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How sustainable is sub-national public debt in Australia?☆

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ABSTRACT

Since the Global Financial Crisis the public indebtedness of Australia's States and Territories has risen significantly due to sizeable fiscal deficits. This paper examines the stability of sub-national governments' indebtedness before gauging the fiscal effort needed to scale back public debt to GSP ratios to ten-year average levels. To do this, we first derive key debt sustainability formulae which are then applied to relevant sub-national data. The analysis reveals that under macroeconomic conditions and fiscal settings in 2012–13, debt levels were unstable for all State and Territory general governments. Moreover, virtually all sub-national governments in Australia need to turn existing primary budget deficits into substantial surpluses to restore public debt to levels experienced on average over the previous decade. This is not in prospect without even more substantial fiscal consolidation than currently envisaged in State and Territory budgets.

1. Introduction

The sustainability of public debt has assumed greater significance as an economic policy issue since the 2008–09 Global Financial Crisis. In the wake of that crisis, budget deficits and public debt levels rose sharply as governments around the world increased budget spending as a countercyclical measure. Meanwhile, sources of government revenue collapsed due to the widespread downturn in economic activity (IMF, 2013). Two key questions inevitably arise for any government whose stock of public debt keeps growing: is the public debt trajectory stable or unstable and, if unstable, what budgetary stance is required to bring public debt under control?

Many authors have examined the issue of government debt sustainability, mainly with reference to developing and emerging economies, based on the relationship between budget deficits and public debt accumulation (see for instance Buiter, 1985; Fischer and Easterly, 1990; Frederiksen, 2001; Hemming et al., 2003; Reinhart et al., 2003; Bohn, 2008; Budina and Van Wijnbergen, 2009; Escolano, 2010; IMF, 2010; Rangarajan and Prasad, 2012; Ghosh et al., 2013; Tanner, 2013). In light of the large increases in the public indebtedness of most OECD member countries post-crisis, debt sustainability analysis has also become increasingly relevant to advanced economies.

To date, research addressing the above questions has mainly centred on public debt sustainability at the national level. Yet in many economies, fiscal positions have also seriously deteriorated at sub-national level, including in Australia's States

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and Territories which are the focus of this paper. Apart from Carling (2014), little research has addressed sub-national public debt in Australia, despite the extensive data provided by the Australian Bureau of Statistics and in State budgets, which are published in accordance with the Loan Council Uniform Presentation framework (Commonwealth of Australia, 2008, p v) established after the May 1991 Premiers' Conference and updated in subsequent agreements of 2002, 2003 and 2008.

The higher public debt levels of Australia's States and Territories not only imply an increased burden for the future taxpayers of those jurisdictions, but also raise economic risks in the present. For instance, according to standard macroeconomic models, the demand for domestic funds from sub-national governments, when aggregated, puts upward pressure on domestic interest rates and appreciates the economy's exchange rate. This crowds out private investment and net exports via worsened industry competitiveness, which limits growth in the wider economy.

A sub-national government's public debt becomes unstable when it continues to increase as a proportion of that jurisdiction's production, or Gross State Product (GSP), because interest payments on the debt keep adding to budget deficits, and hence the public sector borrowing requirement without limit. The probability of default rises as public debt escalates, as recognised by the major credit rating agencies, Standard and Poor's (2010) and Moody's Investor Services (2013). These agencies monitor a range of institutional and financial measures, including the ratio of debt to tax revenue, that are closely related to the debt/GSP ratio (in part because there are economic and political constraints on the share of tax revenue to GSP). Downgrades to creditworthiness that reflect this risk raise the interest premium that lenders require as compensation which further swells public debt interest obligations, leading to a vicious circle of deficits and debt.[1]

The normative question of the appropriate level of state debt to GSP will depend on a broad range of factors. If the debt is used to finance capital expenditure which enhances the productive capacity of the economy, a higher level of debt will generally be seen as appropriate and more acceptable to lenders to the state. On the other hand, if the debt is used to fund current expenditure or capital expenditure which is unproductive, lenders will generally be less willing to support higher debt levels. These are important issues but outside the scope of this analysis.

In this paper we show that the capacity of sub-national governments in Australia to stabilise debt to GSP essentially depends on the following factors—the size of public debt relative to GSP, the effective servicing cost of that debt relative to GSP and the size of the primary budget balance. The primary budget balance is defined as the conventional fiscal cash surplus (+) or deficit (−) but excludes the impact on the balance of public debt interest payments.[2]

The primary balance is central to debt sustainability analysis since, together with interest payments on previously accumulated debt, it governs the rate at which public debt accumulates. Governments directly control the primary fiscal balance through discretionary fiscal measures that alter either public spending, revenue-raising, or both. Unlike at federal level, there is no scope for monetising budget deficits at State level, so no financing via seigniorage occurs.

A state's budgetary stance becomes untenable if its public debt to GSP ratio (and associated debt to tax revenue ratio) exceeds a level lenders will support at prevailing interest rates. Exactly what this level is can vary from state to state, depending on the nature of the government spending or transfers being funded and how quickly debt has accumulated. If public debt escalates rapidly, sub-national governments need to decide whether merely stabilising debt to GSP is sufficient. If not, then a lower debt to GSP target has to be set.

2. Sub-national public sector borrowing and debt: recent trends[3]

There are a number of different classes of borrowing entities within the sub-national public sector.[4] These include:

- *general government* entities which provide non-market goods and services and transfer payments financed predominantly by taxation (such as police, public schools, public health services);
- *public non-financial corporations* (such as state rail authorities and, to varying degrees across the states, electricity generation and distribution) which are majority government owned and which cover costs (albeit not always fully) from end users rather than from taxation revenue;
- *public financial corporations* which engage in financial intermediation (such as the central borrowing authorities, including the Treasury Corporation of Victoria, Queensland Treasury Corporation and similar bodies in other states).

The analysis here focuses on the State and Territory general government sector and the consolidated public sector (which includes State, Territory and local general government plus public financial and non-financial corporations). In the case of public non-financial corporations, capital expenditure and borrowing decisions are generally taken using commercial criteria which should normally generate additional revenue to service the debt. Nonetheless, some public non-financial

[1] The Queensland Commission of Audit (2012, p16) estimated for instance that the Queensland government's debt servicing costs were approximately \$100 million per annum higher than if the State had a AAA credit rating.

[2] The conventional balance equals Taxes (T) less Government Spending (G). The Primary Balance (PB) $= T - (G - PDI)$ where PDI is interest paid on government debt. Because the analysis is focused on the determinants of government borrowing and the associated call on financial markets, Government Spending (G) includes capital expenditure.

[3] The analysis here focuses on gross debt rather the net debt (i.e. gross debt less financial assets). In very summary terms, this is our preferred treatment on the basis that financial assets are required to meet the large unfunded liabilities of the public sector superannuation schemes. Indeed, for three States and both Territories, unfunded superannuation liabilities exceed financial assets. This issue is discussed further in the Appendix.

[4] For further details, see ABS (2005, pp 11–14).