STATE OF THE REGIONS 1994-2019

A land boom, a mining boom and their aftermath



June 2021

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Iron ore carrier – ABC News



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Introduction

Beginning in 1996, NIEIR's *State of the Regions* reports have documented the economic progress of Australia's regions, both urban and country. Issued annually, each report has covered the current year and the immediate past. The reports chronicle a period of relatively stable growth, at national level, in the major economic indicators including Gross Domestic Product and National Income. Growth in these indicators was driven by growth at the regional level, with stability at the national level achieved by balancing out the fate of the various regions, some of which prospered and some of which fell behind.

This quarter century of sustained growth ended with the advent of COVID-19 in 2020. Whether or not it can be resumed post COVID-19, it is opportune to assess regional economic performance over this period of sustained growth, as covered in the *State of the Regions* reports. Rather than provide a summary of the annual reports, this overview report goes back to the original statistics and assesses the period as a whole. For statistical purposes, the period begins with the recovery from the 1990 recession (most of the comparisons begin with the 1993-94 financial year) and ends with the 2018-19 financial year.

The State of the Regions reports

Each annual *State of the Regions* report has included a range of statistical indicators, concentrating on measures of production and income. The reports also include basic demographic indicators, though they do not attempt to compete with the ABS and other providers of detailed demographic data.

The reports divide Australia into regions, each with precise geographic boundaries. These regional boundaries used have changed over the years, and indeed have been updated for the present report. With each update the statistics reported for previous years were revised to reflect the new boundaries. The number of regions has stabilised at 67, a number which does rough justice to the geographic variety of Australia without going into inordinate detail. Regional boundaries have been drawn to include like with like and to recognise established regional identities, but inevitably require compromises. One important compromise is that regions in the metropolitan cities are smaller in area but larger in average population than country regions, which in turn are smaller in area and larger in population than remote regions.

Each region is considered from two points of view: as a region in which production takes place and as a region in which income is received. The first point of view concentrates on the location of economic activity activity organised by employers (including the selfemployed) and generating paid work. The second point of view highlights where people live, mainly in household dwellings but also in various kinds of more-or-less permanent institutional accommodation. The first point of view concentrates on the value of production in each region (on a production or workplace basis) while the second centres on incomes received (on a residential or household basis). The basic statistical framework is provided by the National Accounts, which the ABS prepares at national and state/territory level. The State of the Regions reports extend this framework to the regional level on both a production basis and a residential basis.

The National Accounts

The National Accounts concepts were developed a century ago as the culmination of decades of statistical effort in estimating industry outputs and their values (bushels of wheat, tonnes of steel, each with its price), and also estimating economic inputs, particularly hours worked by wage rate. Eventually enough information was collected to allow the estimation of national totals and so to describe the behaviour of national economies statistically. The *State of the Regions* reports extend this capability to regional economies, in the process extending the range of comparisons which can be made between regions.

The National Accounts hinge on two basic concepts: the aggregate value of goods and services produced in a year (Gross Domestic Product, GDP) and the aggregate value of incomes received during a year (National Income). National Income is less than GDP for two reasons:

- overseas claims on the value of production are paid out and Australian claims on the value of production overseas are paid in. In Australia incomes paid out overseas are greater than those received from overseas, resulting in a net deduction. These amounts are recorded by the financial system and can be estimated quite accurately; and
- the consumption of capital is also deducted.
 Corporate accountants attempt to do this through depreciation allowances, but their calculations do not necessarily add up at the national level. It is particularly difficult to estimate the deduction for the consumption of natural capital. When iron ore is dug up and exported, how much should be

deducted from National Income to allow for the reduction in in-ground iron ore resources? (In theory, quite a lot; in practice nothing.) When bushfires destroy forests and their wildlife, how much should be deducted? (In theory, a lot; in practice, next to nothing.) When greenhouse gases are emitted, with serious environmental effects, how much should be deducted? (In theory, a lot, in practice nothing.) On the other hand, it can be argued that technological developments augment capital and can be offset against the consumption of capital.

