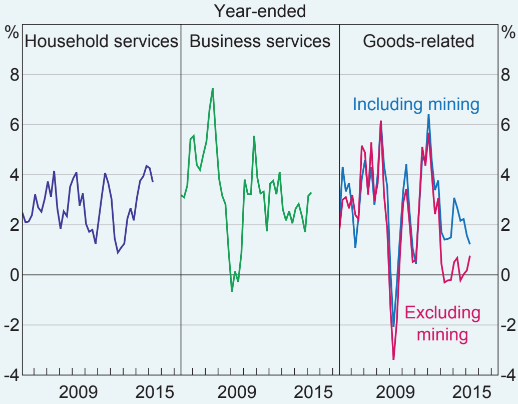
Box C

Developments by Sector

The composition of economic activity has been changing over recent years in response to a range of different forces (see the 'Domestic Economic Conditions' chapter). Recent sectoral trends can help to explain some of the features in the aggregate economic data, such as above-average growth in employment despite below-average GDP growth. These differences across sectors also underpin differences in economic conditions across the states.

Economic activity in the service sectors of the economy has picked up over the past few years (Graph C1).[1] In particular, output growth for household services has increased considerably, to be well above its average pace over the past decade. Business services output growth has also picked up a bit, to be around average. In contrast, output growth remains weak in the goods-related sector. Excluding the mining industry, goods-related output has been little changed for more than two years.

Graph C1
Output Growth by Sector
Year-ended



Sources: ABS; RBA

The rebalancing of economic activity across sectors has been mirrored in a wide range of other variables (Graph C2). In the household services sector, survey measures of business conditions have improved since late 2013, to be well above their long-run average, and employment growth and the number of job vacancies have increased over the past year or so.[2] Conditions in the business services sector have also improved over the past couple of years, and this has been accompanied by a recovery in job vacancies and employment in that sector. This follows a period of weak conditions, driven in part by the decline in mining investment, which had required the use of a number of business services.[3] Meanwhile, overall conditions remain weak in the goods-related sector, and vacancies and employment have been little changed for nearly three years.

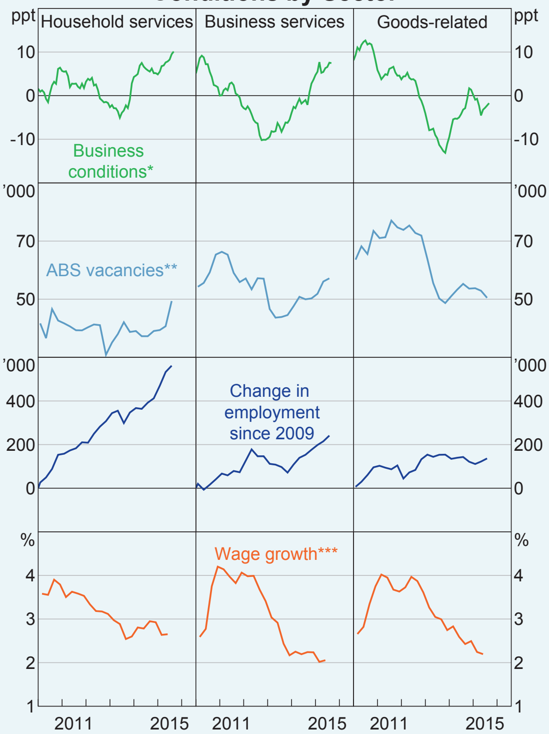
Declines in wage growth have been broad based across industries over the past few years (see the 'Price

1 Household services include: accommodation & food; education & training; health care & social assistance; arts & recreation; and other services. Business services include: professional, scientific & technical; financial & insurance; administration & support; rental, hiring & real estate; and information, media & telecommunications. Many of these services are used by households as well as businesses. The goods-related sector includes: mining; construction; manufacturing; electricity, gas, water & waste; transport, postal & warehousing; wholesale trade; and retail trade.

2 The household services sector appears to generate more employment from a given level of vacancies than other sectors. If vacancies are filled relatively quickly in the household services sector, they are less likely to be captured in the ABS Job Vacancies survey, as it measures the stock of vacancies on a particular day in the quarter. Further, some firms may have positions to fill that do not meet the ABS criteria for a vacancy to exist – for example, if recruitment action has not commenced or the job is not available to be filled on the survey date. This may be more prevalent among household services firms, particularly if they are more inclined to hire workers through personal recommendations or centralised systems that allocate new staff to commence as soon as positions become available, such as new graduates beginning work at hospitals or schools. For further information about the relationship between the job vacancies series and employment growth, see Edwards K and L Gustafsson (2013), 'Indicators of Labour Demand', RBA *Bulletin*, September pp 1–12.

