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Medium term prospects for Australian regions

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MEDIUM-TERM PROSPECTS FOR AUSTRALIAN REGIONS

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The Centre of Policy Studies at Monash University regularly provides medium-term forecasts for Australia's regional economies. This report reviews our latest forecasts, which cover the period between now and 2010.

Before looking at the detailed forecasts, it is useful to consider why we forecast, and how we forecast.

Why forecast?

The answer is simple – because people have a need to know the economic future. For some people it is just an innate desire to know what will happen, as opposed to what is happening. For others, though, economic forecasts provide critical information that is necessary for planning purposes. Prime examples are multi-industry, multi-regional businesses concerned with the allocation of their resources, educational and training authorities concerned with anticipating changes in regional demands for different skill types, and governments concerned with regional development of public infrastructure.

How do we forecast?

Our forecasting process has three stages. In the first stage we assemble a large volume of external forecasts from agencies that specialise in different areas of the Australian economy. These include:

state/territory macroeconomic forecasts from Access Economics Pty Ltd. and state Treasury departments; national-level forecasts of foreign tourism numbers from the Federal Government's Tourism Forecasting Council; national-level assumptions for changes in industry production technologies and in household tastes based on historical trends; and

forecasts for the quantities of agricultural and mineral exports, and estimates of capital expenditure on major minerals and energy projects from a number of groups, including the Australian Bureau of Agricultural and Resource Economics (ABARE).

In the second stage, the data assembled in the first stage are fed into an economic model that is used to trace out the implications of these inputs for industry output and employment by state and territory. The model imposes sensible economic assumptions on the economic behaviour of industries, consumers, exporters and the government in the states. For example, there are equations that specify industry demands for materials, labour and capital as functions of industry activity levels and relative prices of the inputs. These equations follow from the reality that firms act to minimise the costs of producing goods and services.

In the third stage, our state-level forecasts of industry growth rates are combined with data on the industry composition of each sub-state region's aggregate value added to make growth forecasts for 57 sub-state regions (see Figure 1). At this stage we also feed into the process some region-specific information on agricultural and mining production, and trends in the interregional movements of retired people.

Forecasts – State/Territory Prospects

Table 1 shows our forecasts for selected state macroeconomic variables in terms of average annual growth rates through to 2010.

Nationally, real GDP is assumed to grow at an average annual rate of 3.2 per cent (row 6). The states/territories with the best growth potential are WA (4.0 per cent per annum annual growth

in real GSP) and QLD (3.7 per cent). The states with the worst growth potential are TAS (2.0 per cent) and SA (2.5 per cent). In general, the forecast growth rates are in line with the long-run growth potential for each economy. For QLD and WA the forecast growth rates are slightly below the average rates of recent years, while for TAS and SA forecast growth is higher than recent experience. Factors such as the prospect of a prolonged period of slow growth in the US and Japan economies, make it unlikely that the foreign-export-oriented states like QLD and WA can sustain a very strong export performance. On the other hand, some of the negative factors underlying the poor performance of TAS and SA over recent times, such as declining population growth and the stagnation of some foreign-import-competing industries, will be gradually reversed allowing a pick up in growth for these states.

Over recent years, real private consumption has grown faster than real GSP in most regions. However, this trend is not expected to continue. As can be seen by comparing rows 1 and 6 in Table 1, we expect that real consumption will grow roughly in line with real GSP in each region over the forecast period.

Growth in real investment (row 2) at the national level is forecast to be a fairly modest 3.0 per cent. This reflects initial conditions. The current level of investment is quite strong, and so only modest investment growth is required to maintain the historically normal economy-wide investment/capital ratio of three per cent. Forecast differences across regions reflect a combination of different initial conditions, different industrial compositions and specific assumptions about large projects such as aluminium plants in QLD.

Over the past fifteen years real international exports (row 4) and real international imports (row 5) have grown rapidly relative to real value added (row 6) in each region. This reflects several factors: declining transport costs; improvements in communications; reductions in protection in Australia and in our major trading partners; and technological changes favouring the use of import-intensive goods such as computers and communication equipment. All these factors are expected to continue through the forecast period, leading to further

increases in the ratios of the volume of international trade to real value added.

Forecasts – industry prospects

Table 2 gives forecasts for the 37 industries distinguished in the model. At the Australia-wide level, *Communication services* (industry 33) is the fastest growing industry. This reflects our assumption that changes in technology through to the end of the decade will favour intermediate usage of these services strongly and that rapid productivity growth will reduce their price relative to consumer prices in general. Similar factors explain the relatively strong growth forecast for *Financial and business services* (industry 34).

