peso to the U.S. dollar in an attempt to eliminate hyperinflation and stimulate economic growth.

⁸ Here we mean a deficit, which is larger than is possible given the initial Treasury deposits at the Federal Reserve. This does not address the US problem of debt gridlock, but see Wray (2011).

⁹ Rising bond rates have impacted on most Eurozone countries, in particular the PIIGS, since the advent of the GFC.

¹⁰ The rate of unemployment for workers under the age of 25 in Spain reached 51.1% in March 2012 (European Commission, 2012).

¹¹ This terminology was originally used by Galbraith (1973) in reference to ways to address the power and influence of large corporations.

¹² The Modern Monetary Realism blog (see <http://monetaryrealism.com/category/modern-monetary-realism>) has focussed on the ex post accounting identity. Contributors make two useful points: 1) private sector saving, S, consists of both household saving and firms' undistributed profit; 2) net saving, unless carefully defined, can be considered to be private sector saving net of depreciation, as opposed to the definition used in this paper, namely (S-I).

¹³ A balanced budget regime is usually understood in terms of the business cycle, whi so that surpluses are run in upturns and deficits in downturns. We have taken a less extreme interpretation of the implications of a balanced budget by assuming sustained full employment.

¹⁴ The accounting identity would be restored by the fiscal budget going into deficit via the operation of automatic stabilisers.

¹⁵ By availability, we mean, after account has been taken of non-government spending. If the Treasury chooses to increase its net spending above that consistent with full employment, then an increase in taxes would be required, not to finance the expenditure, but rather to make additional real resources available for purchase by the Treasury.

¹⁶ See Mitchell and Mosler (2002) for a critique of the Australian financial market's justification for the retention of the market for Commonwealth Government Securities.

¹⁷ Van Lear (2002/3) expresses concerns about the depiction of the Central Bank, Treasury relationship, in Wray (1998) and Bell (2000). There have been other heterodox critiques of MMT &/or Chartalism, including Gnos and Rochon (2002), Rochon and Vernengo (2003), and Febrero (2009), but they do not focus on the viability of full employment policy, under current institutional arrangements.

¹⁸ Fiebiger claims that US commercial banks now hold little Treasury paper anyway.

¹⁹ Lavoie also outlines a Post-Chartalist sequence of transactions in which the additional Government deposits of \$100 in the Commercial Banks are not transferred to the Central Bank prior to being spent (Lavoie, 2011:15-16, Table 2).

²⁰ In the USA, the Treasury tries to maintain a deposit of \$5 billion in the Federal Reserve at the close of each day (Wray, 2011).

²¹ In this scenario, there will be no downward pressure on the interbank rate, despite additional reserves being held by the Commercial Banks, because they choose to do so. Wray (2011) raises the spectre of the Federal Reserve needing to sell Treasury Bills to the Commercial Banks to counter downward pressure on the interbank (Federal Funds) rate, which contributes to debt gridlock.

²² An interest rate corridor, which still exists in Australia (see Figure 1), prevailed until November 2006 in the UK.

²³ The reader is referred to BoE (2010, paras. 55-59 & paras. 73-85) for a more detailed discussion of the Operational Standing Facilities.

²⁴ The Reserve Bank makes a clear statement about the conduct of Open Market Operations 'On a day-to-day basis, deviations in the cash rate around the target are determined by the supply and demand for exchange settlement (ES) funds. These funds are held in accounts at the Reserve Bank by banks as well as a number of other institutions, and are used by these account holders to meet their settlement obligations to each other and to the Bank. The daily aggregate net settlement obligation between ES account holders and the Bank can be very large. This is mostly because the Reserve Bank acts as banker to the Australian Government. Expenditure by the Australian Government results in funds flowing into ES accounts, while the payment of federal taxes has the opposite effect. Similarly, purchases of Commonwealth Government Securities (CGS) from the Government by investors reduce ES balances while redemptions of such securities increase ES balances' (RBA, 2012). Australian commercial banks and other financial institutions must keep positive exchange settlement accounts with the RBA to allow settlement of interbank transactions within the financial system.

²⁵ On the other hand, indexed gilts are sold at the lowest bid price.

²⁶ The use of auctions, rather than the tap system, means that it is very unlikely that there will be a shortfall of bids for a specified bond issue. However the Bid to Cover ratio for Australian Treasury Fixed Coupon Bonds was as low as 1.33 on 30 November 2011, after being 1.01 on 5 July 1983. Mitchell (2009c) points out that 'If the demand for government paper is declining, this more than likely means is that the economy is now offering prospects of growth and investors are diversifying their portfolios again into riskier financial assets and as a consequence desiring less government paper.' In turn this means that 'the extent to which the Government needs to drain the excess funds to maintain control of monetary policy is reduced'. However riskless government securities remain an important component of a portfolio containing increasingly risky assets.