3 Rayner V and J Bishop (2013), 'Industry Dimensions of the Resource Boom: An Input-Output Analysis', RBA Research Discussion Paper No 2013-02.

Graph C2
Conditions by Sector



* Gross value added weighted; deviation from average since 1989; six-month moving average

** Job vacancies seasonally adjusted by the RBA

*** Year-ended growth in wage price index

Sources: ABS; NAB; RBA

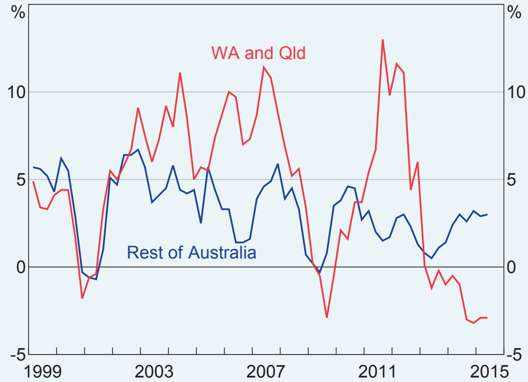
and Wage Developments' chapter). More recently, in the household and business services sectors wage growth has been little changed, while employment growth has increased. In contrast, wage growth has continued to decline in the goods-related sector, where employment has not increased. The apparent stabilisation of wage growth in the services sectors may reflect an improvement in demand for labour, although it is also possible that wage growth has been stable for other reasons. For example, the Bank's liaison suggests that firms are reluctant to give annual wage increases below inflation unless there are exceptional circumstances.

These compositional changes across industries help to explain the pattern of output growth and labour market developments across the states. Western Australia and Queensland have been more directly exposed to the upswing and downswing associated with the cycle in commodity prices and mining investment. These mining states had stronger growth in state final demand, employment and wages than the rest of Australia for much of the past decade, but this has recently been reversed. State final demand has fallen in Western Australia and Queensland over the past year or so, while it has picked up elsewhere (Graph C3). In the labour market, while employment in household services has risen in most states, the recovery in business services has been uneven. Business services employment has remained little changed in Western Australia and Queensland over recent years, partly reflecting lower mining investment-related demand, while it has risen notably in New South Wales and Victoria. Similarly, goods-related employment has declined in Western Australia and Queensland as mining and mining-related construction employment has fallen, but has been little changed in New South Wales and Victoria. Overall, the recent recovery in employment, job vacancies and job advertisements has been more pronounced in New South Wales and Victoria than in the mining states (Graph C4).

Nevertheless, these different trends in employment growth across states have not led to significant deviations in state unemployment rates as the supply of labour has also adjusted. In particular, the decline in population growth since 2012 has been most pronounced in the mining states, reflecting both lower net immigration and an adjustment in interstate flows.[4] All states have seen declines in wage growth, although the mining states have seen larger declines, just as they experienced larger increases during the upswing (Graph C5).

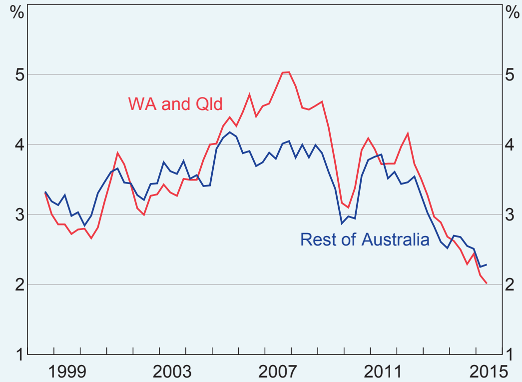
4 See RBA (2015), 'Box D: Implications of Lower Population Growth for the Australian Economy', *Statement on Monetary Policy*, August pp 44–46.