Another fast growing industry is *Electricity generation - gas* (industry 23). It has especially strong growth prospects in QLD and NSW, reflecting announced and planned construction of new plants. Strong growth in gas-fired electricity restricts growth prospects for other types of electricity generation, especially *Electricity generation – black coal* (industry 21) in QLD and SA. In all regions, forecast growth of *Electricity supply* (industry 26) lags behind forecast GSP growth. This reflects assumptions about electricity-saving technical change that are imposed on the forecasts.

Other industries with relatively strong growth forecasts include *Other transport services* (industry 32) and *Other metal products* (industry 18). These industries participate heavily in the strong growth forecast for international tourism and manufactured exports. In addition, changes in technology are assumed to favour intermediate usage of *Other metal products*.

Forecasts for *Agriculture* (industry 1), the mining industries (industries 3 to 8), *Petroleum products* (13) and *Alumina and aluminium* (17) are, in the main, based on extrapolations of the current views of the ABARE. These include slow growth for *Crude oil* in VIC, reflecting the run down of the Bass Straight reserves. The prospects for *Brown Coal* reflect those of brown-coal electricity generation with an allowance for greater efficiency of fuel use in power generation.

The manufacturing industries with the weakest growth prospects (other than petroleum) are *Textiles, clothing and footwear (TCF)* (industry 10), *Wood and Paper products* (industry 11) and *Cement* (industry 15). The TCF industries are restricted by import competition, as are the wood and paper industries. Cement is restricted by adverse shifts in technology in the construction sector.

Most of the remaining industries have close to average growth prospects. Two offsetting forces - strong export growth and increasing import competition, affect *Food, beverages and tobacco (industry 9)*. The same forces strongly influence the prospects of *Chemical products (excl petrol)* (industry 12), *Motor vehicles and parts* (19) and *Other manufacturing* (20). Our forecasts for *Construction services* (industry 29) govern the prospects of *Non-metal construction materials excl Cement* (industry 14). These, in turn, reflect our macro assumptions for investment (Table 1). *Wholesale, retail trade and accommodation* (industry 30) sells widely throughout the economy. Its growth rate, though, is slightly below that of GDP because of adverse taste and technology shifts against its products. *Dwelling ownership* (industry 35), *Public services* (36) and *Other services* (37) are very consumption oriented. Accordingly, their prospects are explained by appropriate weighted averages of the growth rates assumed for private and public consumption. Strong reliance on public consumption explains the relatively poor prospects for *Public services*.

For most industries, especially services, regional differences in growth forecasts mirror regional differences in the GSP forecasts in Table 1. Hence, growth tends to be relatively strong in WA and QLD and relatively weak in TAS and SA.

Forecasts – Sub-state regions.

Table 3 ranks the 56 sub-state regions in terms of their growth prospects through to 2010.

Relative to the state GSP forecasts, our Gross Regional Product (GRP) forecasts cover a wider band. This is largely because there are greater differences between the industrial

mixes of the sub-state regions than between the industrial mixes of the states.

At the top of the regional rankings are Perth (WA) and Peel (WA), with forecast average annual growth rates of 4.7 and 4.6 per cent. The economic activity of these regions is heavily concentrated in service industries, which have especially strong growth prospects in WA (see Table 2). At the opposite end of the rankings is Eyre (SA), with an average annual growth rate of 1.8 per cent. This region has a heavy concentration (around 30 per cent) in slow-growing wheat-sheep agriculture.

Mining and agricultural concentrations explain the extreme rankings of several regions within each state. In QLD, which has an average growth rate of 3.7 per cent, South West and Central West have poor prospects compared to the rest of the state. Both regions owe their low positions to weak prospects for broadacre agriculture. The North West has better prospects, but still lags behind the state generally. Its relatively low position is due, in part, to relatively poor prospects for non-ferrous ore production in and around Mt Isa.

The presence of mining does not prevent a region from doing relatively well compared to other regions in the same state, nor does its absence prevent a region from doing relatively poorly. Similarly, the absence of agriculture does not prevent a region from having a relatively low growth ranking, nor does its presence prevent a relatively high ranking. An example of a relatively highly ranked, non-mining region is Moreton (QLD) (which includes the Gold Coast tourism area). It is a strong growing region because of tourism and population movements. Examples of relatively lowly ranked mining regions are East Gippsland (VIC), due to dwindling Bass Strait oil and gas supplies, and Mersey-Lyell (TAS), due to declining production from the local non-ferrous mine. An example of an agricultural region with relatively good prospects is Far North (QLD). The share of Agriculture in its aggregate value added is 10 per cent, compared with a QLD share of less than 7 per cent. However the concentration of its activities in tourism and in the faster growing parts of agriculture (fruit and vegetables) is sufficient to give the region a high growth ranking within its state.

