



Australia's competitiveness: Reversing the slide

TONY MAKIN



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MINERALS COUNCIL OF AUSTRALIA
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Executive summary

Since the turn of the century, Australia's competitiveness has collapsed, contributing to the economy's rate of growth falling below potential. Over this time, Australia has experienced an unprecedented mining boom which sustained income growth and minimised the macroeconomic impact of the global financial crisis (GFC) in 2008-09, greatly assisted by the flexibility of the exchange rate and strong trade ties to Asia, most notably China.¹ However, the fact that Australia has not fared as badly as many other advanced economies since then has bred complacency in policy circles about the need to address a persistent competitiveness problem.

A key economic difference between Australia and other advanced economies is the relative dominance of commodity exports, which in turn means high exposure to volatile terms of trade (the ratio of export prices to import prices). For roughly a decade from 2002-03, booming commodity prices, particularly for coal and iron ore, greatly improved Australia's terms of trade. As well as boosting national income and spurring massive mining related investment, the commodity price boom contributed to a strengthened real exchange rate (the nominal exchange rate adjusted for domestic inflation relative to inflation in major trading partners).

While the boom-related appreciation of the exchange rate led to a loss of competitiveness, this does not imply Australia has been producing goods the rest of the world no longer wants. On the contrary, world demand for Australia's natural resources has substantially increased.

Interpretations differ about the mining boom's impact on Australia's economy. On one hand, the "Dutch disease" perspective highlights the negative impact of a higher real exchange rate on the competitiveness of sectors outside mining. A more plausible and positive view emphasises pursuit of the economy's comparative

advantage which has raised national income and households' international purchasing power. A higher real exchange rate can be seen as a necessary part of adjustment to a new equilibrium.

From this perspective, the more worrying factor has been the role of domestic policies (notably fiscal and industrial relations policies) in aggravating competitiveness problems. A central argument of this Monograph is that Australia will not durably improve its competitiveness without serious fiscal and structural reform, including labour market reform.

Measures of competitiveness reflect an economy's ability to sell goods and services to the rest of the world and to compete against goods and services produced abroad. Competitiveness has traditionally been gauged by the standard measure of the real exchange rate, or variants of it. However, an alternative exchange rate-based measure based on the relative prices of non-tradables (products not traded on world markets) to tradables (products which are, or which could be, traded internationally) can also be used for this purpose. This relative price reflects the opportunity cost of shifting resources between the traded and non-traded goods sectors.

A third, broader measure devised by the World Economic Forum (WEF) provides an alternative approach. It aims to benchmark individual economies based on various "pillars" of economic growth (for example, economic institutions, macroeconomic environment, product and labour market efficiency and technological readiness), in the process linking drivers of both competitiveness and productivity.

Each of these measures has its limitations. For instance, both the traditional real exchange rate and the alternative exchange rate measure can be criticised for being too narrow. Meanwhile, the WEF measure may be criticised for being too heavily influenced by business perceptions. Nonetheless, taken together, all three measures have somewhat disturbingly exhibited the same dramatic slide over recent years.

The real exchange rate has been up to 25 per cent stronger so far this decade compared with the previous decade average. As has been noted widely, this is a key reason Australia's manufacturing, tourism and the higher education sectors in particular have found it harder to compete internationally than they did in the 1990s.

The alternative real exchange rate measure based on the relative

prices of non-tradable goods and services to the prices of tradable goods and services reveals competitiveness has deteriorated by close to 30 per cent since the late 1990s. This reflects a shift of resources to the non-tradables sector (including publicly-provided services such as public administration, education, health and welfare) and away from the tradable sector due to domestic demand pressures.

The third metric, the WEF competitiveness measure, also shows Australia's economic performance has seriously deteriorated since the turn of the century. From being ranked in the top 10 most competitive countries in the world in the early 2000s, Australia now ranks 21st – outside the top 20 most competitive countries for the first time.

These three measures sit alongside trends in productivity, a distinctly different measure, which has attracted more attention in an Australian context. Productivity indicators have also shown a marked deterioration over the last decade suggesting there may be insights to be gained from examining those factors which bear on both concepts.

Domestic and foreign macroeconomic policy settings have severely damaged Australia's

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Australia will not durably improve its competitiveness without serious fiscal and structural reform, including labour market reform.

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The Abbott Government has so far undersold the importance of fiscal consolidation to Australia's competitiveness and to future economic growth.

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competitiveness since the global financial crisis by influencing real exchange rate behaviour. Specifically, overly expansionary fiscal settings of federal and state governments in Australia in the wake of the crisis, settings that have yet to be fully reversed, contributed to the dollar's strength and have been a major home grown source of the competitiveness problem. In addition, foreign central banks that implemented expansionary monetary policies to weaken their exchange rates so as to improve their economies' competitiveness, worsened competitiveness here.

To reverse Australia's competitiveness slide, several compatible policy responses are needed. In the short to medium term, fiscal consolidation in the form of reduced government spending at all levels of government would lessen pressures on domestic interest rates and the dollar, to the benefit of all internationally-exposed industries in the economy. The Abbott Government has so far undersold the importance of fiscal consolidation to Australia's competitiveness and to future economic growth. It should broaden its fiscal repair message beyond the need for government to “live within its means”.

Australia's economic future is inextricably bound to Asia whose dynamism stems from highly flexible goods, services and labour markets and relatively low income taxes. To become more competitive in our region, there is therefore an urgent need for structural policy initiatives to make the labour market more flexible and to further reform the tax system. And the more flexible is the labour market, the more readily private sector employment expands as government's call on resources diminishes. Here again, the Abbott Government should construct a reform narrative more squarely around the need to reverse the slide in national competitiveness. ■

SECTION

01

Australia's international economic performance

SECTION 1

Australia's international economic performance

While Australia has outperformed most advanced economies over the last two decades, our economic growth performance in more recent times has not been strong. Growth has slowed to below potential. Meanwhile, Australia has been performing worse than it could have on both the competitiveness and productivity fronts since the turn of the century.

It is widely recognised that the mining boom has put pressure on parts of the economy highly exposed to international trade, particularly via the exchange rate. Less well appreciated is the degree to which certain government policies have clearly exacerbated our competitiveness problems.

How competitive an economy is determines how well it performs in the international economic arena. Measures of competitiveness reflect an economy's ability to sell goods and services to the rest of the world and to compete against goods and services produced abroad. Conventional price-based measures

of competitiveness differ from productivity measures which gauge how efficiently the economy's inputs of labour, capital and technology combine to produce these goods and services. An economy can have low levels and growth rates of productivity and still be competitive, if its costs and incomes, expressed at world prices, are sufficiently low, bolstering world demand for its exports while reducing domestic demand for imports. Hence competitiveness has traditionally focused on the expenditure or demand side of the economy, whereas productivity centres on the output or supply side.

Yet the two concepts are also interconnected, with labour market arrangements forming one important common thread. More fundamentally, economies that are highly competitive *and* productive experience higher economic growth rates per head which improves the overall living standards of its citizens.

While a number of studies have

focused on productivity trends in Australia in recent years, the concept of competitiveness has attracted rather less attention.² Redressing this situation is an important motivation for this Monograph. Before focusing on measures of competitiveness, it is useful to provide some context on the Australian economy's international trade profile and growth performance since the turn of the century.

Table 1 **Index of trade openness (exports plus imports, %GDP)**

Country	1992 (%)	2012 (%)
Australia	33	42
Canada	55	61
China	36	52
India	18	55
Indonesia	53	50
Japan	17	31
Korea, Republic of	54	110
Malaysia	151	162
Mexico	36	67
New Zealand	59	59
Phillippines	na	65
Russia	na	52
South Africa	39	60
Thailand	78	149
United Kingdom	51	65
United States	20	30

Source: World Bank

International trade

Australia is usually regarded as a highly internationalised economy, one that is heavily integrated with the global economy. Yet, compared with many other economies, this is not the case. Many emerging economies, as well as many advanced economies, are more open to international trade and investment. Table 1 shows that, according to a broad measure of trade openness computed as the sum of exports and imports expressed as a proportion of gross domestic product (GDP), Australia is less open to international trade than many of its major trading partners.

This in itself may be indicative of a lack of international competitiveness, although it also reflects relatively high international transport costs (due to distance, among other factors) and a classic form of trade specialisation based on large resource endowments (with very low levels of intra-industry trade compared with many other industrialised economies).

Most fast growing Asian emerging economies are significantly more integrated with the global economy than Australia. Measured as a percentage of national production, Australia's exports are close to 20 per cent, whereas the proportions for large faster growing emerging economies like China, India, Russia and South Africa are higher. Relative

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Most fast growing Asian emerging economies are significantly more integrated with the global economy than Australia.

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import shares for these economies show a similar pattern in that they are mostly higher than Australia's.

From a competitiveness perspective it is also worth noting that more than 70 per cent of Australia's trade is with countries that are members of the Asia-Pacific Economic Co-operation (APEC) forum. Of its major trading partners, eight of

the top 10 are APEC members on the basis of two-way trade, with the top three – China, Japan and the United States – also the world's three largest economies. The United Kingdom is the only European OECD country which ranks in the top 10 of Australia's trading partners and then accounts for less than 4 per cent of total two-way trade (Table 2).

Table 2 Australia's top 10 two-way trading partners 2012 (% share)

1		China	20
2		Japan	11.4
3		United States	9.0
4		South Korea	5.1
5		Singapore	4.7
6		United Kingdom	3.6
7		New Zealand	3.4
8		Thailand	3.0
9		Malaysia	2.8
10		India	2.8
Total top 10			65.8

Source: Department of Foreign Affairs and Trade

The mining boom and the economy

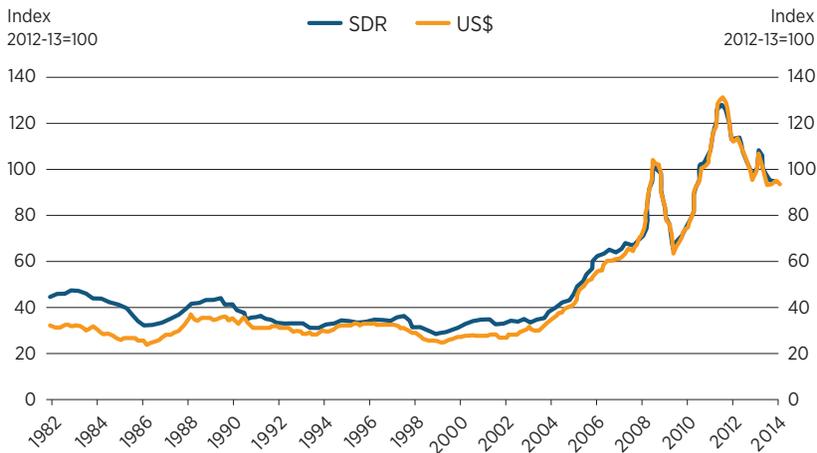
By international standards, Australia has a very large per capita endowment of exploitable natural resources which exposes the economy to highly cyclical movements in world commodity prices.³ Exports of commodities, the largest being iron ore and coal, account for well over half of Australia's exports, whereas imports are mainly manufactures. Prices received for commodity exports rose markedly in the first decade of the 21st century, giving rise to a major improvement in the terms of trade (the ratio of export prices to import prices). Despite a retreat in mineral commodity prices

in the last three years, Australia's terms of trade remain well above the long-term average.

