

## **Senate Select Committee on State Government Financial Management**

### **Submission by Alex Wadsley MBA, B.Ec (Hons)**

Mr Wadsley is a PhD Student in Economic at the University of Tasmania, School of Economics & Finance looking at the relationship between the real exchange rate, the terms of trade and the export share in a neo-classical framework. He is also a lecturer in Macroeconomics Theory and Policy and Microeconomic for Finance at the University of Tasmania, School of Economics & Finance.

Previously Mr Wadsley has worked as a financier in Project Finance for BOSI (Bank of Scotland International) and as an analyst for Woodside Petroleum in Western Australia.

### **Terms of Reference:**

Commonwealth and state and territory fiscal relations and state and territory government financial management, including:

- a) Commonwealth funding to the state and territories – historic, current and projected
- b) The cash and fiscal budgetary positions of state and territory governments – historic, current and projected
- c) The level of debt of state/territory government business enterprises and utilities – historic, current and projected
- d) The level of borrowing by state/territory governments – historic, current and projected
- e) An examination of state/territory net government debt and its projected level
- f) The reasons for any government debt including an analysis of the level and efficiency of revenue and spending
- g) The level of investment in infrastructure and state-owned utilities by state and territory governments
- h) The effect of dividends paid by state-owned utilities on their ability to invest
- i) Present and future ownership structures of current and former state-owned utilities and the impact of ownership on investment capacity; and
- j) The effect of investment by state-owned utilities on Australia's capacity constraints.

### **Summary**

This submission focuses on Terms of Reference point j) *the effect of investment by state-owned utilities on Australia's capacity constraints.*

A key finding of the theoretical PhD research, which has been supported by empirical analysis for Australia and other countries, is that increasing investment in addressing export bottlenecks will not improve Australia's balance of trade and may amplify internal economic dislocation caused by the high terms of trade. Increasing productivity in the export sector will cause an appreciation of the exchange rate. Investment in improving capacity constraints should be focused on improving

productivity in the non-traded and import-competing sectors which are under pressure from an appreciated exchange rate.

The way to assist Australia in addressing the balance of trade is to increase saving or reduce investment. Other countries have achieved this through Sovereign Wealth Funds. The Future Fund established by the Federal Government may serve as a basis for an Australian Sovereign Wealth Fund.

From a general macroeconomic standpoint, investment expenditure may exacerbate capacity constraints by increasing aggregate demand. Only investment that *has the capacity to improve productivity quickly* and expand Aggregate Supply will assist.

Given the current shortages, a focus on skilled labour and maintaining road and electricity infrastructure is appropriate.

### ***Investment and Capacity Constraints***

A State Government spending spree is the worst possible response to an over-heating economy. Poorly considered investment is worse than no investment at all.

Investment in improving productivity and efficiency in the non-export sector is more important than addressing export ‘bottlenecks’. Resolving export bottlenecks will only assist the national economy if it is done in concert with a strategy to raise national savings. Otherwise the impact will be on the exchange rate, raising dis-allocation pressures in the economy generally.

The Tasmanian State Government’s record on managing investment is fairly poor with delays in important road projects such as the Kingston Bypass and Bridgewater bridge, while focus has been placed on mega-projects such as the Tamar pulp mill, *which would exacerbate supply constraints*.

### **Capacity Constraints and the Export Sector**

There is a traditional call when the balance of trade figures show a deterioration in the current account balance to blame ‘bottlenecks’ in the export of commodities, such as rail and port infrastructure at Newcastle. This viewpoint is incorrect. The increase in the price of key commodities such as coal and iron ore have been the equivalent of being able to load two or three cargoes of coal for the price of one. If such massive improvements in the terms of trade are not able to improve the current account balance, then no amount of volume increases from improved port or rail infrastructure will be able to. Instead the terms of trade, and any increases in export productivity will likely increase domestic pricing pressures, particularly on wages and the exchange rate.

$$\text{Real Domestic Price Level} = f \left( \frac{\text{Terms of Trade} \cdot \text{Export Sector Labour Productivity}}{\text{Non-Tradeable Sector Labour Productivity}} \right) \quad [1.1]$$

The equation [1.1] is derived from labour market equilibrium, which requires that the real wage for labour working in the export sector must be equal to the real wage for labour working in the non-tradeable sector. As the terms of trade improve, this will result in price pressures on the non-tradeable goods sector. However, improving the productivity in the export sector, for example by increased infrastructure investment, will not reduce price pressures or improve the balance of trade. Instead it will simply increase real domestic price levels and the real exchange rate.

