Understanding the economic fallacies of the intergenerational debate

William Mitchell and Warren Mosler

Abstract
This paper demonstrates that Federal spending is not inherently financially constrained and does not have to be facilitated via prior taxation or debt-issuance. It also refutes the claim that budget deficits result in higher interest rates in the future, with lower levels of capital formation and economic growth as a consequence. These misconceptions together lead to the nonsensical claim that by running surpluses now the Government will be better able (because it has 'more funds stored away') to cope with future spending demands. The paper thus challenges the conventional view, such as that espoused in the 2002 Australian Treasury Intergenerational Report, that the ageing population will place unsustainable demands on the Federal budget.

Keywords: Budget surpluses, intergenerational debate, functional finance
1. Introduction

Readers of this journal were introduced to the intergenerational (IG) debate and, in particular, some of the mainstream macroeconomic arguments by Coombs and Dollery (2002, 2004). In this paper, we critique the mainstream position and argue that Federal Government fiscal policy stance is flawed. We argue that the current policy will damage the futures of many Australian citizens by undermining their ability to confront some of the real issues that accompany an 'ageing population'. We show that the Government posturing on the IG issue fails to acknowledge that the real issues are the "real economic reallocations we may need to make to cope with an ageing population" (McAuley, 2002). Furthermore, the debate has ignored the necessity to enhance our public capital infrastructure in areas like education which provides the best bridge into the future.

While government and business have supported the continued pursuit of budget surpluses for many reasons, the theme underlying the pro-surplus rhetoric is now centred on IG issues. It is claimed that a number of federal programs (such as health, social security, and education) are sensitive to demographic factors and with population ageing, the budget 'blow out' will be unsustainable (Commonwealth Treasury hereafter IGR, 2002: 4). So in addition to the usual mainstream economic arguments about the surplus reducing pressures on interest rates and the need to promote national saving, a new vehicle of persuasion has been introduced with rhetoric designed to strike at the heart of our life experiences - health and aged care.

To cement this persuasion into an 'analytical' framework, the Federal government as part of it's rather misnamed 'Charter of Budget Honesty Act 1998', published its long awaited Intergenerational Report as Budget Paper No.5, one of the 2002-03 Budget documents (IGR, 2002). The IGR provided a forty-year projection of Commonwealth spending and revenues assuming various demographic and economic parameters. The IGR claims that the upsurge in persons over 65 years of age will cause the cost of health and pension support to blow out with increasingly fewer tax payers in the workforce left to 'fund' the expenditure.

The IGR summarised the implications as follows: (a) the budget cannot be allowed to reach the projected level because the increasing public debt would push interest rates up and 'crowd out' productive private investment; (b) increasing debt will also impose higher future taxation burdens for our children which will reduce their future disposable incomes and erode work incentives; (c) the private sector must save more; (d) the economy must produce more jobs and people must work longer to accumulate more funds to finance their own retirements; and (e) higher levels of immigration are required to reverse the ageing bias in the population.

The debate stimulated by the IGR has been confined to issues like, the validity of the IGR's population and economic projections (McDonald and Dowrick, 2002); challenges to the focus on reducing spending rather than increasing taxation (McAuley, 2002); challenges to the claim that ageing per se inevitably increases health spending as a percent of GDP (Kinnear, 2002); and issues of intergenerational equity and fiscal sustainability (Coombs and Dollery, 2002, 2004).

While some of the Government's real aims are sound (for example, to provide efficient and high quality health care), we argue that the basic monetary assumptions of IGR are
without any application once there is a complete understanding of the dynamics of a fiat currency economy operating with a floating exchange rate.

In addressing the way in which the IGR forces us to think about the principles that underlie the role of government with a monopoly in fiat (legislated) currency issuance we note the following three glaring facts that describe macroeconomic outcomes in Australia over the last 10 years or so: (a) the Government has been running record budget surpluses; (b) the private sector has achieved record levels of indebtedness; and (c) labour underutilisation (unemployment and underemployment) has persisted at high levels. The three outcomes are related and driven by the first.