Chart 1 shows that in the last decade world commodity prices have been exceptionally high by the standards of the 1980s and 1990s. Commodity prices, especially for minerals, rose markedly above historical norms from 2000 onwards, with the exception of a V-shaped dip during the GFC.⁴ Prior to that prices fluctuated considerably, but around a relatively flat trend line.

Based on the proportion of commodity exports in total exports, it so happens that, contrary to popular perception, a select group of advanced economies – Australia,

Chart 1 World commodity prices (2012–13=100)

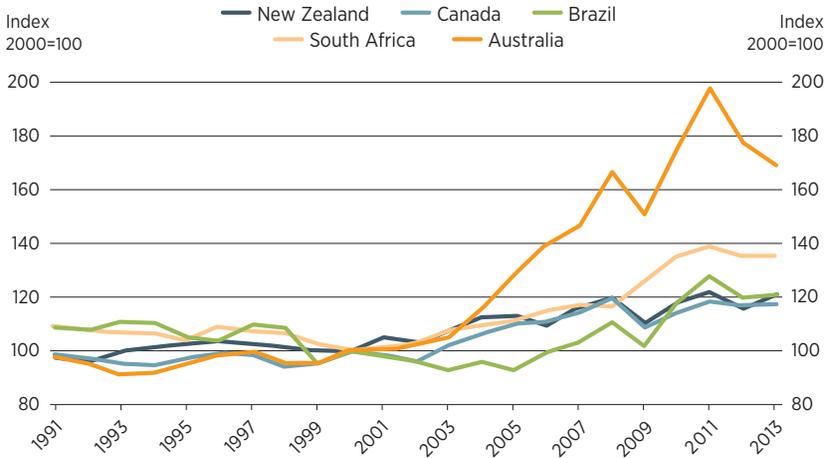


Source: Reserve Bank of Australia

Canada, New Zealand and Norway – are more heavily reliant on commodity exports than many developing commodity exporters in Asia and Latin America.⁵ Indeed, after declining slightly for three decades, commodity exporting advanced economies (CEAEs) increased their dependence on

commodity exports significantly from 2000, with their commodity exports reaching an average of 60 per cent of total exports in 2010. Moreover, Australia appears more exposed to fluctuations in the terms of trade than other commodity exporters, including those with which we compete directly (Chart 2).

Chart 2 Australia’s terms of trade vs other commodity exporters (2000=100)



Source: International Monetary Fund 2014a

Is the “Dutch disease” really a disease?

There are conflicting interpretations of the effects on an economy of a positive terms of trade “shock” like that experienced by Australia in the early 21st century. A pessimistic view highlights “Dutch disease” effects, a term coined by *The Economist* magazine to convey the plight of the Netherlands in the late 1970s. Following the discovery and export of large reserves of natural gas from the North Sea, the (pre-euro) Dutch guilder appreciated significantly. This was widely seen as harming international competitiveness, causing the Dutch manufacturing sector to contract.

This perspective stresses the loss of competitiveness due to real exchange rate appreciation. Relatedly, volatility in the terms of trade is considered to impact on long-run economic growth.⁶ Resource booms can also adversely affect the level and quality of public spending which can feed back to aggravate the cyclical effect of the upswing. Hence the argument that a sudden expansion of commodity exports may be offset by costs borne by traditional industries elsewhere in the economy.

In contrast, an optimistic view of a resources boom interprets it as a national income windfall.⁷ This more positive view starts from

the presumption that Australia’s commodity specialisation is appropriate from an international trade theory perspective, reflecting the pursuit of the economy’s comparative advantage in commodities. On this interpretation, industry restructuring is necessary to capture gains in income with necessary resource reallocation signalled by relative price changes. Hence, it is not really a disease at all.

Higher commodity prices increase the economy’s international purchasing power. This enables higher national spending, including on imports, and implies a rise in Australia’s overall standard of living. In the national accounts, a separate measure of national income adjusted for changes in the economy’s terms of trade called real gross domestic income (RGDI) captures this improved international purchasing power effect.

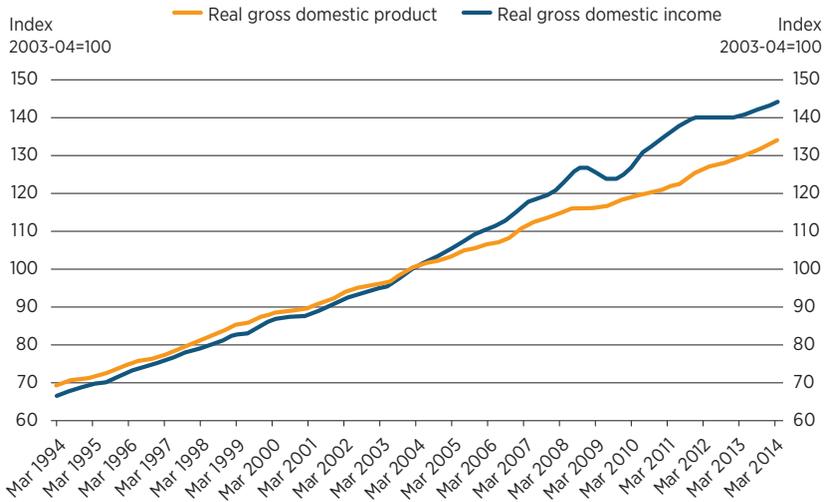
The RGDI measure reflects the fact that the economy earns more income when the prices it receives for its exports of goods and services rise relative to the prices it has to pay for its imports of goods and services. In other words, under these circumstances a given volume of exports can pay for a larger volume of imports which means the economy in effect has higher income. On this income measure, the Australian economy has performed much better in recent years than

the standard real gross domestic product (RGDP) data would indicate (as shown in Chart 3).

In short, interpreting the impact of high commodity prices on the economy as a disease is a misdiagnosis. A better physical analogy may be to think that high commodity prices act like a performance-enhancing drug on the economy, but one which has side-effects. These are best

dealt with by initiatives that ensure maximum flexibility in the economy's product and factor markets, including initiatives to improve labour mobility. Moreover, in the longer run the higher savings typically associated with terms of trade gains, along with increased immigration of skilled labor and foreign investment, will augment existing factor inputs, thereby enabling an expansion of national product.

Chart 3 Real gross domestic product vs real gross domestic income



Source: Australian Bureau of Statistics

Economic growth

Australia's long-term real GDP growth rate as measured by average annual real GDP over the past half century has been more than 3 per cent, although annual growth rates tended to exceed this long-run rate during periods of productivity-enhancing economic reform. But since the GFC of 2008-09, economic growth has fallen below its long-term trend.

During the Rudd-Gillard-Swan era, per capita GDP grew on average less than 1 per cent per annum, less than the almost 2.5 per cent average rate of the Howard-Costello years. In no single year between 2008 and 2012 did economic growth per head exceed 2 per cent per annum which had hitherto been the norm.

While Australia's growth rate in the wake of the GFC looks good by European standards, this is a very poor benchmark. In official commentary, the floundering European economies were incongruously treated as Australia's economic peers, even though international trade links with Europe were minimal compared with Asia.

In the wake of the GFC, it was Asia that pulled the Australian economy along by buying commodities at elevated prices while mining investment rose strongly to exploit Asian growth. Yet Australia has

still registered sub-normal growth in recent years – despite a mining boom without historical precedent and a \$95 billion budgetary stimulus by the Australian Government in response to the GFC; a response that in the end did more harm than good.

In short, the mining boom could not compensate for a worsening of competitiveness and productivity. Australia's escape from the worst effects of the financial crisis bred complacency about the need to address competitiveness and productivity problems via economic reform. Improving competitiveness remains critical to restoring economic growth to its long-term average rate.

Comparing Australia with an OECD outlook centred on Europe is especially misleading since Australia now has limited two-way international trade with that part of the world. A simple comparison with Australia's major trading partners in Asia shows that growth in most Asian economies has consistently exceeded Australia's by a significant margin. Chart 4 shows Australia's average annual growth since 2009 has been easily exceeded by China, India, Malaysia, Singapore, South Korea and Thailand, even though some of these economies experienced recessions in the immediate aftermath of the crisis.

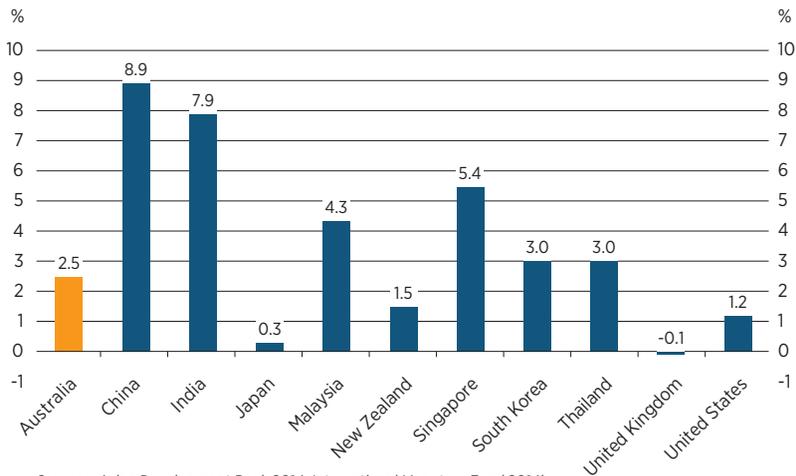
One obvious reason for this higher growth is that Australia, as an advanced economy, is much closer to its technology frontier; we have a capital stock per capita that is a multiple of those in China and other Asian economies, most of which have a way to catch up both in terms of capital stock and in terms of productivity levels. Yet this is not the full story.

Sub-normal growth has occurred due to worsened competitiveness and productivity. Without improvement in both

competitiveness and productivity, Australia will fail to take advantage of new opportunities in Asia, in the process constraining the domestic speed limit for economic growth.

For all the talk about Australia seizing opportunities in Asia, the great anomaly is that the economic policy mindset in Australia has closely resembled that which has served Europe so badly. For instance, in the European tradition, the labour market has become less flexible in recent years, company and marginal income tax rates

Chart 4 Economic growth in Australia's top 10 trading partners (annual average growth 2009-13, %)



Sources: Asian Development Bank 2014, International Monetary Fund 2014b.

remain high by Asian standards (and in some cases even by OECD standards), future entitlement expectations have been raised and income redistribution has become an overarching policy goal, though without any specific income distribution target in mind. Add to this a preoccupation with climate change policy and the quest for compatibility with Europe's emissions trading scheme.

Such policy priorities sit oddly with the efficiency enhancing orientation of Asian economic policies aimed at expanding production as the route to higher living standards.