The city regions achieve upper rankings compared with the non-urban regions in each state. As already noted, Perth ranks number 1 of all regions. Brisbane ranks number 9, with a growth potential almost equal to the fastest growing region in QLD (Far North). Sydney (ranked 9), Melbourne (18), Adelaide (37) and Hobart (49) are the highest ranked regions in their states. The key strengths of the capital cities are over-representations of fast growing service industries such as finance, insurance and communications.

Next we take a closer look at the regions in the state with the highest growth potential, WA, and regions with the lowest growth potential, TAS.

WA Sub-state regions

The regions with the top growth ranking in WA are Perth and Peel. The regions with the weakest prospects are Mid West, Wheatbelt and Goldfields-Esperance. The most obvious strengths of Perth are the absence of slow-growing agricultural and mining industries, and an over-representation of fast growing service industries (especially *Financial and business services*). Peel has a similar advantage to Perth in terms of under-representations of agriculture and mining. However, unlike Perth, Peel has an under-representation of financial and business service industries, which is a relatively fast-growing industry. Another weakness of Peel is an over-representation of black coal electricity generation, which has comparatively weak growth prospects.

Now consider the bottom ranked region in WA, Goldfields-Esperance. It is over-represented in slow growing agriculture and mining, and is under-represented in most of the fast-growing service industries. For some industries, the forecast growth rate for Goldfields-Esperance is below the industry's forecast growth rate in WA. This reflects population drift away from Kalgoorlie and towards Perth, and explains, for example, relatively weak prospects for consumer-oriented industries such as *Trade, accommodation and Dwelling ownership*.

The major weakness of the Wheatbelt region is an over-representation in slow-growing agriculture. Almost 30 per cent

of value added in this region is generated by wheat-sheep agriculture. In our regional calculation, we have assumed that this form of agricultural production grows significantly slower than agricultural production generally in WA. This reflects the comparatively poor medium-term prospects for wool and grains production

Of the other regions in WA, the Mid West and the Pilbara have the poorest prospects. The main negatives for the Mid West are over-representations of relatively slow growing *Agriculture* and *Non-iron ore*. The Pilbara suffers from an over-representation of slow-growing *Iron Ore*. All other regions have prospects slightly better than average. Kimberley's economy benefits from comparatively good prospects assumed for its agricultural industries, particularly those centred on the Ord river scheme. The Gascoyne and Great Southern regions benefit from being under-represented in slow-growing agriculture and mining and over-represented in comparatively fast-growing service industries. The South West has a mix of industries similar to the WA-wide mix. Accordingly, its growth prospects are close to the growth prospects of the state as a whole.

TAS Sub-state regions

Greater Hobart and Northern have above average prospects in TAS, while Southern and Mersey-Lyell have below average prospects. The strengths of Greater Hobart are an over-representation of comparatively fast growing service industries, especially *Communication services* and *Financial and business services*, and an under-representation of agriculture and mining. Offsetting these is the disadvantage from having an under-representation in the rapidly growing *Other transport services*. This industry covers water transport services, air transport services and other transport services It has especially strong growth prospects in TAS, reflecting our forecast of strong growth in trade between TAS and the mainland. Another large disadvantage for Hobart is an over representation of *Public services*, which have comparatively poor prospects.

The main strength of the Northern economy is its over-concentration in *Other transport services*. Another strength is

an under-representation of slow growing *Electricity generation - other* (hydro).

Notable weaknesses of the Mersey-Lyell economy are an over-representation of *Wood and Paper products*, which is comparatively slow growing in TAS, and the poor prospects for *Non-iron ore* production in that region. For many industries, the forecast growth rate for Mersey-Lyell is below the industry's forecast growth rate for TAS, reflecting population drift away from that region to Hobart and the mainland.

Adverse population movements also explain the relatively weak growth rates of the service sectors in the Southern region. Other weaknesses of Southern include an over-representation of hydro electricity generation and an under-representation of *Other transport services*.

Conclusion

A number of common characteristics apply to most of the regions that have high growth potential.

They are positioned within a high-growth state and thus benefit from strong growth in trade within the state.

They generally have a solid secondary-production base covering a diversified range of manufacturing and service industries.

They have natural advantages in one or more areas such as tourism attraction;

They make efficient and sustainable use of natural resources.
and

They have shown an ability to adjust to technological and other external changes.

In our forecasts we tried to take account of some of these factors, but have not accounted for other non-economic drivers such as the level of commitment by individual businesses and people within regions to achieve better than average. How these levels of commitment are focused to produce above-average growth is the ultimate challenge of each region and each industry.