If net capital losses have been underestimated, it is possible that Australia's National Income, properly calculated, fell during the quarter century to 2019 – it all depends on the answers to theoretical questions which have not been satisfactorily resolved either by accountants or economists. However, the corporate sector and the tax commissioner have negotiated a conventional set of depreciation rates for calculating commercial profit and, taking the corporate accountants' approach, the National Accounts deduct no more than a modicum of depreciation from GDP to estimate National Income. This done, the statisticians still feel a little queasy about the definition of depreciation allowances and prefer to concentrate on GDP.

This does not, however, mean that the National Accounts give up on the concept of income. They instead concentrate on incomes received by households, and especially on household cash incomes. If a household's standard of living is reduced because its favourite picnic spot is destroyed by a bushfire, too bad; its cash income is unaffected. Add to this that reasonably accurate data are available for cash incomes, it follows that cash incomes dominate the definitions of income used in the National Accounts.

There are many other instances where the estimation of the National Accounts involve contestable decisions as to what to include and what to leave out. Many of these arise because the Accounts are compiled from multiple sources, requiring the reconciliation of conflicting evidence and the infilling of gaps. Because of this they are prepared by experts in estimation and reconciliation, in other words by statisticians rather than by the accountants who prepare many of the primary sources on which they are based. In Australia this responsibility falls on the ABS which, in co-operation with its confreres internationally, has developed a coherent set of concepts covering both the production and the income-receiving side of economic activity, primarily to document changes over time but also to allow comparisons between Australia and other countries and, within Australia, to allow comparisons between the states and territories.

National accounting at regional level

Many of the data which underlie the National Accounts have an address attached and can accordingly be used to extend national accounting concepts to the regional level. This applies to many of the sources for measures on a residential basis, including population and employment (where Census data are updated using survey results) and also income tax and Centrelink data. Some production data is also available regionally, especially agricultural production. However, several of the major National Accounts sources are not available at the local level and their regional values accordingly have to be estimated. This applies particularly to trade data – national exports and imports are meticulously recorded, but not so interregional sales and purchases. It also applies to the value of regional production in most industries where business operations cross regional boundaries. Businesses are under a legal obligation to prepare accounts for their operations in Australia, from which their contribution to total output (their value-added) can be calculated, but there's no obligation to calculate the regional distribution of their value-add.

Thanks to these data sources, at the regional level employment and household income can be estimated fairly readily on a residential basis. The main problems in bringing the National Accounts down to the regional level arise in estimating the value of production, since there are no direct sources. However, employment incomes, which are reported by residential area, can be redistributed to their regions of production using data on commuting behaviour, which is conveniently provided by the Census. This methodology allows NIEIR to prepare reasonably accurate estimates of employment incomes generated by region of production. The missing item is the difference between employment incomes paid out and the total value of regional production, or Gross Regional Product. The missing item - call it for convenience gross corporate profits – must necessarily be estimated. The ABS does this at state level, by industry, in its State Accounts. NIEIR extends this estimate to the regional level, in the main relying on its regional employment estimates and industry profitability rates.

A second important component of the National Accounts which can only be indirectly estimated at regional level is regional imports and exports. As with Gross Regional Product, the ABS state-level estimates provide a starting point. More detailed estimation is greatly aided by the ABS industry input-output tables and for some industries at least can be checked from data on freight flows. NIEIR estimates interregional exports and imports, but does not publish them in the *State of the Regions* reports – they are considered useful for modelling purposes but insufficiently accurate for detailed publication.

In addition to estimates of the value of production and the level of incomes, and by analogy with corporate accounts, the National Accounts also include an annual National Balance Sheet. For reasons already discussed, many of the items in the National Balance Sheet cannot readily be ascribed regionally – for example, which regions are responsible for overseas debt? However, wealth held by households, both housing wealth and financial wealth, not to speak of household debt, can be estimated on a regional basis and is included in the State of the Regions reports. However, the regional distribution of wealth adds a whole range of complexity to the assessment of regional performance and will not be addressed in detail in this summary report, though the importance of runaway land prices will be mentioned again and again.