How then do we measure competitiveness? The next section canvasses three competitiveness measures – all of which point to significant deterioration over the past decade, implying that corrective policy action is overdue. ■

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SECTION

02

Competitiveness: Measures and trends

Competitiveness: Measures and trends

There are several different ways to gauge an economy's competitiveness. This Monograph focuses on three key measures: the real exchange rate, the ratio of the prices of non-tradable to tradable goods and services and the more multi-dimensional World Economic Forum approach.

First, the real exchange rate has traditionally been used to convey the degree to which domestic producers can compete on price grounds with suppliers of goods and services in other economies. Real exchange rate measures along this line vary according to the weighting system used for the currencies of trading partner or competitor economies.

Second, an alternative exchange rate measure is based on the relative prices of non-tradables to tradables. A rise in this ratio implies that domestic labour and capital resources are drawn away from industries competing on world markets to industries producing goods and services that are not traded internationally.

Third, the World Economic Forum publishes annually a

broader competitiveness measure. This measure of competitiveness aims to comprehensively account for key economic, social and environmental variables in order to benchmark individual economies' overall performance and identify specific areas of economic strength and weakness.

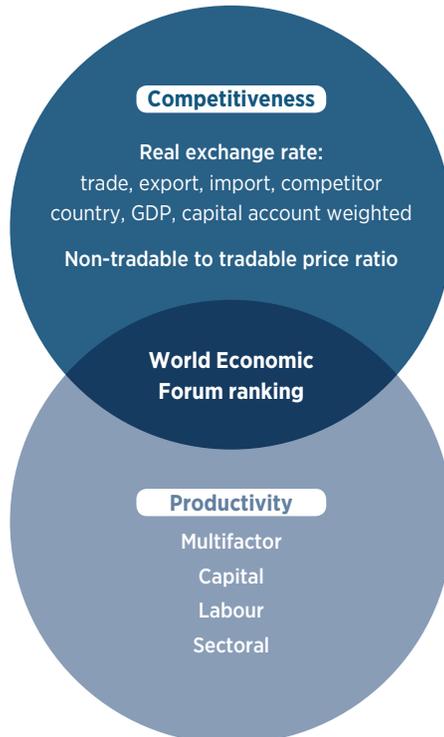
Competitiveness is often talked about in the same breath as productivity, but it is important to understand the conceptual differences. Multifactor and other partial productivity measures, such as capital productivity and labour productivity, differ from competitiveness insofar as they primarily focus on how efficiently factor inputs are combined in production without explicit regard to other economies' performance or international trade dimensions. Of the three competitiveness

measures examined in this paper, the one that does have a productivity dimension is the WEF measure. Chart 5 provides a schematic for thinking about competitiveness and productivity.

Each of the three competitiveness measures outlined here has its limitations, so care should be taken in using them on their own. However, when taken together, they all embody elements of Australia's competitiveness problem. And they all have exhibited a disturbingly similar slide over recent years.

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Each of the three competitiveness measures ... have exhibited a disturbingly similar slide over recent years.
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Chart 5
Competitiveness vs productivity measures



Competitiveness measure 1: The real exchange rate

The exchange rate is arguably the single most important price for an economy which is significantly integrated with goods, services and asset markets in the rest of the world. Exchange rate changes alter the prices of domestically-produced goods and services relative to goods and services produced in other countries. Hence, they affect the profitability of all exporting industries and of import competing industries, as well as the cost of importing from abroad.

Movements in the multilateral (or effective) measure of the exchange rate, the Trade Weighted Index (TWI), indicate “average” movements of the exchange rate against the currencies of an economy’s major trading partners. The “real” effective exchange rate (the nominal exchange rate adjusted for domestic inflation relative to inflation in major trading partners) is the conventional index of competitiveness used by economists.

Competitiveness by this measure either improves or worsens over the short term due to nominal exchange rate movements or due to domestic prices or costs changing in relation to prices or

costs of major trading partners. In reality, nominal exchange rates are far more variable than price levels, inflation rates or labour costs. Hence swings in nominal exchange rates account for most real exchange rate movements over shorter periods.

Real exchange rate movements are important over short periods because they impact on real activity, particularly export and import volumes and the profitability of local industries. Large appreciations make exports of goods and services more expensive from foreign buyers’ perspective, simultaneously making imported goods and services cheaper than domestically produced products. Hence real appreciations worsen the economy’s international competitiveness while real depreciations improve it in the short term.

The age-old purchasing power parity (PPP) theory of exchange rates (see Box 1) implies that the real exchange rate should gravitate back to its long-run value through time and that the real exchange rate is either overvalued or undervalued if it rises above, or falls below, the long-run average for extended periods.

Box 1 Purchasing Power Parity and competitiveness

Purchasing Power Parity is the most durable long-run theory of the exchange rate which links exchange rate movements to changes in national price levels and inflation rates.

PPP has a long history, dating back to the writings of the classical British economists, David Hume and David Ricardo. The modern form of PPP is attributed to the Swedish economist Gustav Cassel who revived the idea after the First World War. Since the breakdown of the Bretton Woods fixed exchange rate system in the early 1970s, a large academic literature has focused on this approach to exchange rate movements.

The absolute version of PPP can be understood as a long-run equilibrium condition for the exchange rate. It simply states that in long-term equilibrium the domestic price level (P) should be equal to the foreign price level (P^*) when converted by the equilibrium effective exchange rate (e).

That is $P = eP^*$ - where e is defined as the price of Australian dollars per unit of foreign currency. If we define the real exchange rate as

$$R = \frac{P}{eP^*}$$

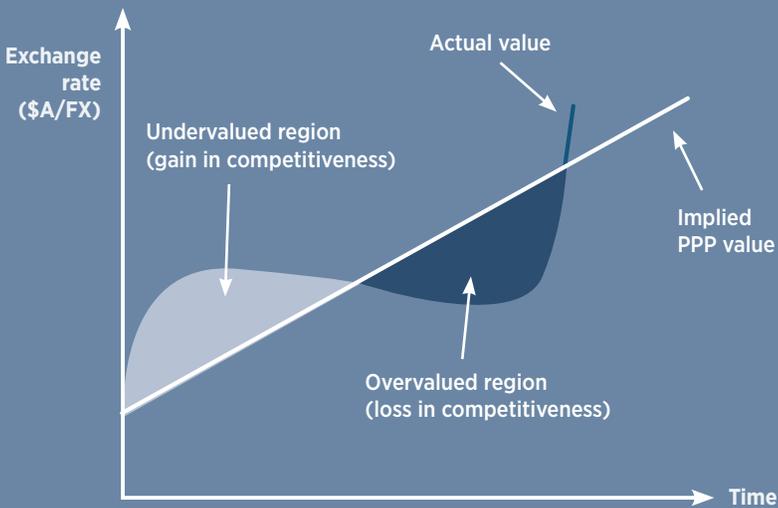
and PPP holds, then the value of the real exchange rate is unity (1) because the numerator equals the denominator in this expression. Any deviation in the real exchange rate above or below unity can therefore be interpreted as a change in international competitiveness with values above unity implying an improvement in competitiveness and values below implying a worsening in competitiveness.

The PPP approach can also be used to gauge whether particular exchange rates are *overvalued*

or *undervalued* compared with an implied PPP value, with PPP providing a long-run equilibrium condition for the exchange rate. The notions of undervaluation and overvaluation of the nominal exchange rate relative to implied equilibrium exchange

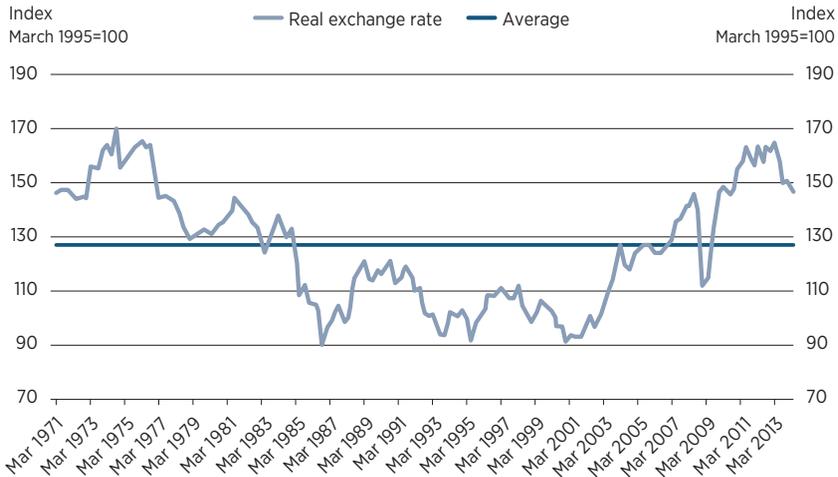
rate values are illustrated in Chart B1. Note that when the local currency is undervalued, competitiveness improves whereas competitiveness worsens when the local currency is overvalued.

Chart B1 Currency undervaluation and overvaluation



Source: Makin 2002.

Chart 6 Real effective exchange rate – trade weighted (1971–2014)



Source: Reserve Bank of Australia

As Chart 6 shows, over the longer term Australia’s real exchange rate measured in trade weighted terms has exhibited mean-reverting behaviour for the most part by gravitating back to its long-run average value.

Nonetheless, since the turn of the century the real exchange rate has appreciated significantly, the exception being the sharp depreciation that occurred at the height of the GFC. The real exchange rate has been up to 25 per cent stronger so far this decade compared with the previous decade average, a key reason Australia’s manufacturing, tourism and higher education sectors

have found it harder to compete internationally on price grounds than they did in the 1990s. On a PPP basis, the dollar has been substantially overvalued in real terms for an extended period of time, implying a significant loss of competitiveness among trade-exposed sectors.

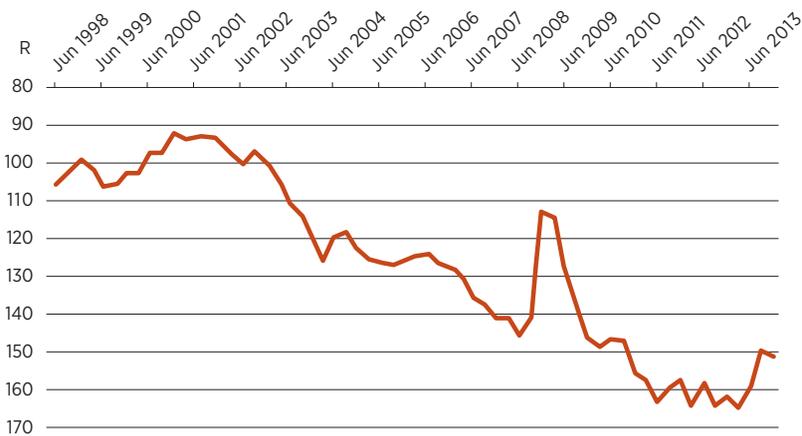
Chart 7 inverts the left axis values in Chart 6 to better convey the slide in competitiveness by this measure. The Reserve Bank of Australia publishes other measures of the real exchange rate weighted by import and export shares rather than two-way trade which convey essentially the same picture.