We argue that the pursuit of budget surpluses undermines the capacity of the economy to provide the resources that may be necessary in the future to provide real goods and services of a particular composition desirable to an ageing population. We suggest that by achieving and maintaining full employment via appropriate levels of net spending (deficits) the Government would be providing the best basis for future growth in real goods and services. We conclude that in a fully employed economy, the intergenerational spending decisions come down to political choices sometimes constrained by real resource availability, but never constrained by monetary issues, either now or in the future.

Unfortunately, the acceptance by most commentators in Australia of the erroneous idea that the Federal government is financially constrained has allowed the IGR to be represented as one of the major issues facing the nation. Overlooked is the issue of our tolerance for badly needed forgone real output, as evidenced by persistently high levels of labour underutilisation. Real issues like this, which will determine whether there is a real capacity by the population to enjoy adequate health and aged care in the future, are being overshadowed by an errant comprehension of monetary (non) issues.

We demonstrate that Federal spending is not inherently financially constrained and does not have to be facilitated via prior taxation or debt-issuance. We also refute the claim that budget deficits result in higher interest rates in the future, with lower levels of capital formation and economic growth as a consequence. These misconceptions together lead to the nonsensical claim that by running surpluses now the Government will be better able (because it has 'more funds stored away') to cope with future spending demands.

We thus challenge the validity of these public debates at their most elemental level and conclude that the mainstream position is misguided at best.

2. Demographic trends in Australia

The IGR debate is initially motivated by the observation that Australia's demography is projected to undergo substantial changes over the coming years. Table 1 shows long-term projections of dependency ratios (dependent cohort expressed as a percentage of the working age population) for those 15 years and under, 65 years and over and total dependents for the three ABS population projections.

The changes in the dependency ratios will be associated with compositional changes in the demand for real resources and policy makers will continue to make political choices to determine the distribution of available real resources across the population (for example, converting unused schools into aged care facilities). These choices will
be constrained only by real resource availability. Policy choices taken today will also influence future resource availability. For example, investment in education and research now will enhance our ability to exploit technological and other productivity gains later. Achieving higher levels of employment now (noting that some 1.8 million Australians are currently without enough work, some without any) will enhance the capacity of households to accumulate wealth (via savings) to contribute to their own health and retirement welfare.

Table 1: Dependency ratios by ABS demographic scenario, 2005–2050

<table>
<thead>
<tr>
<th>Year</th>
<th>Low Scenario</th>
<th>Medium Scenario</th>
<th>High Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aged</td>
<td>Child</td>
<td>Total</td>
</tr>
<tr>
<td>2005</td>
<td>18.1</td>
<td>28.7</td>
<td>46.8</td>
</tr>
<tr>
<td>2010</td>
<td>19.7</td>
<td>26.6</td>
<td>46.3</td>
</tr>
<tr>
<td>2015</td>
<td>23.1</td>
<td>25.1</td>
<td>48.2</td>
</tr>
<tr>
<td>2020</td>
<td>26.8</td>
<td>23.8</td>
<td>50.5</td>
</tr>
<tr>
<td>2025</td>
<td>30.7</td>
<td>23.0</td>
<td>53.7</td>
</tr>
<tr>
<td>2030</td>
<td>35.1</td>
<td>22.8</td>
<td>57.9</td>
</tr>
<tr>
<td>2035</td>
<td>38.3</td>
<td>22.8</td>
<td>61.1</td>
</tr>
<tr>
<td>2040</td>
<td>41.5</td>
<td>22.8</td>
<td>64.2</td>
</tr>
<tr>
<td>2045</td>
<td>43.0</td>
<td>22.3</td>
<td>65.4</td>
</tr>
<tr>
<td>2050</td>
<td>44.9</td>
<td>22.0</td>
<td>66.9</td>
</tr>
</tbody>
</table>

Source: ABS Demographic Statistics, Ausstats. Scenarios are defined in terms of fertility, migration and life expectancy. In the medium and high scenarios all three components are assumed medium and high, respectively. In the Low Scenario fertility and migration are low and life expectancy is assumed medium.

While the challenge is ahead in managing this political process, we argue in the remaining sections that no matter how difficult these ‘choices’ might become there will never be a risk of government insolvency.