Graph C3
State Final Demand
Year-ended growth



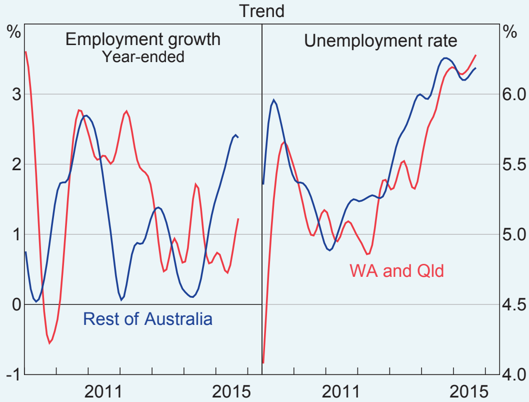
Sources: ABS; RBA

Graph C5
Wage Growth*
Year-ended



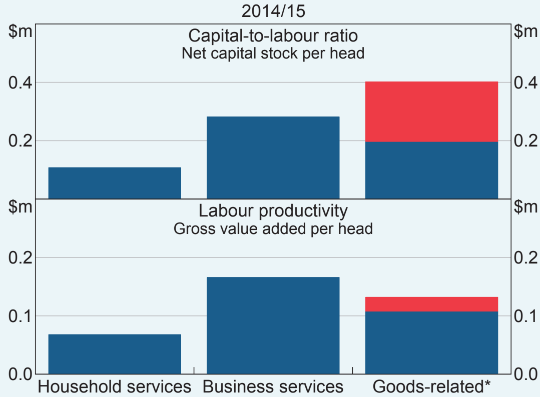
* Wage price index
Sources: ABS; RBA

Graph C4
Labour Market by State
Trend



Sources: ABS; RBA

Graph C6
Capital and Productivity
2014/15

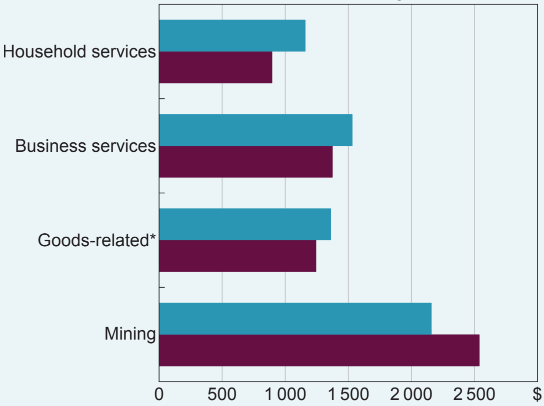


* Red bars show the contribution of mining and utilities
Sources: ABS; RBA

For the economy as a whole, the change in the composition of economic activity can partly help to explain why aggregate employment growth has picked up notably despite below-average GDP growth and weak investment. Output produced by the household and business service sectors is more labour intensive than in mining; that is, to produce an additional unit of output, services firms tend to add extra workers but not undertake as much investment (Graph C6). Moreover, measured output per hour worked (i.e. labour productivity) is lowest in the household services sector. This may be because the output of the household services sector is particularly difficult to measure. Nevertheless, a shift in demand towards household services would be expected to produce a larger pick-up in employment growth for a given level of measured output growth.

Compositional change in the labour market can also help to explain some of the weakness observed in aggregate labour income growth. The mining industry has the highest level of earnings of all industries and, on average, the household services sector has the lowest earnings (Graph C7).

Graph C7
Average Weekly Earnings
2014/15 average



* Includes mining

** Average hourly wage multiplied by 39, which is approximately average full-time hours

Sources: ABS; RBA

The difference in earnings is partly explained by differences in average hours worked; a higher proportion of household service employees work part-time and mining workers tend to work more than the average full-time working hours. However, even adjusting for hours worked, differences remain. The absorption of more workers into the household services sector and further declines in mining employment will tend to lower the growth of aggregate labour income. Indeed, the effect of compositional change is evident in average weekly earnings (AWE) growth, which fell to just 1.2 per cent over the past year, well below growth of 2.3 per cent in the wage price index (WPI), which is adjusted to remove the effects of compositional change. The difference between growth in AWE and the WPI is also likely to capture changes in the composition of jobs within industries and firms; for example, workers moving from high-paying mining-related construction jobs to lower-paying positions elsewhere in the construction industry.[5] ✥

5 For a discussion of the decline in wage growth unrelated to composition, see Jacobs J and A Rush (2015), 'Why is wage growth so low?', RBA *Bulletin* pp 9–18. For a discussion of the conceptual differences between AWE and the WPI see Australian Bureau of Statistics (2014), 'Feature Article: Average Weekly Earnings and Wage Price Index – What do they measure?', *Average Weekly Earnings*, May.