An even more revealing picture of export competitiveness could be derived based on countries Australia competes with, rather than major export markets.⁸ Such a measure could include the currencies of commodity exporting rival countries – for example, Canada, Brazil, Indonesia and South Africa. Other conceptual variants of the standard measure of the real exchange rate include a measure using domestic labour costs relative to those abroad. Instead of composite foreign price levels, this measure expresses competitiveness in terms of relative production costs, a measure once published by the Australian Treasury. Effective exchange rates can also in principle

be weighted by GDP or sources of foreign capital.⁹

While PPP is useful as an indicator of long-term exchange rate movements, many factors influence Australia’s exchange rate over the short to medium term causing deviations from its long-run equilibrium value. In particular, federal and state budget deficits in Australia have contributed to real exchange rate appreciation by ramping-up government borrowing, the bulk of which has been financed by foreign capital inflow. Another macroeconomic factor influencing the dollar has been excessive monetary expansion abroad relative to Australia’s monetary stance, most notably by the United States Federal

Chart 7 The slide in competitiveness measure 1 (R)



Source: Reserve Bank of Australia

Reserve's "quantitative easing" program which has been mimicked on smaller scales by the central banks of the United Kingdom and Japan.

World prices received for Australia's commodity exports have also long been considered an underlying medium-term determinant of Australia's exchange rate, reflecting the dollar's "commodity currency" status.¹⁰ Although commodity prices have fallen notably since 2011, the trade weighted exchange rate has remained high by historical standards due to domestic and foreign macroeconomic policy settings. The reasons for the deviation from the PPP equilibrium value of the exchange rate will be explored subsequently in greater detail.

For a number of reasons, the theory of purchasing power parity needs qualification. Among them are varying weights used in national price indexes, the effect of trade restrictions and transport costs, as well as the fact that a large proportion of goods and services produced and consumed in the economy are not internationally tradable. This last factor in particular motivates discussion of a second competitiveness measure.

Competitiveness measure 2: Relative price of non-tradables to tradables

Another way to measure the economy's international competitiveness is to gauge how the prices of non-tradable goods and services behave relative to the prices of tradable goods and services. This perspective is based on the assumption that an economy produces and consumes these two distinct classes of goods and services. The prices of non-tradables are set by domestic demand and supply factors, whereas the foreign currency prices of tradable goods and services are set in world markets, and converted to domestic values via the prevailing exchange rate.

In essence, tradables are goods and services which can potentially be bought and sold on world markets. They consist of exports, imports, close substitutes for exports (such as coal used for domestic power generation) and import competing goods (such as locally brewed beers). In other words, tradables include domestic production which is not necessarily shipped abroad, but which is nonetheless subject to the forces of international competition.

The nominal exchange rate translates foreign currency prices of tradables into domestic currency

values, and if domestic producers and consumers exercise limited market power they can export and import any particular good or service without affecting its price. The share of tradable output in GDP is another measure of an economy's trade openness and is likely to be larger than the simple trade openness measure of the value of exports and imports relative to GDP.

Non-tradables, on the other hand, are those domestically produced goods and services which are effectively isolated from the effects of international competition and whose prices are therefore determined by the forces of domestic demand and supply. Services, including public administration, health services, legal advice, school education, construction and entertainment, are among the most obvious non-tradables.

The key characteristic of non-tradables, a portion of which is non-market traded and therefore valued in the national accounts at labour cost, is that they are provided exclusively to domestic residents and hence cannot be bought or sold by foreigners. Apart from public and private services, some commodities and merchandise goods are also non-tradable, especially if international transport costs are high, making

shipment unprofitable, or if the goods are perishable in some sense. Ready mixed concrete is a good example of a non-tradable good. Artificial trade barriers, such as prohibitive tariffs and quotas, can also make goods and services non-tradable in practice.

For the purposes of this discussion, a second measure of an economy's competitiveness is reflected in the ratio of the prices of goods and services in the non-tradable sector (P_N) of the economy relative to prices paid or received for goods and services paid or received for goods and services produced in the tradable sector (P_T), this sector being the sector exposed to competition from the rest of the world. If we denote this particular measure of competitiveness as R^* , then

$$R^* = \frac{P_N}{P_T}.$$

On this basis, if non-tradables prices are rising faster than tradables prices, competitiveness is worsening, whereas if the prices of tradables are rising faster than those of non-tradables, competitiveness is improving. From a production perspective, if this ratio is rising labour and capital will be drawn away from the tradable sector to the non-tradable sector. Hence a diminishing share of the economy's output will be exposed to international competition, other things the same. The result

is de-internationalisation of the economy's production. At the same time, domestic consumption of relatively cheaper tradables will increase, thereby adding to the import bill and widening the trade deficit.

In other words, this relative price reflects the opportunity cost of shifting resources between the traded and non-traded goods sectors. As increased demand for non-traded goods raises their relative price, and increases the opportunity cost of using resources in the traded goods sector, a country's competitiveness declines, and conversely when the price of non-traded goods falls relative to that for traded goods. The relative price (and changes in that relative price) therefore measure the pressures on an economy's competitiveness.

Chart 8 illustrates that based on this measure Australia's competitiveness has deteriorated over the past 15 years, sliding by close to 30 per cent. Again, left axis values have been inverted in the Chart to convey the competitiveness slide based on this second measure.

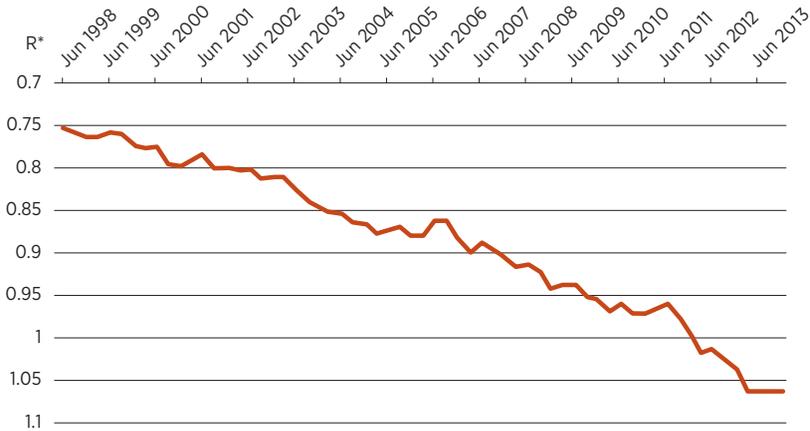
The dramatic decline in Australia's competitiveness from before the turn of the century according to this alternative measure reflects the fact that inflation in the

non-tradables sector, mainly services (including publicly provided services such as public administration, education, health and welfare) has persistently exceeded the rate of growth in the prices of tradable goods and services.

Prices of tradable goods and services are influenced by the value of the exchange rate and have usually grown by less than the Reserve Bank's 3 per cent upper target limit for overall inflation over recent years. Meanwhile, inflation of non-tradables, mainly services not affected by the exchange rate, has tended to exceed 3 per cent.

Over the longer term, a fall in the value of this measure can also reflect an underlying trend decline if the goods sector, which is largely tradable, has faster productivity growth than the services sector, which includes many non-tradables. If wages rise similarly across both sectors, non-tradables prices would increase more over the longer term than tradables prices, other things equal.¹¹ In recent years, however, this has not been the case, as productivity performance in many non-tradable industries, including construction, financial services and transport services has actually outperformed productivity in the key tradables sectors, mining, agriculture and manufacturing.¹²

Chart 8 The slide in competitiveness measure 2 (R*)



Note: The ratio of non-tradables to tradables prices based on official CPI data
 Source: Reserve Bank of Australia

The so-called Balassa-Samuelson hypothesis is also relevant here.¹³ It proposes that inflation rates and hence real exchange rates should be higher in faster growing economies with relatively more productive tradables sectors than in slower growing economies, although empirical support for this hypothesis is mixed across a range of countries.

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As increased demand for non-traded goods raises their relative price, and increases the opportunity cost of using resources in the traded goods sector, a country’s competitiveness declines...

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Competitiveness measure 3: The World Economic Forum approach

Apart from these exchange rate-based measures of competitiveness, there is a more comprehensive measure published annually by the World Economic Forum in its annual *Global Competitiveness Report*. The WEF competitiveness rankings now cover 148 economies, capturing elements of both an alternative competitiveness measure and a productivity measure.

Produced under the direction of Professor Xavier Sali-i-Martin from Columbia University and a team of economists in collaboration with a global partnership of relevant organisations,¹⁴ it combines a large dataset covering a wide range of economic and social indicators from sources including the International Monetary Fund, Organisation for Economic Co-operation and Development, International Labour Organisation, the World Bank, World Trade Organisation, and World Health Organisation. These data are combined with results from the World Economic Forum's annual Executive Opinion Survey, which garners the views of more than 13,000 business leaders worldwide on different dimensions of national competitiveness.

The WEF measure scores and ranks countries across a range of economic indicators for a set of so-called "pillars" that are thought to drive economic growth. These pillars are individual economies' institutions, infrastructure, macroeconomic environment, health and education, product market efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication and innovation. Disaggregated scores are published for each of these pillars.

The survey component, which accounts for well over half of the overall weighting of the results, is a clear limitation of the WEF measure to the extent it colours the rankings according to business perceptions. While business perceptions about an economy are not irrelevant in the global trading environment, the sharp deterioration in perceptions about labour market efficiency does seem to have exaggerated the fall in Australia's ranking.

In view of this limitation and a degree of opaqueness about construction of the WEF measure, it should therefore be used with care. The WEF measure nonetheless has important strengths based on the range of factors bearing on competitiveness that it looks to capture. And while specific rankings at any point in

time may be debatable, the WEF measure also has the virtue of providing a consistent means of tracking relative movement through time. Notwithstanding possible methodological deficiencies, the onus is on critics of this longstanding internationally-recognised measure to make a case to the WEF for remedying any perceived problems.

For the purposes of this Monograph, what is striking is the extent to which movements in the WEF competitiveness measure mirror other measures. Chart 9 shows that Australia's economic ranking has seriously deteriorated since the turn of the century. After declining sharply from the beginning of the century, there was some recovery later in the 2000s, but the decline has resumed since then.

In the early 2000s, Australia was ranked in the top 10 most competitive countries in the world. However, the 2013-14 *Global Competitiveness Report* has Australia ranked 21st, outside the top 20 most competitive countries in the world for the first time. New Zealand has overtaken Australia to come in 18th in the 2013-14 report, up five places over the previous year.