Even without the balance sheet, the National Accounts at regional level form an overwhelming mass of numbers. They tell not one story, but a myriad of stories: the fortunes of regions, the fortunes of industries within regions, the fortunes of households within regions. Summarised back to national level, they can be interpreted in various ways, very often by the imposition of a pre-conceived macroeconomic theory or ideology. This report includes a brief macroeconomic introduction, but most of it assumes the national and international background and concentrates on patterns of regional income generation and distribution as indicated by the National Accounts measures, which are limited to regional totals and averages. However, in Chapter 6 we begin the process of remedying this deficiency by considering the distribution of income among households in each region.

Plan of the report

The National Accounts at regional level chart the ways in which regional economic histories diverge from the national history. Thanks largely to international trends, but with contributions from national and state government decisions, industries have both prospered and collapsed. The economic fate of each region has been influenced by its industry mix. Taxation and government expenditure policies have also had regional effects, if only by favouring some population groups and disfavouring others. At the national level, GDP in dollars of constant purchasing power increased every year from 1992 to 2019, somewhat as it had during the post-war period and by contrast with the recessions of 1983 and 1991. This special State of the Regions report concentrates on the period from 1994 to 2019 as a whole, characterising regional economic performance by a cascade of statistics. The chapters follow the statistical trail as follows.

 Chapter 1 covers the international background, both as regards trade and prevalent economic ideology.

- Chapter 2 provides technical background to the statistics. It introduces the 67 regions used in this report, placing them in relation to Australia's five metropolitan centres (plus Canberra) and grading outwards through inner suburbs, outer suburbs, urban peripheries and closer-settled rural areas to the remote pastoral/mining regions. It also divides Australian productive activities into 10 major industry groups, variously exposed to competition both overseas and interregional, and also variously exposed to government policies.
- Chapter 3 describes the role of the 10 industries in generating Gross Regional Product, employment and employment-related local income, differentially by region.
- Chapter 4 moves systematically through the production-related statistical indicators by industry by region, covering regional patterns of employment (measured in hours worked by industry). Multiplying hours worked by income generated per hour worked by industry leads to estimates of local income by place-of-work.
- Chapter 5 switches attention to the incomes received by the residents of each region. It begins by describing how commuters who work in one region but live in another move employmentrelated local incomes across regional boundaries, then covers regional trends in property income, which, since it derives from corporate profits, is not included in local income. The chapter finishes by assessing the regional effects of redistribution through the tax/social security system. This completes the systematic journey from Gross Regional Product by region of production to household disposable income by region of residence. The data in Chapters 3, 4 and 5 show how regional industry performance relates to regional household disposable incomes.
- The data in Chapters 2 to 5 comprise regional aggregates and averages. Chapter 6 switches to a different approach, based on the income question in the Census. In discussions of income distribution at the national level this source has taken second place to surveys with detailed questions on income sources - surveys which are believed to be more accurate than the rough tick-a-boxes of the Census income question. However, the Census question has two major advantages: it provides valid data at the regional level (which the surveys generally don't, because their samples aren't big enough) and allows cross-tabulation by other Census variables, particularly household composition. In Chapter 6 the regional distribution of high and low household incomes is compared with the distribution of high and low average incomes generated in Chapter 5.

The report thus outlined is a sequence of statistics. These numbers can be interpreted to tell a myriad of stories: stories of regions, stories of industries, stories of people. They have not been prepared to tell any particular story and are open to investigation by readers with particular interests. In Chapter 7 the data is interrogated to give tentative answers to two questions: what do the numbers

have to say about changes in regional inequality? And how have regional fortunes varied by the position of each region within the hinterlands of Australia's five metropolitan cities?

1. The macroeconomic background

The State of the Regions reports are designed to facilitate comparison of the level of economic activity and of household prosperity in different parts of Australia. Issued annually, each report includes commentary on current trends backed up by a statistical appendix with detailed economic data for each region. Most of the reports have also included special articles on particular industries or aspects of regional public finance.

From their inception in 1998 to 2020 the reports were prepared against a background of national economic growth, in the sense that Australian GDP rose every year. The reports documented that growth was far from evenly distributed across regions. As industries rose and fell and income groups gained and lost, some regions prospered and others faltered.