3. Sketching a modern monetary macroeconomics

3.1 Sectoral accounting

How does government macroeconomic policy operate in a modern monetary economy distinguished by the use of fiat (rather than commodity) currency and flexible exchange rates (see Mitchell and Mosler, 2002)? Under a fiat currency, the monetary unit defined by the government is convertible only into itself and not legally convertible by government, for example, into gold as it was under the gold standard. The currency has no intrinsic worth. The viability of the fiat currency is ensured by the fact that it is the only unit which is acceptable for payment of taxes and other financial demands of the government.

While not emphasised in mainstream analysis, as a matter of national accounting - the federal government deficit (surplus) equals the non-government surplus (deficit). The non-government sector is the sum of the private domestic and the foreign sectors. In aggregate, there can be no net savings of financial assets of the non-government sector.
without cumulative government deficit spending. In other words, the only entity that can provide the non-government sector with net financial assets (net savings) and thereby simultaneously accommodate any net desire to save and thus eliminate unemployment is the federal government. It does this by net spending. Additionally, and contrary to mainstream rhetoric, the systematic pursuit of government budget surpluses is necessarily manifested as systematic declines in private sector savings.

A simple example demonstrates these points. Suppose the economy is populated by two people, one being government and the other deemed to be the private sector (see Nugent, 2003). If the government spends 100 dollars and taxes 100 dollars (balanced budget) then private savings are zero (private budget is balanced). Say the government spends 120 and taxes remain at 100, then private saving is 20 dollars which can accumulate as financial assets (in this case, 20 dollar notes although to encourage saving the government may decide to issue an interest-bearing bond). The government deficit of 20 is exactly the private savings of 20. Now if government continued in this vein, accumulated private savings would equal the cumulative budget deficits. However, should government decide to run a surplus (say spend 80 and tax 100) then the private sector would owe the government a net tax payment of 20 dollars. The government may agree to buy back some bonds it had previously sold. Either way accumulated private saving is reduced dollar-for-dollar when there is a government surplus. The government surplus has two negative effects on the private sector: (a) the stock of financial assets (money or bonds) it holds, which represents private wealth, falls; and (b) private disposable income falls in line with the net taxation impost. Some may retort that government bond purchases provide the private wealth-holder with cash. That is true but the liquidation of wealth is driven by the cash shortage in the private sector arising from tax demands exceeding government spending. The result is exactly the same when expanding this example by allowing for private income generation and a banking sector.

Macroeconomics textbooks use a 'sectoral flows' framework to summarise the accounting of income flows between the government, private and foreign sectors. Total private savings equals private investment, the government budget deficit, and net exports, as net exports represent the net financial asset savings of non-residents.

Figure 1 shows the evolution of the federal budget (positive equals surplus), the private domestic balance (positive indicates net saving) and the current account deficit (positive means we are drawing on foreign savings). It clearly shows that the private domestic sector has been negatively saving over the period that the federal government has been running budget surpluses.

The pursuit of government budget surpluses is a contractionary policy position. Pursuing budget surpluses is necessarily equivalent to the pursuit of non-government sector deficits. The decreasing levels of net private savings 'financing' the government surplus increasingly leverage the private sector and the deteriorating debt to income ratios will eventually see the system succumb to ongoing demand-draining fiscal drag through a slow-down in real activity. If the aim was to boost the savings of the private domestic sector, when net exports are in deficit, then as Wray (1998: 81) suggests "taxes in aggregate will have to be less than total government spending."
Understanding the economic fallacies of the intergenerational debate

Figure 1: Sectoral balances in Australia, 1960-61 to 2004-05, per cent of GDP

Source: RBA Bulletin database. The private sector balance is computed from the sectoral balances as the sum of the public balance and the current account balance.

3.2 Government spending is not inherently revenue constrained

Mainstream macroeconomics draws a false analogy between private household budgets and the government budget by claiming that like a private household, the government has to 'finance' its spending. In other words, it is alleged to be financially constrained. With three alleged sources of 'finance' available to government (taxes, selling bonds and money creation), various scenarios are constructed to show that budget deficits are either inflationary, if 'financed' by 'printing money' or squeeze private sector spending (by pushing up interest rates) if 'financed' by debt issue. Taxation is also considered to be a drain on private enterprise and initiative.