Table 3 outlines the range of other economies that now rank above Australia – in descending order, Switzerland, Singapore, Finland, Germany, the United States, Sweden,

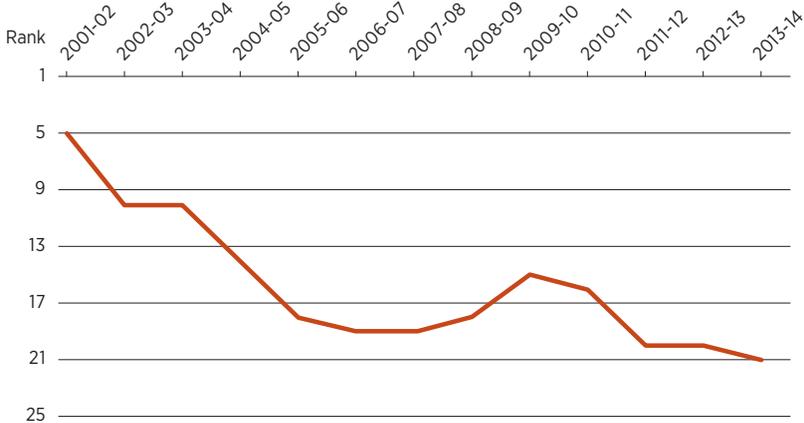
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The 2013-14 Global Competitiveness Report has Australia ranked 21st, outside the top 20 most competitive countries in the world for the first time.

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Chart 9

The slide in competitiveness measure 3



Note: Left axis shows Australia's WEF competitiveness ranking
 Source: World Economic Forum (Annual Global Competitiveness Reports)

Hong Kong, the Netherlands, Japan, the United Kingdom, Norway, Taiwan, Qatar, Canada, Denmark, Austria, Belgium, United Arab Emirates and Saudi Arabia.

The overall WEF ranking for any country reflects both strengths and weaknesses in the way its economy works. Notable positives for Australia are its well-developed financial system (ranked 8th in the world) and its banking sector in particular (ranked 5th). The standard of higher education and training (ranked 11th) is also noteworthy. The standout weak points continue to be a highly inflexible labour market and excessive government regulation. Ironically, the labour market has

become less flexible when massive structural change in the economy due to the mining boom implies greater flexibility is needed.

Debate continues about the relationship between the degree of labour market flexibility and overall productivity, particularly since the conventional measures of productivity fail to show a strong relationship between the degree of flexibility and productivity growth. But as Australia's WEF competitiveness ranking implies, it may well be that the conventional productivity measures inadequately capture the significance of labour market flexibility. This issue is examined later in this paper.

Table 3 **WEF Global Competitiveness Index, 2013-14 rankings**

Country/economy	Rank (out of 148)
Switzerland	1
Singapore	2
Finland	3
Germany	4
United States	5
Sweden	6
Hong Kong SAR	7
Netherlands	8
Japan	9
United Kingdom	10
Norway	11
Taiwan, China	12
Qatar	13
Canada	14
Denmark	15
Austria	16
Belgium	17
New Zealand	18
United Arab Emirates	19
Saudi Arabia	20
Australia	21
Luxembourg	22
France	23
Malaysia	24
Korean, Rep.	25
Brunei Darussalam	26
Israel	27
Ireland	28
China	29
Puerto Rico	30

Source: World Economic Forum (2013-14 Global Competitiveness Report)

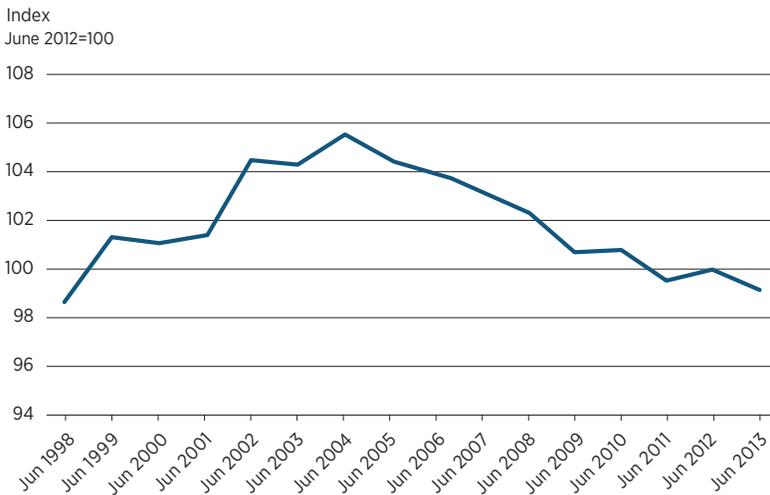
Competitiveness and productivity

By explicitly examining supply-side factors of economies such as institutions, labour markets, infrastructure, technology and business sophistication, the WEF approach merges areas traditionally thought to influence both competitiveness and productivity. The most comprehensive measure of productivity – multifactor productivity – reveals how efficiently the market sector is combining the economy’s human resources with capital, technology and natural resources in generating production.

Chart 10 shows that after improving in the late 1990s, MFP has been declining in line with the fall in competitiveness since 2003-04. Productivity according to this broad measure has yet to recover to the high levels achieved in the 1990s. In terms of partial productivity measures, labour productivity fell in most years over the past decade and there has been an even more marked decline in capital productivity which has contributed to poor multifactor productivity.¹⁵

The standout period of MFP growth of 2 per cent per

Chart 10 The slide in multifactor productivity



Note: Multifactor productivity, quality adjusted hours worked index measure
 Source: Australian Bureau of Statistics

annum in the second half of the 1990s resulted from significant economic reforms initiated by federal and state governments of both political persuasions. This wide-ranging reform effort that began in the 1980s increased the degree of competition faced by Australian firms and reduced business uncertainty. Reforms included financial deregulation, tariff reductions, partial foreign investment liberalisation, privatisation, greater commercial focus in the provision of economic infrastructure, and greater flexibility in labour markets. Simultaneously, there was increased internationalisation of the economy, a shift to a lower inflation regime, greater fiscal responsibility, and more extensive education and training of the workforce.

Productivity improved not only relative to past trends but compared with most other OECD nations, suggesting the information technology revolution at this time was not the key factor at work. What, then, explains the deterioration of productivity since 2003-04?

This is a puzzle. Undoubtedly, a slowdown in the reform effort of governments at all levels played a role, but other special factors appear also to have contributed. For example, massive investment in mining added to production

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Productivity has yet to recover to the high levels achieved in the 1990s.
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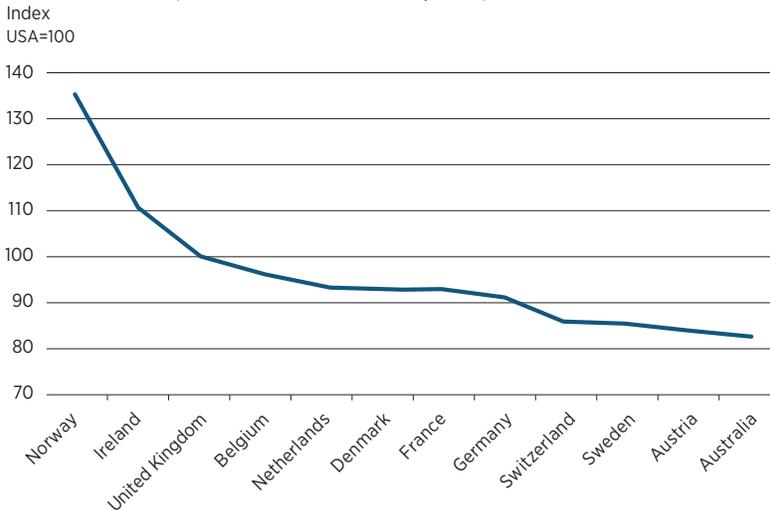
inputs before output comes fully on stream. Putting this extra capital stock and enlarged labour force to efficient use in coming years is a key challenge facing Australia's mining industry. In addition, a lengthy and widespread drought held back agricultural productivity for a period.

Labour productivity is measured as national output per hour worked. The OECD publishes this measure for Australia and for other OECD members. Australia's measure for 2012 – expressed as a percentage of United States labour productivity (USA = 100) – was 82.7. This was

less than that of Austria, Belgium, Denmark, France, Germany, Ireland, Netherlands, Norway, Sweden, Switzerland and the United States as shown in Chart 11. At the same time, Australia's measure of labour productivity was above levels for Canada, Greece, Japan, Korea, New Zealand, Portugal and Poland.

Notwithstanding early signs that some productivity indicators have started to improve, continued economic reform remains central to turning around Australia's recent productivity slump. Since so much big-bang reform has already occurred, significant options for

Chart 11 **Australia's relative labour productivity**
(select OECD economies, 2012)



Note: (i) Index values show GDP per hour worked relative to the United States (USA=100)
 Source: Organisation for Economic Cooperation and Development

further reform are now more limited. The present challenge is to identify areas where further reform would most fruitfully raise productivity, both at the enterprise level where it can improve for myriad reasons, and at the economy-wide level.

Based on international comparisons on a sectoral basis, the McKinsey Global Institute has estimated that a few industries in Australia (notably mining and domestic transportation) are more productive than in the United States, whereas many others (including utilities, finance, insurance, real estate, agriculture, manufacturing, IT, media, telecoms, professional and business services, and wholesale and retail trade) are significantly less productive.¹⁶ A number of other studies have also compared productivity at the industry level with other countries.¹⁷ ■

SECTION

03

How policy settings have worsened our competitiveness

How policy settings have worsened our competitiveness

The three competitiveness measures introduced in the previous section graphically illustrate how severely Australia's competitiveness has declined since the turn of the century. What factors have been mainly responsible for this deterioration and how?

To answer these questions, it is important to first distinguish between medium and longer term influences, and between those factors Australian policy makers can influence, and those they cannot.

In the medium term, macroeconomic policy settings both here and abroad, as well as commodity price fluctuations, influence real exchange rate movements, and hence the economy's competitiveness according to competitiveness measures 1 and 2. However, commodity prices are beyond the control of economic policy and, to the extent they signal the need for industry restructuring, are not necessarily barriers to long-term growth.

By influencing real exchange rate behaviour, domestic and

foreign macroeconomic policy settings have damaged Australia's competitiveness since the GFC. Overly expansionary fiscal settings of federal and state governments in the wake of the crisis, settings that have yet to be fully reversed, have contributed to the dollar's strength and been a major home grown source of our competitiveness problem. By implementing expansionary monetary policies to weaken their exchange rates, foreign central banks have also been responsible for worsening our competitiveness.

Identifying longer term causes of worsening competitiveness is more complicated. The best indicator for this purpose is the broad-based WEF competitiveness measure. As noted, this measure has a supply-side dimension, and so includes elements that

also affect productivity. The labour market plays a role that directly or indirectly influences competitiveness and productivity. Labour costs influence the economy's cost structure and prices relative to foreign costs and prices, and domestic labour practices influence the way the workforce combines with the other factors of production. How these various factors have affected Australia's competitiveness over recent years is examined in later discussion.

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Expansionary fiscal policy at home

The Australian dollar exchange rate has undoubtedly been affected over and above the influence of commodity prices by continued high levels of federal and state government spending, a response to the GFC which caused budgets to go heavily into deficit.

Two questions arise in this context. How effective is fiscal stimulus in theory under Australia's circumstances? And what impact did it have in practice?