In 2020 the world encountered COVID-19. In many countries there were immediate increases in death rates. Australia avoided these increases and even kept GDP sputtering upwards, but its economic system, and even more its social relationships, were in shock. Interpersonal relationships were disrupted by lockdowns and it was not only the apocalyptically-minded who discerned the end of an era. Even apart from the pandemic, there were signs that business could no longer be maintained as usual. It is opportune, therefore, to provide an overview of the period chronicled by the *State of the Regions* reports, broadly the quarter century of uninterrupted national economic growth which faltered in 2020.

The State of the Regions reports focus on regions - 67 of them, covering the whole of Australia. The decisions which influence the economic fate of each region may be divided into those made outside Australia and outside Australian control, those made within Australia but outside the region (including the decisions of the Commonwealth and state and territory governments) and decisions made within the region by local government, locally-based businesses and local residents. In this hierarchy the national news bulletins emphasise national decisions, not only because they are presumed to be of widespread national interest but because they are easier and cheaper to cover than either international or local events. The importance of local decision-making is often under-appreciated, except when it feeds back to the national or state level - often informally, but also through formal mechanisms including parliamentary representation. The ability of regional decision-makers to improve the lot of their region, including by advocating for their region, is most effective when they have a realistic understanding both of their own region and of the other regions which in various ways are related to their region.

The State of the Regions reports take a conventional approach. Just as the prosperity of a nation is bound up with the prosperity of its industries, so the prosperity of a region depends fundamentally on the prosperity of its industries. After an introduction to the regional division used in the reports, Chapter 2 identifies the factors which drive activity in Australian industries and Chapter 3 discusses the regional distribution of broad groups of industries.

The factors which drive industry growth and decline are, to a large extent, international. Australia is a medium-size country which follows world trends in fashion and technology. It generates much of its income from exports and satisfies many of its demands with imports. Accordingly this review of the quarter century of regional growth which followed recovery from the 1990 recession begins with a background account of developments in Australia and in the world at large which affected industries generally. And since no period in history can be understood without reference to its immediate past, this account sketches a little of that history.

1.1 The Second World War and its aftermath

The quarter century to 2020 invites comparison with the previous period of rapid economic growth, the post-war prosperity which began in the 1940s, faltered in 1961 and petered out as inflation and unemployment rose during the 1970s. The Australians who held power during this period had all experienced the Second Word War, hence their automatic commitment to the US side in the Cold War. More important, they had all experienced the 1930s depression, hence their serious commitment to full employment. Their contemporaries in Western Europe and North America had been through similar experiences and had similar priorities, so that Australia pursued full employment and economic growth in a supportive world environment. The economic reforms of the 1940s centred on this commitment to full employment, which was to be maintained by Commonwealth taxation and expenditure policies and by Commonwealth policies on overseas trade which emphasised job generation, backed up by State government investment in education, transport and the utilities.

As interpreted by the High Court, the Australian constitution provides little incentive to coherent regional policies. The states are in charge of the chief policy instruments for promoting regional growth, infrastructure and educational investment, but the Commonwealth

receives the increased tax revenues which result from successful investment. Neither the federal nor the state governments are required to think holistically about regional development. During the war and its aftermath the Commonwealth used its financial powers to regulate the pace of state infrastructure investment and engaged in limited investment on its own account, chiefly in telecommunications and airports. During the 1950s it also began to finance tertiary education and private schools. Within their areas of responsibility both the Commonwealth and the states developed rules for the equitable distribution of services across regions. The states extended school education and health services in response to population growth and invested heavily in electricity supply and roads, often with an eye to regional development. There were some notable examples of regional planning: for example, the government of SA used its Housing Trust to develop new suburbs on the northern fringe of Adelaide, building good-quality low-cost housing with ready access to jobs in newly-developed factories. Other states published regional and metropolitan development plans but were basically content to let economic development unfold within the parameters set by Commonwealth macroeconomic policy.