Bell (2000: 617) says that the erroneous understanding that a student will gain from a typical macroeconomics course is that "the role of taxation and bond sales is to transfer financial resources from households and businesses (as if transferring actual dollar bills or coins) to the government, where they are respent (i.e., in some sense 'used' to finance government spending)."

What is missing is the recognition that a household, the user of the currency, must finance its spending, ex ante, whereas government, the issuer of the currency, necessarily must spend first (credit private bank accounts) before it can subsequently tax (debit private accounts). Government spending is the source of the funds the private sector requires to pay its taxes and to net save.

Government spending is therefore not inherently revenue constrained and is typically facilitated by the government issuing cheques drawn on the Reserve Bank of Australia (RBA). The RBA will never 'bounce a government cheque'. The recipients of the cheques (sellers of goods and services to the Government or transfer payment recipients) deposit them in their bank, and after clearance, credit entries appear in accounts throughout
the commercial banking system. Operationally, this process is independent of any prior revenue, including taxing and borrowing. How much the government spends today does not financially diminish its ability to further spend in the future. Taxation is the reverse of this process and bank entries reflect the draining of liquidity from the private sector by the government. No real resources are transferred to government. Nor is government's ability to spend augmented by the adjustments to private bank accounts. The notion of the government 'saving' its own currency is nonsensical.

3.3 Unemployment occurs when net government spending is too low
The purpose of government spending is to move real resources from private to public domain to facilitate the government's economic and social program. Once we realise that government spending is not revenue-constrained then we have to analyse the functions of taxation in a different light. The starting point of this new understanding is that taxation functions to promote offers from private individuals to government of goods and services in return for the necessary funds to extinguish the tax liabilities. So the imposition of taxes creates unemployment (people seeking paid work) in the non-government sector. As a matter of accounting, for aggregate output to be sold, total spending must equal total income (whether actual income generated in production is fully spent or not each period). Involuntary unemployment is idle labour unable to find a buyer at the current money wage. In the absence of government spending, unemployment arises when the private sector, in aggregate, desires to spend less of the monetary unit of account than it earns. Nominal (or real) wage cuts per se do not clear the labour market, unless they somehow eliminate the private sector desire to net save and increase spending.

So unemployment occurs when net government spending is too low to accommodate the need to pay taxes and the desire to net save. Wray (1998: 81) says, "Normally, taxes in aggregate will have to be less than total government spending due to preferences of the public to hold some reserves of fiat money." Thus, in general, deficit spending is necessary to ensure high levels of employment.

For a time, inadequate levels of net government spending can continue without rising unemployment. In these situations, as is evidenced in Australia over the last decade GDP growth can be driven by an expansion in private debt. The problem with this strategy is that when the debt service levels reach some 'threshold' percentage of income, the private sector will attempt to restructure their balance sheets to make them less precarious and as a consequence the demand for debt slows and the economy falters. In this case, any fiscal drag (inadequate levels of net spending) begins to manifest as unemployment.

3.4 Why does the federal government issue debt?
If government spending is not financially constrained then why does it issue debt? While not financially constrained, the government's budget position has liquidity impacts on the private sector. Government spending and purchases of government bonds by the RBA add liquidity and taxation and sales of government securities drain private liquidity. These transactions influence the cash position of the system on a daily basis and on any one day they can result in a system surplus (deficit) due to the outflow of funds from the official sector being above (below) the funds inflow to the official sector. The system
Understanding the economic fallacies of the intergenerational debate

cash position has crucial implications for the RBA, which targets the level of short-term interest rates as its monetary policy position.