How effective is fiscal stimulus in an open economy?

Basic Keynesian economics simplistically proposes that additional government spending can raise aggregate spending in the economy by a multiplied amount. If extra fiscally-induced domestic spending raises national output, multipliers are positive and fiscal stimulus is effective, as presumed by the Australian Treasury.¹⁸ However, the effectiveness of stimulus spending has been challenged on the grounds it neglects important open economy linkages.

The classic textbook macroeconomic model, for example, concludes that, even during recessions, fiscal policy is ineffective in raising aggregate demand in an open economy with a floating exchange rate

because it “crowds out” net exports.¹⁹ This is because extra government spending in response to an asset price collapse tends to push up interest rates attracting foreign capital inflow. In turn, this strengthens the exchange rate, worsens competitiveness according to measure 1 (R), and therefore causes job losses elsewhere in industries such as manufacturing and tourism, as indeed has happened. If many economies are implementing fiscal stimulus simultaneously, the relative size of the stimulus matters in this context.

Alternatively, if we look at competitiveness measure 2 (R*), if increased public spending falls on non-tradables, as is usually the case, this extra demand raises the price of non-tradables relative to tradables. This real exchange rate appreciation increases the output of non-tradables, while tradable output decreases due to a loss of competitiveness.

This rise in the relative price of non-tradables to tradables is consistent with the real exchange rate appreciation predicted in the fiscal transmission mechanism outlined in Box 2. However, in this approach the impact on national output and hence employment depends on whether the elasticity of tradable output with respect to the real exchange rate differs from the elasticity of non-tradable output.

Other harmful side effects of fiscal stimulus are that:

- Higher public debt has to be repaid, requiring higher taxes or spending cuts in the future
- Households save more in light of the prospect of higher future taxes, resulting in less private spending elsewhere in the economy (economists call this the so-called “Ricardian effect”).²⁰ This implies that over the long term private saving will rise significantly to offset a fall in public saving.²¹
- Higher public debt not matched by income yielding public assets has to be serviced; when owed to foreigners (as the bulk of it is), this acts as a drain on the economy’s national income.

In crafting the fiscal response to the financial crisis, the Rudd-Swan government assumed that fiscal expansion, primarily focused on spending, was an effective means of countering an economic slowdown. This was despite the theoretical considerations outlined here and a lack of compelling empirical evidence from the international academic literature.

Importantly, the IMF concluded in a survey of the effectiveness of fiscal stimulus that the evidence was ambiguous, with estimates of the effects of fiscal policy on national output differing “... not merely in degree but in sign”.²²

Box 2**Government spending and competitiveness**

The impact of increased government spending on competitiveness according to measure R^* can be illustrated with reference to Chart B2.²³

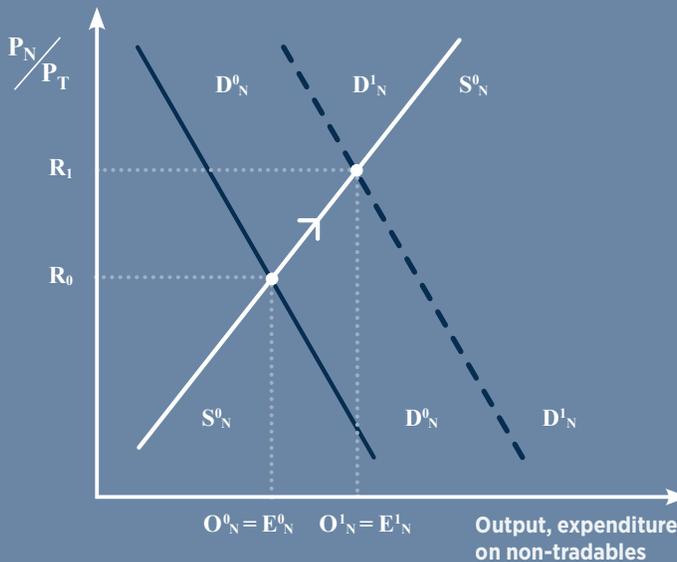
Consistent with textbook demand and supply theory, it simply shows that an equilibrium value of the ratio of non-tradables to tradables prices will be established at any point where the demand for non-tradables equals the supply of non-tradables. Government spending is overwhelmingly on non-tradable goods and services, such as construction, welfare and public service provision.

Hence, an increase in government spending will boost demand for non-tradables in the economy, other things the same. In the chart, the demand for non-tradables schedule therefore shifts to the right, which raises the relative price of non-tradables to tradables which increases R^* . This higher relative price induces a higher share of non-tradable production and hence competitiveness worsens because the higher government spending draws resources away from tradable production.

The tradable sector becomes less competitive as a result because prices received for tradables fall relative to those of non-tradables. Meanwhile, relatively lower tradables prices stimulate spending on imported products which widens the

trade deficit. This loss of competitiveness is exacerbated if accompanied by increased labour costs in the non-tradable sector which would shift the supply of non-tradables schedule upwards to the left in Chart B2.

Chart B2 Effect of increased government spending on R^*



What impact did fiscal stimulus have in practice?

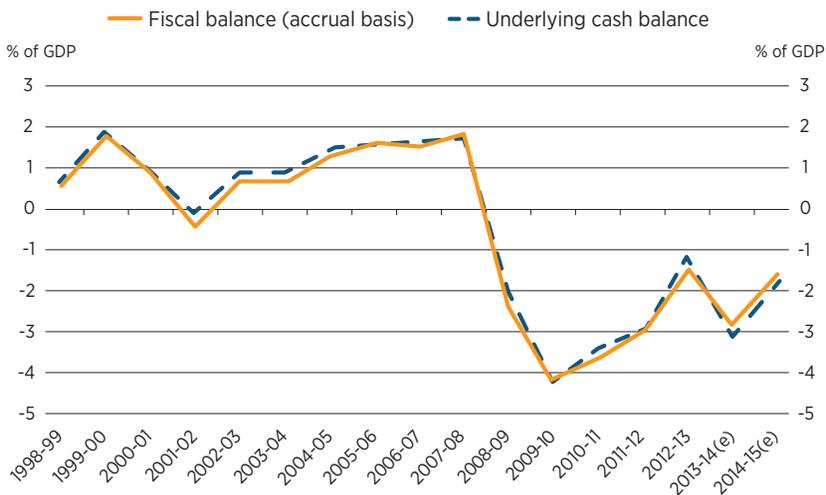
In Australia’s case, the degree of fiscal stimulus as a proportion of GDP in 2008-09 was one of the highest in the world and of similar order to that of the United States, the epicentre of the crisis itself.²⁴ Focused heavily on government spending rather than tax relief, it exceeded the responses of many economies whose banking systems had failed, even though the banking system in Australia weathered the crisis intact.

Close scrutiny of the pattern of aggregate expenditure recorded in the national accounts, especially

for the December 2008 and March 2009 quarters, reveals that it was the behaviour of exports and imports, not increased fiscal activity, that was primarily responsible for offsetting the fall in private investment due to the GFC.²⁵

In the case of the federal government, fiscal stimulus also contributed to a severe deterioration of the Australian Government’s balance sheet, the most important item of which is the “net financial worth” entry, representing the difference between government financial assets and liabilities (see Chart 12).

Chart 12 Federal government budget balance



Source: Commonwealth of Australia (2014-15 Budget Papers)

According to the 2014-15 Commonwealth Budget, net financial worth will exceed negative \$329 billion (or minus 20 per cent of GDP) in 2014-15, a giant leap from the minus 1.5 per cent of GDP net financial worth figure recorded for the last year of the Howard-Costello government. This balance sheet deterioration overwhelmingly reflects increased public debt run up to finance the series of budget deficits that arose as spending blew out and persistently outpaced revenue during the Rudd-Gillard-Swan years.

Consistent with standard international macroeconomic theory and empirical work by the IMF on budget deficits and interest rates, higher government spending by federal and state governments contributed to interest rate levels that have been relatively high by advanced economy standards. In turn, this contributed to a stronger exchange rate by encouraging capital inflow into Australia.²⁶ Curiously, however, the impact of expansionary fiscal policy on the exchange rate and hence competitiveness has been ignored by many policy makers, market economists and most commentators, even though this linkage is routinely taught in undergraduate courses in macroeconomics.

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This experience can also be viewed through the lens of the second measure of competitiveness. Higher government spending, such as more than \$16 billion on new school halls under the Building the Education Revolution (BER) program, raised spending on non-tradables. This worsened competitiveness by increasing the prices of non-tradables relative to tradables, with non-tradables inflation persistently exceeding the Reserve Bank's official 3 per cent inflation ceiling. The result was to increase imports and attract resources away from tradable sector production.

In other words, higher government spending was economically ineffective as a macroeconomic stimulus instrument since losses in the tradable sector of the economy offset any expansionary effect in the non-tradable sector. Exactly how much tradable activity is squeezed out depends on the elasticities of tradable and non-tradable output with respect to the ratio of non-tradables to tradables prices.²⁷

Another flaw with the fiscal response was that the spending continued well after the worst of any business cycle downturn had passed due to administrative and operational delays. Previous empirical studies have concluded that in general public infrastructure spending has arrived on average

around a year after a major downturn began. This means, contrary to intent, that in practice fiscal stimulus is usually either weakly countercyclical or procyclical in advanced economies.

Fiscal multipliers associated with government programs like the BER have been estimated for different countries and for different fiscal instruments using general equilibrium models and econometric approaches.²⁸ These estimates vary considerably, prompting a survey of multiplier estimates by Alan Auerbach, William Gale and Benjamin Harris to comment that the range is “almost embarrassingly large”.²⁹ Many multiplier estimates are positive because they consider short-term effects only and are based on Keynesian assumptions without regard to longer run public debt-related implications. Or they underemphasise exchange rate effects in small open economies.³⁰ The “short run” in this context refers to up to a year, whereas the “long run” refers to a subsequent period of up to ten or more years’ duration.

Other research, including my work with Ross Guest, has estimated significant *negative* long-run multipliers for the federal government’s stimulus spending using different, though compatible, modelling approaches.³¹ The multiplier in each case turns negative in the longer term due

to implied higher interest rates, tax rates and real exchange rates that eventuate after the stimulus episode.

A more specific claim is that Australia’s fiscal stimulus response saved 200,000 jobs. Yet, this assertion is based on spurious Treasury modelling of the long-run relationship between GDP and employment, without factoring in the flexible labour market which existed at the time of the financial crisis. As Vito Tanzi, the former Fiscal Affairs Director at the IMF, has argued, workers in advanced economies now have more specialised skills than ever. Hence, in practice, any jobs that fiscal stimulus measures may create are rarely likely to match those that are lost, especially in the financial sector during a crisis.³²

The Australian Treasury predicted in the 2009-10 Budget papers that, reflecting the stimulus spending, the economy would be growing at an incredible 4.5 per cent on the basic GDP measure in 2012-13. In reality, GDP growth was under 3 per cent. In short, the fiscal stimulus measures, most notably the BER program, failed to deliver as originally expected and left a loss of competitiveness as a lasting legacy.³³ As a result, the federal government’s fiscal response to the financial crisis subsequently weakened the economy by

contributing to the dollar's strength, and by creating pervasive policy uncertainty about how the large budget deficit it created was to be reversed.