In the 1970s all this fell apart. The story is complicated and difficult to unravel, but its major elements can be seen in the history of the motor vehicle. Invented and brought to reliability in Europe and initially mass manufactured in the USA, in Australia motor cars were at first imported as playthings for well-heeled mechanically-minded men. The general adoption of motoring as a means of transport was delayed by depression and war. During the post-war period tariff barriers encouraged the major international car manufacturers to set up Australian subsidiaries, and motor vehicles became a star Australian industry. Cars shifted from luxury goods to (rather expensive) necessities. Australia's regional geography was rebuilt as small towns were bypassed and, in the cities, malls replaced shopping strips. Manufacturing moved to the suburbs.

The motorisation of the Free World depended on supplies of petrol, which the Western oil companies drew increasingly from sources they had developed in a limited number of low-income countries. When these countries jacked up the price of crude oil, the petrol-dependent countries, including Australia, were hard put to adjust. The spike in petrol prices was not the only cause of the combination of rising unemployment and high price inflation which plagued Australia and other Free World countries in the 1970s, but it made an important contribution. It was also gradually realised, beginning in the 1980s, that vulnerability to disruptions in the worldwide petrol supply chain was not the only hidden downside of universal motoring; more insidiously motoring was linked, via CO₂ emissions, to climate change.

Championed though they were as a lead industry in Australian economic development, during the post-war period the motor manufacturers remained oriented to the domestic market in which they were protected from overseas competition by tariffs. This Australian reliance on protected manufacturing industries was, in turn, a response to experiences as long ago as the 1860s, when the major export industries (wool and gold) were profitable but failed to generate satisfactory levels of employment. The government of Victoria, and after federation the Commonwealth government, resorted to promoting job-generating industries – hence the classic Australian argument for tariffs to protect manufacturing so that it could generate employment.

During the post-war period the main opposition to tariffs came from the pastoral industry, producer of wool. The pastoralists pointed out that tariffs increased the costs of export industries without increasing the prices they received. These complaints were not much heeded during the wool-price boom of the early 1950s but became desperate in the 1960s as synthetic textiles replaced wool. With Australia's major export industry under stress, it was inevitable that the tariff would come under scrutiny, and with it the role of industries such as motor vehicle manufacture. The claims by the pastoral industry that the tariff was imposing costs it could no longer bear were generalised into a more general argument that the Commonwealth should stop mollycoddling uncompetitive industries and rely on competition to find new export industries which would substitute for wool. The Whitlam government's tariff cuts of 1973 were a harbinger of change.

Meanwhile, as part of its Cold War strategy, the USA had encouraged economic reconstruction in Western Europe and Japan. This succeeded to the extent that, by 1971, the US was no longer the totally dominant economic power it had been at the end of the Second World War, though it remained the dominant military power. It passed from being a major overseas investor to a borrower. The resulting flow of US dollars into international money markets, coupled with the oil price increases, contributed to a general surge of inflation and brought great wealth to businesses which made prescient financial calls. The most innovative of these businesses evaded national control. For a while national financial sectors were split between conservative, government-regulated banks and unregulated financial intermediaries which operated at much higher levels of risk but were generally highly profitable. These profits generated political power, which was exercised to allow businesses in the finance sector greater scope to borrow, to lend and to make commercial decisions on interest rates and on exchange rates between currencies.

In short, during the post-war period economic growth in the major economies of the US bloc was accompanied by the gradual accumulation of conflicts over the distribution of income – the share of oil-producing countries vis a vis oil consumers, the share of new manufacturers (particularly in Japan) vis a vis established manufacturers and the share of finance. A further important conflict concerned

redistribution: the newly rich, particularly in the finance sector, objected to the progressive taxation which, in the post-war period, had financed social security systems, education and health services. These conflicts generated uncertainties as to future costs and demands, which in turn discouraged capital accumulation and generated unemployment. Conflicts over income shares and taxation generated inflation. Some of the continental European governments addressed these conflicts and stabilised their economies by negotiations which included organised Labour as well as Capital, but in the Anglophone countries Capital distrusted Labour and was also split, with the interests of finance, secondary industry and primary industry variously opposed. In Australia efforts to follow continental European practice failed and the country elected to follow American precedents, based on competition.