Australia has a very open economy with almost no restrictions on capital account transactions and only rare interventions by the Reserve Bank on foreign exchange markets. Under these conditions the balance of trade is determined by net savings using the following identity (in simple terms):

$$NX = X - M = S - I \quad [1.2]$$

Where NX is net exports, X is exports, M is imports, S is Savings and I is Investment. Net Savings is Savings less Investment. This balance is achieved by adjustments in the exchange rate. Appreciation of the Australian dollar makes imports cheaper, while making it harder for manufacturing exporters to compete in world markets.

In Australia's case there has been an increase in investment by companies from retained earnings, so that the improvement in the terms of trade has been counter-balanced by an increase in the exchange rate. This has in turn put pressure on exporting manufacturers resulting in a loss of jobs in parts of Tasmania's manufacturing sector, such as Blundstone Boots in Hobart and ACL Bearings in Launceston.

The solution to improving the balance of trade, if that is the objective, lies in improving net savings, which can be achieved by increasing the savings rate or, contrary to assumed wisdom, *reducing investment*.

Major resource exporters such as Norway and Chile, as well as the oil rich nations of OPEC have managed domestic pressures associated with appreciating commodity prices by placing a large proportion of the excess returns into Sovereign Wealth Funds. Holding these funds offshore, the impact of terms of trade improvement on currency appreciation is reduced. This helps reduce the 'Dutch Disease' effect, whereby strong exporting sectors lead to employment reductions in import competing sectors.

An additional solution to address the pressures on the domestic economy associated with a high terms of trade are to improve the flexibility of the labour force so that the export sector can expand without placing additional pressures on other labour markets.

## **Capacity Constraints and Aggregate Demand**

Inflationary pressures can be caused by aggregate demand where there are constraints on aggregate supply. Increases in demand can be met by the economy, but only at increased prices, which in turn leads to inflation.

The components of Aggregate Demand are consumption, investment, government expenditure, and net exports.

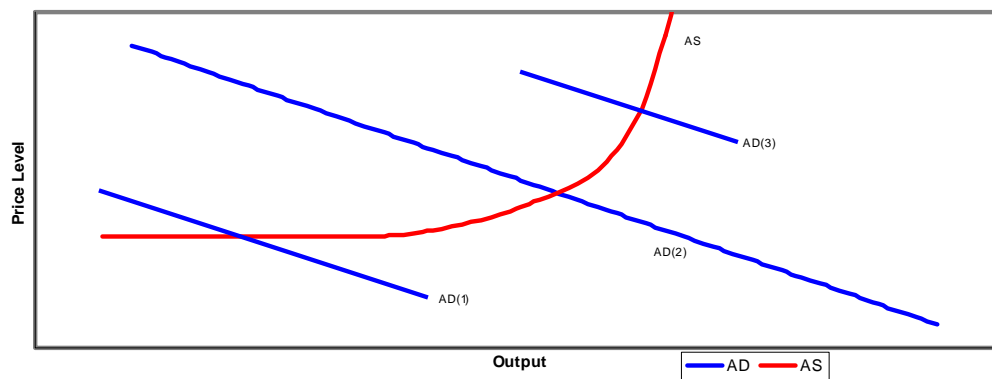
$$AD = C + I + G + NX \quad [1.3]$$

where AD is Aggregate Demand, C is Consumption, I is Investment, G is Government Expenditure and NX is net exports.

It should be noted that the Government Expenditure only refers to domestic government expenditure, as expenditure by government that results directly in imports (for example American made jet fighters) should have no impact on Australian aggregate demand or inflationary pressures in Australia.

### Chart 1 Aggregate Supply and Aggregate Demand

**Aggregate Supply (AS) and Aggregate Demand (AD)**



*Source: Any Introductory Macroeconomics Text*

Chart 1 shows 3 possible relationships between Aggregate Demand and Aggregate Supply, with the impact of government supported investment depending on where the Aggregate Demand curve lies on the Aggregate Supply function. When increased Aggregate Demand results in increased output without any increase in the price level (AD(1)), then the economy is operating in the horizontal or Keynesian part of the Aggregate Supply curve. For example, during recessions, increased government infrastructure investment will not exacerbate economic constraints. Conversely when the economy is operating on the vertical part of the aggregate supply (AD(3)) then any increase in aggregate demand associated with government infrastructure investment will result in increased prices and little or no increase in output. Government demand will price out private investment and activity.

It is believed by the Reserve Bank and the Treasury that the economy is operating close to full capacity, suggesting that either AD(2) or AD(3) is appropriate. Only infrastructure *that has the capacity to increase overall productivity rapidly* will assist in addressing rather than exacerbating supply constraints.