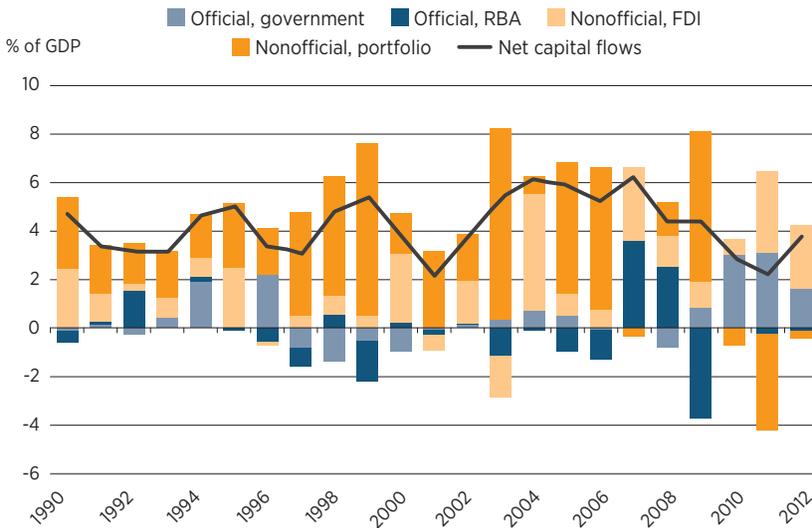
The extent to which the fiscal stimulus of Federal and state governments contributed to the dollar's strength and worsened competitiveness is difficult to quantify with precision. However, the quantum of foreign capital inflow directed toward acquiring Australian government bonds increased sharply at this time suggesting the fiscal stance was a major short-run factor driving the dollar above its fundamental value (see Chart 13).

Expansionary monetary policy abroad

Another macroeconomic policy influence on the exchange rate has been highly expansionary monetary policies abroad. Central banks in the bigger advanced economies most affected by the GFC, notably the United States and the United Kingdom, engineered large scale quantitative easing programs involving the equivalent of trillions of dollars' worth of direct purchases of government bonds to soak up public debt and to offset money supply shrinkage in the wake of the GFC. Japan has also more recently engaged in major monetary expansion.

Chart 13

Net capital flows (% of GDP)



Source: International Monetary Fund 2014a

In the case of the United States, this meant more US dollars began circulating relative to other currencies, so the US dollar exchange rate depreciated against the Australian dollar and the currencies of many of its other trading partners. While the Federal Reserve acknowledged there would be adverse international spillover effects, it deemed the macroeconomic benefits to other countries were greater than the costs. Meanwhile, central banks in several emerging countries, including China, resisted US dollar depreciation by preventing appreciation of their own exchange rates.

With interest rates in major advanced economies at close to zero, the tens of billions of Australian government bonds issued to fund the large budget deficits of recent years became highly attractive and induced extra capital inflow, again as reflected in Chart 13. Alongside capital inflow to finance mining investment, this led to appreciation of the Australian dollar.

Monetary policy in Australia could have been more relaxed during and after the GFC to cushion the impact of monetary easing overseas. Unfortunately, for reasons already outlined, fiscal expansion limited the scope for lowering domestic interest rates and likely introduced a degree of caution to

the operation of monetary policy at the time. Allowing monetary policy a greater role would not only have been a more effective means of responding to the after-effects of the crisis. It would have been more efficient, as monetary policy is more neutral between sectors than the stimulus package proved in practice, as well as less likely to result in pure waste. ■

SECTION

04

Policies to reverse the slide

Policies to reverse the slide

What policy responses can help reverse the slide in Australia's competitiveness? In part, this depends on which competitiveness measure we are addressing.

For instance, fiscal consolidation can in theory be used to improve Australia's competitiveness according to measures 1 (R) and 2 (R*) where overvalued real exchange rates are central, whereas structural reform, including labour market and tax reform can improve competitiveness (and productivity) based on measure 3 (W).

Reduce government spending

Deliberately increasing the budget deficit by more than other countries to stimulate economic activity in the wake of the global financial crisis strengthened the exchange rate and reinforced the impact of historically high commodity prices on the exchange rate over recent years. This worsened international competitiveness and crowded out activity in the internationally-exposed sectors of the economy. In addition, the escalation of public debt sent a message to households and firms that future taxes are likely to be higher. As a consequence,

consumer and investor confidence fell, dampening retail and non-mining investment spending. The high exchange rate and overly tight monetary policy also contributed to this loss of confidence.

Fiscal consolidation generally has the reverse effects to fiscal stimulus on the wider economy and can be expansionary to the extent it lessens pressure on both domestic long-term interest rates and the exchange rate, thereby assisting competitiveness. As the Reserve Bank sets short term-interest rates, monetary policy accordingly needs to be co-ordinated with fiscal consolidation.

Since the government sector primarily consumes rather than produces goods and services, a major cut in government consumption spending also adds to national savings other things equal, and effectively augments the supply of available funds for productive purposes. In this way,

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Without continued fiscal consolidation, public debt owed to foreigners will keep growing and circumstances could quickly change if foreign lenders demand a higher interest risk premium in light of the size of Australia's combined private and public indebtedness.

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fiscal consolidation, in addition to exerting downward pressure on longer term interest rates and the exchange rate, also reduces reliance on foreign borrowing for unproductive purposes. Without continued fiscal consolidation, public debt owed to foreigners will keep growing and circumstances could quickly change if foreign lenders demand a higher interest risk premium in light of the size of Australia's combined private and public indebtedness.

Cutting government spending, the bulk of which is non-tradable activity, would also directly lessen pressure on the prices of non-tradables, as the reverse of the case illustrated in Chart 2B in section 2. Hence competitiveness measure 2, as measured by R^* , would cease to deteriorate via the accelerated rise in the prices of non-tradables relative to tradables. This would alleviate the competitiveness lost by the tradable sector and curtail resources being drawn away because price rises in that sector fail to keep up with non-tradables inflation.

An obvious target for spending cuts is the billions of dollars' worth of government budgetary assistance to industry in the form of subsidies and tax concessions estimated by the Productivity Commission to be close to \$8 billion for the federal government alone in 2012-13. This

assistance is counterproductive as it helps sustain the high dollar through budget deficits and paradoxically acts to worsen the plight of internationally-exposed industries. There is also considerable scope for expenditure reduction where there are major overlaps of responsibilities and programs at the federal, state and local government levels, such as water, transport, government services, education and health administration.

In addition, academic research has shown that what matters is not just the budget balance itself, but the means by which it is obtained.³⁴ In other words, whether fiscal consolidation takes the form of reduced government spending or higher taxes is critical to the economy's subsequent performance. On that score, the weight of evidence is that cutting government consumption is preferable to cutting government investment, and even more preferable to raising income taxes which can be recessionary. It should also be noted that the fiscal consolidation that has occurred in many economies since the fiscal largesse in the wake of the GFC has relied heavily on revenue rather than expenditure measures.³⁵

As set out in the recommendations of the National Commission of Audit, considerable scope exists for

cutting government consumption by eliminating programs that are not justified by the principles of public economics.³⁶ Returning the budget to surplus primarily through spending cuts would reduce this source of upward pressure on the exchange rate and alleviate the loss of competitiveness of many trade-exposed firms. It would also stem inflationary pressures on the non-tradables side of the economy.

The most general rule for evaluating whether a public spending program is warranted is to ask whether a particular program is achieving a desired societal outcome which the private sector is not suited to achieve. Numerous other fundamental questions arise when assessing public spending at any level of government. For instance, what are the basic criteria for assessing the worth of proposed spending programs? What tier of government should be responsible for spending that meets these criteria? And what overlap is there between governments delivering programs that are, in principle, fully justified?

One argument against cutting government spending is that government spending needs to be sustained in the form of infrastructure investment now that mining sector investment is declining from record levels.

However, this argument neglects that the mining investment boom has essentially been aimed at increasing Australia's export capability and that this investment should give rise to higher export volumes after due lags, in the process replacing investment with net exports as a strong source of demand for domestic product, although perhaps not to the same degree.

At a more fundamental level, this argument is another manifestation of the "hydraulic" Keynesian idea that economic growth essentially stems from the demand side, rather than the supply side of the economy. Increased spending on infrastructure to maintain a given level of aggregate demand would, other things the same, also sustain upward pressure on the exchange rate in the absence of accommodating monetary policy, therefore prolonging the loss of competitiveness Australia has experienced since the GFC.

The case for more infrastructure investment rests on its potential to positively influence the supply-side of the economy by adding to the economy's capital stock. Increased infrastructure spending adds to the economy's total investment requirement relative to its given savings, other things the same. This implies an increase in foreign borrowing which must be serviced

at the going world interest rate. Hence national income improves when new infrastructure investment generates a significant return above the effective long-term foreign interest rate in net terms.³⁷

On this basis, the criteria should be how worthy each infrastructure project is on a cost-benefit basis and whether the extra output it facilitates, or its rate of return, exceeds the effective foreign interest rate. Of relevance here is that world interest rates will most likely rise in coming years following the wind back of quantitative easing by the United States Federal Reserve and other central banks.

By the same reasoning, cutting government consumption increases national saving which reduces the call on foreign funds. This improves national income since higher domestic saving, other things the same, reduces interest paid abroad which normally subtracts from national income.

Manage the exchange rate?

Since the exchange rate is central to competitiveness measures 1 and 2 it is reasonable to ask whether the exchange rate itself should be more tightly managed as a direct means of improving Australia's competitiveness. No international rules prevent Australia managing its exchange rate more pro-actively, or returning to a pegged rate system.

Much is made of the decision to float the dollar more than three decades ago, but Australia was an international laggard on this score. Many trading partners floated their currencies without much fanfare a decade or so earlier, following the collapse of the Bretton Woods system of managed exchange rates in 1971.

It was ill-advised policy not to have floated the exchange rate sooner because Australia has traditionally been a commodity exporting advanced economy (in company with Canada, New Zealand and Norway) and floating exchange rates are the best option for economies highly prone to international commodity price shocks. Had the Whitlam or Fraser governments floated the dollar, the economy would have avoided some of the macroeconomic pain during their terms, including high inflation and the booms and busts of the 1970s and early 1980s. The previous pegged exchange rate

system acted to magnify earlier cycles via its effects on the domestic money supply.

A lower Australian dollar would immediately boost the competitiveness of manufacturing and tourism, and raise returns to commodity producers. The difficulty with proposals for the Reserve Bank to target a lower level of the exchange rate is that it would transform the way monetary policy is conducted in Australia. If the Reserve Bank prevented the dollar rising above a certain value, its purchases of foreign currency in the foreign exchange market would, other things the same, add to the domestic money supply (assuming it doesn't sterilise the intervention). This would ultimately be inflationary in the absence of productivity improvements and Australia's international competitiveness would then be eroded via the inflation channel.