After spending and portfolio adjustments have occurred, budget deficits result in ‘system-wide’ surpluses (manifested as excess reserves in the accounts commercial banks keep with the RBA). The RBA offers the commercial banks a discount on the going short-term interest rate for excess reserves. Competition between the commercial banks to create better earning opportunities on the ‘surplus’ reserves then puts downward pressure on the cash rate. But the system-wide excess cannot be removed by intra-bank transactions because for every liability there is a corresponding asset - that is, no net financial assets can be created or destroyed by purely private transactions. If the RBA desires to maintain the current target cash rate then it must ‘drain’ this surplus liquidity by selling government debt. In other words, government debt functions as interest rate support via the maintenance of desired reserve levels in the commercial banking system and not as a source of funds to ‘finance’ government spending. If the government did not issue debt then the RBA would lose control of the target interest rate. The extreme example is Japan which has near zero short-term interest rates because the Bank of Japan does not ‘drain’ all the liquidity being pumped in via their massive budget deficits. Nugent (2003) says “that in Japan, with the highest public debt ever recorded, and repeated downgrades, the Japanese government issues treasury bills at .0001%! If deficits really caused high interest rates, Japan would have shut down long ago!”

With on-going budget deficits, the private sector may ultimately refuse to hold any more cash or assets. In this case, the private sector would increase its consumption spending. With private employment levels rising in response to the increased consumption, the budget deficit could be lower yet the economy still be operating at its real limit (full employment). Whether this generates inflation depends on the ability of the economy to expand real output to meet rising nominal demand. That is not compromised by the size of the budget deficit.

4. The intergenerational myth in Australia

4.1 The fallacies in the Intergenerational Report

The crux of the Government’s position is that it needs to run ‘budget surpluses now’ to ‘save for the future’. Using the analysis in Section 3, we can see that the IGR (2002: 1) claim that the “The Commonwealth Budget recorded an accumulated cash surplus of $23.7 billion from 1997-98 to 2000-01” is equivalent to saying that non-government SA financial asset savings declined by $23.7 billion over the same period. Equally, the IRG (2002: 1) claim that “During this period, Commonwealth government net debt, already one of the lowest among the industrialised economies, has fallen from $82.9 billion to $39.3 billion” is equivalent to saying that non-government holdings of government debt fell by the same amount over this period. In other words, private sector wealth was destroyed in order to generate the funds withdrawal that is accounted for as the budget surplus.

The IRG (2002: 1) claims this accounting record is achieved through “sound fiscal management ... [and] ... has provided the platform for vigorous, low inflationary growth ... generating jobs and higher incomes for Australians.” Once we appreciate
the equivalents noted above we would conclude that this draining of financial equity introduces a deflationary bias that has slowed output and employment growth (keeping unemployment at unnecessarily high levels) and has forced the non-government sector into relying on increasing debt provided by overly enthusiastic 'financial engineers' to sustain consumption.

These insights help us understand the errors in the logic underpinning the IGR and the issue in general. Financial commentators often suggest that budget surpluses in some way are equivalent to accumulation funds that a private citizen might enjoy through saving. The resonance with the US debate in relation to their Social Security Trust Fund is manifest (Eisner, 1998; Penner et al, 1999). The idea that accumulated surpluses allegedly 'stored away' will help government deal with increased public expenditure demands that may accompany the ageing population lies at the heart of the IGR misconception. We repeat - the notion of government 'saving' its own currency is nonsensical. The government can always spend if there are goods and services available for sale. While it is moot that an ageing population will place disproportionate pressures on government expenditure in the future (Kinnear, 2002), we would argue that the concept of pressure is inapplicable because it erroneously assumes a financial constraint.

The IGR (2002: 1) considers that "taxpayers' funds" will be squeezed. But the notion that taxpayers fund 'anything' is also erroneous. As we have seen, taxes are paid by debiting accounts of the member commercial banks accounts whereas spending occurs by crediting the same. The notion that 'debited funds' have some further use is not applicable. When taxes are levied the revenue does not go anywhere. The flow of funds is accounted for, but accounting for a surplus that is merely a discretionary net contraction of private liquidity by government does not change the capacity of government to inject future liquidity at any time it chooses (Mitchell and Mosler, 2002).

The mainstream claim that deficits lead to future tax burdens is also problematic. The IGR (2002: 1) falls into this error claiming that "if policies are not adjusted, the current generation of taxpayers is likely to impose a higher tax burden on the next generation." Government budgets are not a 'bridge' that spans the generations in some restrictive manner. Each generation is free to select the tax burden it endures. Taxing and spending transfers real resources from the private to the public domain. Each generation is free to select how much they want to transfer via political decisions mediated through political processes.