1.2 The New Right reform policies

During the 1980s the task of administering the economies of Western Europe, North America and Australia passed to a new generation, the oldest of whom had been children during the 1930s depression. Personal experience of the costs of poverty was less widespread than it had been among their seniors. The majority of this generation had secure employment and were willing to tolerate an increase in the unemployment rate. Internationally, the USA emerged from its failure in Viet Nam to proclaim itself the victor in the Cold War. It ascribed its victory to its competitive, profit-oriented economic system and sought to install such regimes as world standard.

Having in mind the US example, during the 1980s and 1990s the Australian reform campaign championed competition. The reformers believed that market competition would guarantee the efficient use of resources and so underpin growth in productivity and in GDP. Full employment was abandoned to force workers to compete in the labour market. Trade policies which had been adopted to generate employment (chiefly tariffs but also government procurement policies) were abandoned to force Australian businesses to compete on the world market. The Commonwealth did its utmost to shift tertiary education onto a commercial, user-pays basis, and also encouraged private, fee-for-service schools and hospitals. Government enterprises were privatised and previously regulated businesses, notably the banks, were deregulated, all in the name of competition.

One important side effect of the celebration of competition was to undercut the left-wing belief that profits arise from the under-payment of labour; indeed, the criticism was turned against wage-earners as trade unions were branded monopolists of labour and profits were valorised provided they had been earned in

competition. This rehabilitation of profit extended to the valorisation of economic rents - profits which resulted from the exploitation of natural resources. This valorisation greatly benefited the mining industry. When minerals came into international demand, the new ideology helped the industry to resist the taxation of resource rents. It was also very handy for the recipients of windfall gains in land prices, particularly those who owed their gains to public investments in transport and those who gained from the re-zoning of land. In addition, the line between competition and monopoly proved to be exceedingly blurred and quasi-monopolistic profits were routinely valorised. By further extension, profits derived from lobbying and bribing governments were also routinely valorised. A set of policy reforms intended to promote efficiency was thus perverted.

Though tariffs were cut in a series of moves beginning in the 1970s, the neoliberal era can conveniently be dated from the floating of the Australian dollar in 1983, accompanied as it was by more general bank deregulation not to speak of continuing tariff cuts. The heavily-protected manufacturing industries began their slow collapse, precipitating a generation of workers with skills in those industries onto social security support – though some of the de-protected industries slimmed down and survived. The banks sought to profit from deregulation but their revelries brought them close to crashing in 1990. The reformers excused these tribulations as learning experiences and broadened their arguments to advocate the privatisation of public service businesses and the deregulation of labour markets.

During the quarter century beginning with the recovery from the 1990 recession Australian Gross Domestic Product increased every year, even after adjustment for inflation. Technologically the period was marked by the increased use of computing in communication, data processing and process control. Activity was disrupted in industries such as media and retail and relative costs were raised in industries which could not be automated, such as the personal services. These technological developments increased the economies of scale available in many industries, and in combination with the ideology of competition, favoured production by multinational corporations, particularly those which specialised in shifting production to countries with low labour costs. Though this generated increased labour incomes in the countries concerned, it also generated remarkable shortterm profits, many of which were squirrelled away in tax havens. Contrary to professed neoliberal principles, the USA countered the resulting deficiency of domestic demand with government deficit spending financed by issuing Treasury Bonds, and eventually simply by printing