A floating exchange rate helps insulate a relatively small economy like Australia from international macroeconomic shocks, such as severe commodity price fluctuations and foreign financial crises. Since it was floated, the Australian dollar has generally performed this insulation role very well, including during the Asian crisis of 1997-98 and the GFC of 2008-09, when the floating exchange rate was the key factor

that saved Australia from technical recessions at those times.

Over the three decades since the float, commodity price upswings have mostly been offset by commodity price downswings, with the exchange rate strengthening in the medium term when commodity prices were high and depreciating when they were low, thereby dampening the impact of the commodity price cycle on the domestic economy. Minimising the impact of commodity price fluctuations on the wider domestic economy and affording the central bank maximum control of liquidity have been major benefits of a floating currency whose advantages are maximised when the economy's supply-side is also highly flexible.³⁸

Accelerate structural reform

When the Hawke-Keating and Howard-Costello governments purposely implemented structural reforms, including financial deregulation, labour market reform, tariff reduction, tax reform and privatisation, it lifted Australia's growth performance substantially above the OECD average and strengthened the economy's ability to withstand major external shocks. Expanding national income via reform was at least as important then as redistributing it.

However, a culture of complacency has taken hold in public policy circles over recent years, encouraged by the relatively better performance of Australia's economy compared with most other OECD economies since the GFC. This experience has provided a convenient cover for avoiding further reform to address the economy's poor underlying competitiveness and productivity performance.

If Australia is to remain competitive in its own region, ongoing economic reform is needed to rectify the competitiveness and productivity problems via further liberalisation of international trade and foreign investment, enhanced labour market flexibility and thoroughgoing tax reform.

Pro-market economic policies are

now needed to revive private sector activity and entrepreneurship by spurring competitiveness and productivity.³⁹ Such policies alter incentives and business practices in sectors that survive on subsidies, as well as those cossetted from competition through trade protection or tax breaks. Policy initiatives of previous Labor and Coalition governments that encouraged greater labour market flexibility have been reversed which will continue to stymie competitiveness and productivity.

Labour market flexibility

Australia's high exposure to terms of trade volatility and its associated economic costs support the case for heightened flexibility. Although the floating exchange rate acts to smooth economic adjustment across the economy in response to external price shocks, it also generates a higher degree of uncertainty for many traded goods industries, compared for instance with other advanced economies. This places a particular premium on the need for ready restructuring by firms along with reallocation of labour and capital to support new business models, products and processes. This restructuring is more readily facilitated if markets are highly flexible.

During the early phase of the mining boom, industrial relations

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A culture of complacency has taken hold in public policy circles over recent years, encouraged by the relatively better performance of Australia's economy compared with most other OECD economies since the GFC.

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arrangements did not have a major effect on exports. Workers, through their unions, were able to extract higher returns permitted by buoyant prices and profitability. Some of these gains, however, were taken in forms (such as restrictions on rostering) that have severe competitiveness implications now that Australian mining companies are no longer in a seller's market. Meanwhile, industrial relations arrangements surely did play an important role in the non-tradables sector (for instance, for aged care, child care, hospital services and government schools) by driving up costs and the prices of non-tradables more generally.

The importance of labour market flexibility to the economy's overall productivity performance, as conventionally measured, remains an issue of economic debate. An important reason for this is that standard measures of productivity are not linked in any direct way to the degree of flexibility in labour markets.

Standard productivity measures assume constant what economists call the "elasticity of substitution" between labour and capital. In effect, the elasticity of substitution is the rate at which labour can be substituted for capital, and is likely to be affected by the degree of labour market flexibility.

Allowing variation through time in the way labour and capital are combined (where the elasticity of substitution is not assumed constant) can yield different results when estimating productivity performance. My own research with Sam Strong has found this to be the case during the reform era of the 1980s and 1990s.⁴⁰

Specifically, we found that labour productivity rose significantly and remained elevated during the economic reform period. Furthermore, our alternative specification which allows the substitutability of labour and capital to change over time suggests labour productivity increased by more than was recorded by conventional productivity measures between 1998 and 2008, when the labour market was more flexible than it is now. The policy implication is that labour market flexibility can play a role in improving productivity.

Tax and welfare reform

Australia's tax to GDP ratio is close to the OECD average when comparison takes appropriate account of compulsory superannuation and other levies.⁴¹ However, comparing the tax take to OECD economies is increasingly irrelevant given most of Australia's key trading partners are in Asia and given our particular commodity

export profile where we compete with countries such as Canada, Brazil, Indonesia and South Africa.

It is also worth noting that Australia's tax structure relies relatively heavily on mobile tax bases (such as corporate income) and that the interaction of the tax system with the welfare system also creates disincentives to work and save. With quite a high tax "wedge", both on current income and income from savings, the economic impact of taxes in Australia is likely to be similar to that in higher tax economies.

Australia's future is obviously tied more to the East than to the West. So too our policy frameworks need to be assessed against economic practices in Asia and in commodity exporting countries that directly compete against Australia in world markets. Relatively low income taxes and welfare provision, as well as highly flexible goods, services and labour markets, contribute to Asia's dynamism, as evidenced by its capacity to shrug off the GFC even more quickly than Australia. Present income tax rates remain uncompetitive by the standards of Asian trading partners and those of other countries against which exporters directly compete. ■

SECTION

05

Conclusion

SECTION 5

Conclusion

For centuries, economists have been interested in exploring the reasons why some economies prosper more than others.

This was a key theme of Adam Smith's *The Wealth of Nations* published in 1776 which argued that income and wealth creation had much to do with expanding the scope for the exchange of goods and services by allowing freer rein to markets. By implication, the more flexible those markets were, the more dynamic economies could become.

This understanding was a key thread running through economic reforms pursued in Australia in the late 20th century. However, in recent years policy makers in Australia have coasted on the back of the mining boom, content to compare Australia favourably against North Atlantic economies that have languished following the GFC. For all the attention devoted to Australia's opportunities and challenges in the "Asian

century", policy makers have been remarkably reluctant to benchmark our performance against our major trading partners in the region.

Australia urgently needs a more searching national conversation about our international competitiveness. In many ways, this is the missing link in the Abbott Government's economic narrative as it struggles to come to grips with Australia's long-term budget predicament and looks to flesh out a meaningful agenda in areas such as tax, reforming the Federation and industrial relations.

The premise of this Monograph is that Australia will not durably improve is competitiveness without serious fiscal and structural reform, including labour market reform. The Abbott Government should grasp this narrative and own it.

It has so far undersold the importance of fiscal consolidation to Australia's competitiveness and to future economic growth. It needs to broaden its fiscal repair message beyond the need for government to "live within its means" and explain why tackling our long-term budget challenge is important to our national competitiveness.

Similarly, there is a compelling narrative around improving national competitiveness which can help stitch together a strong policy agenda in areas such as tax, improving the operation of the Federation, broad-based regulatory reform and workplace relations. ■

Endnotes

- ¹ While it is more accurate to describe the episode of 2008-09 as a transatlantic banking and public debt crisis, this paper uses the more common terminology for consistency and ease of expression.
- ² See, for example, Eslake 2011, Banks 2012, and Parham 2012.
- ³ These price fluctuations stem predominantly from the high inelasticity of demand for commodities relative to high inelasticity of supply.
- ⁴ Shann 2012 provides a comprehensive account of the scale and structural implications of the boom.
- ⁵ See International Monetary Fund 2012.
- ⁶ Using modern trade and industrial organisation theory to explain trade specialisation, Sutton 2012 shows that terms of trade volatility makes it hard for commodity exporting countries to specialise in the production of elaborately transformed manufactures where competition on quality is important.
- ⁷ Makin 2013a and 2014a, and Van der Ploeg 2011 elaborate on the wider macroeconomic consequences of commodity price fluctuations.
- ⁸ See Jones and Wilkinson 1990, and Ellis 2001 for earlier Reserve Bank estimates and further discussion.
- ⁹ See Makin and Robson 1999.
- ¹⁰ See Makin 2013a for a theoretical rationale.
- ¹¹ Goldstein and Officer 1979 provide earlier estimates of this phenomenon.
- ¹² See Parham 2012 for more detailed estimates and explanation.
- ¹³ See Balassa 1964, and Samuelson 1964.
- ¹⁴ Australia's partner institution is the Australian Industry Group.
- ¹⁵ See McKinsey Global Institute 2012.
- ¹⁶ Ibid, p. 30
- ¹⁷ See, for instance, Young et al. 2008.
- ¹⁸ See Australian Government 2009.

- ¹⁹ The classic open economy macroeconomic model was outlined by Mundell 1963, and Fleming 1962.
- ²⁰ This effect is named after the classical economist, David Ricardo. See also Barro 1989.
- ²¹ Makin and Narayan 2011 provide evidence of an almost complete long-run private-public saving offset for Australia.
- ²² See IMF 2008, p. 164.
- ²³ See Makin 2013b for an extended treatment of this approach.
- ²⁴ See IMF 2009, p. 38.
- ²⁵ Makin 2010 provides more detailed analysis.
- ²⁶ Makin and Narayan 2013 provide evidence that the consolidated budget deficit of federal and state governments translates almost one for one to increased capital inflow.
- ²⁷ This is shown formally in Makin 2013b.
- ²⁸ See Cogan et al. 2013, Forni et al. 2009, Ramey 2011, and Born et al. 2013.
- ²⁹ See Auerbach et al. 2010.
- ³⁰ See, for instance, Blanchard and Leigh 2013.
- ³¹ See Guest and Makin 2011 and 2013, as well as Humphreys 2012.
- ³² See Tanzi 2012.
- ³³ This is elaborated in Makin and Humphreys 2014.
- ³⁴ See, for instance, Alesina et al. 2012, Auerbach et al. 2010, Barro and Redlick 2011, Cogan et al. 2013, Favero and Giavazzi 2007, Guest and Makin 2013, Makin 2014a, and Schuknecht and Stark 2010.
- ³⁵ See Perotti 2011 for a related discussion.
- ³⁶ See Australian Government 2014.
- ³⁷ Makin 2014b formally derives this condition.
- ³⁸ See Makin and Rohde 2012, and Stevens 2013.
- ³⁹ See Banks 2012, Ergas and Owens 2012, and Shann 2012 for a related discussion.
- ⁴⁰ See Makin and Strong 2013.
- ⁴¹ See Carmody 2014 for further discussion.

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Australia's competitiveness: Reversing the slide

TONY MAKIN

Three different measures of Australia's competitiveness all tell roughly the same story. Australia has a serious competitiveness problem and this is showing up in lower economic growth.

Tony Makin explores in detail how to think about national competitiveness and the policies that make a difference. He argues that Australia will not durably improve its competitiveness without serious fiscal and structural reform, including labour market reform. There is no comfort in Australia comparing itself with the low-growth economies of Europe. Our policy frameworks need to be benchmarked against those in the fast-growing economies of Asia.

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