When we argue that there is no financial constraint on federal government spending we are not, as if often claimed, saying that government should therefore not be concerned with the size of its deficit. We do not advocating unlimited deficits. Rather, the size of the deficit (surplus) will be market-determined by the desired net saving of the non-government sector. Given this saving it is the responsibility of the government to ensure that its taxation/spending are at the right level to ensure that full employment is achieved.

This insight puts the idea of sustainability of government finances into a different light. The IGR (2002: 1) logic is that forward planning is necessary "to ensure that governments will be well placed to meet emerging policy challenges in a timely and effective manner." What we know is that if the Federal government continues to run
budget surpluses to keep Commonwealth debt low; then it will ensure that further deterioration in non-government savings will occur until aggregate demand decreases sufficiently to slow the economy down and raise the output gap.

We agree that the goal should be to maintain an “efficient and effective medical health system” (IGR, 2002: 1). Clearly the real health care system matters by which we mean the resources that are employed to deliver the health care services and the research that is done by universities and elsewhere to improve our future health prospects. So real facilities and real know how define the essence of an effective health care system.

Clearly maximising employment and output in each period is a necessary condition for long-term growth. The emphasis in the IGR (2002: 2) on “encouraging mature age participation in the labour force” is clearly desirable and contrary to current government policy which reduces job opportunities for older male workers (Mitchell et al., 2005). We can agree that anything that has a positive impact on the dependency ratio is desirable and the best thing for that is ensuring that there is a job available for all those who desire to work.

But this is about political choices rather than government finances. The ability of government to provide necessary goods and services to the non-government sector, in particular, those goods that the private sector may under-provide is independent of government finance. Any attempt to link the two via fiscal policy ‘discipline’, will not increase per capita GDP growth in the longer term. The reality is that fiscal drag that accompanies such ‘discipline’ reduces growth in aggregate demand and private disposable incomes, which can be measured by the foregone output that results.

4.2 The irrelevance of the Futures Fund

In the 2005 Federal Budget, the Government announced the creation of the Future Fund (FF) which it says was an “investment fund – which will help us prepare for the coming changes” (Commonwealth of Australia, 2005). Full details will be announced in the upcoming 2005-06 Budget. The aim of the Future Fund is to ‘spend’ the excess taxation over spending on financial assets so that by 2020 the stockpile of financial assets will fully cover the unfunded Commonwealth superannuation liabilities. There are several issues that relate to the operation of the Future Fund and the types of assets it might accumulate which are not relevant here. Further the accounting involved suggest that to achieve the targets on-going surpluses of over $6 billion a year will be required (Nielsen and Webb, 2005) which will prolong the fiscal drag and may prove impossible once the private sector resumes saving.

However, given that the Future Fund will not increase the capacity of Government to spend in the future (following Section 3), the real question that Australian citizens, should be asking is whether an accumulation fund held by our Government participating in local and international equity markets is a better way to ‘spend’ our liquidity than: (a) to leave it in private hands; and/or (b) to build public capacity in the form of better schools, universities, research facilities, hospitals and community amenities.
5. Conclusion

This paper has made three major points. First, the idea that it is necessary for the Federal government to stockpile financial resources to ensure it can provide services required for an ageing population in the years to come has no application. It is not only invalid to construct the problem as one being the subject of a financial constraint but even if such a stockpile was successfully stored away in a vault somewhere there would be still no guarantee that there would be available real resources in the future (see Foster, 1981). Second, the best thing to do now is to maximise incomes by ensuring there is full employment. This requires a vastly different approach to fiscal and monetary policy than is currently being practised. Third, if there are sufficient real resources available in the future then their distribution between competing needs will become a political decision which economists have little to add.

Long-run economic growth that is also environmentally sustainable will be the single most important determinant of sustaining real goods and services for the population in the future. Principal determinants of long-term growth include the quality and quantity of capital (which increases productivity and allows for higher incomes to be paid) that workers operate with. Strong investment underpins capital formation and depends on the amount of real GDP that is privately saved and ploughed back into infrastructure and capital equipment. Public investment is very significant in establishing complementary infrastructure upon which private investment can deliver returns. A policy environment that stimulates high levels of real capital formation in both the public and private sectors will engender strong economic growth.
References