Aligned as it was with American ideology, the Australian government found this international background congenial. To the delight of the banks, deficiencies in demand resulting from the offshoring of production were

countered, not as in the US by government deficits, but by mortgage lending. In the first half of the quarter century, with international demand for Australian exports slack, the missing demand was replaced by households which borrowed on mortgages, with the banks in turn borrowing overseas. It greatly helped that banks were able to automate mortgage administration. As compared with the US government, the Commonwealth government boasted of its financial rectitude, drawing attention away from the accumulation of household and international debt. These policies supported the maintenance of a higher exchange rate than the market would otherwise have determined, which was profitable to the banks but penalised tradeexposed industries including those which had been on both sides of the tariff debate – hence penalising rural regions and manufacturing regions alike. A more obvious problem was that the policy of pumping up housing demand was not accompanied by any real effort to increase the supply of housing, particularly the supply of residential land with accessible employment. This contributed to the generation of capital gains in urban land, with obvious regional effects since the gains were concentrated in urban areas with good employment accessibility. By raising urban land costs they also penalised trade-exposed industries which used urban land, particularly manufacturing but also peri-urban agriculture. In this way, the Commonwealth went from encouraging manufacturing through tariffs to directly discouraging it by raising land costs – a sort of reverse tariff.

The limitations of competition as a principal aim of economic policy were also demonstrated in the industries which lend themselves to natural monopoly and in those where economies of scale make large, quasi-monopolistic businesses inevitable. The new-found respectability of profit included profits earned in dubiously competitive industries. During the nineteenth and twentieth centuries Australian governments had not hesitated to enter these industries as producers on their own account, but the idea that prices, service levels and profitability could be regulated and subjected to competition from public enterprise was now condemned as anti-competitive. Many publicly-owned businesses were privatised, with the proceeds mainly used to avoid the tax increases which would otherwise have been required to finance politicallypopular increases in government current expenditure on roads, police, education and health services. The worst of the privatisations have been returned to public enterprise while, in the more profitable privatised services, vested interests have been created which, among other effects, have hindered the decarbonisation of the energy and transport sectors. It has also been alleged that the privatisation of telecommunications hindered rather than sped the investment program required to support the spread of information technology both among businesses and households.

Despite privatisations, a substantial public sector remained, including in health, education, roads and public transport. The effect of competition policies in these sectors included treasury procurement rules which emphasised least initial cost rather than whole-of-life returns. In various instances this favoured imports rather than domestic producers. Competition policies also favoured businesses with large marketing budgets, which tended to be multinational.

In this context regional policy was sporadic and largely exercised by the states through their decisions on infrastructure investment. The various privatisations reduced the states' influence over infrastructure investment and in any case the priority of competition dictated that regional policy be left to the market, with the decisions of financial institutions prominent. Despite this, the issue of regional policy occasionally generated public discussion, for example over Northern development.

1.3 A land boom, a mining boom and afterwards

As chronicled in the *State of the Regions* reports, the quarter century of growth in GDP can be broken into three periods:

- a land-boom period, conveniently dated from 1994 to 2008
- a mining boom, conveniently dated from 2008 to 2016; and
- a fin de siècle period from 2016 to 2019.

The land-boom period proved to be the heyday of competition-based economic policy. Mortgage lending was used to pump demand. In the absence of complementary action to increase the supply of urban land with ready access to employment, the cost of urban housing rose rapidly — note the contrast with the balanced development around Adelaide during the post-war period, and also that Adelaide, as a manufacturing city, was sacrificed to the gods of competition.

The financial crash of 2008 discredited the financial institutions based in New York, but not enough to bring about any fundamental reforms. Australia was scarcely dented by the crisis, since the demand for Australian mineral exports strengthened unexpectedly, largely due to a spurt of construction activity in China. During the resulting mining boom the Commonwealth failed to dampen the upward surge in the exchange rate, happily accepting the adverse consequences for trade-exposed industries other than the booming iron ore mines and (later) methane producers. Though there were overseas precedents for such dampening, they involved diverting some of the resource rents generated by the boom-time prices to public purposes. It proved impossible for

Australia to follow these precedents thanks to the political power of the mining industry which, of course, claimed that its profits were the rewards of enterprise and not resource rents. The constitution awards the administration of onshore mineral resources to the states, not the Commonwealth, and the industry was also able to argue that low royalties encourage state development.

When a decline in the price of iron ore signalled the end of the boom, the Commonwealth government attempted to return to the halcyon days of the land boom. Once again it relied on mortgage lending to pump demand, ignoring two uncomfortable facts – the financial fragility resulting from high household debt and the increase in business costs from high urban land prices, directly through the price of land as a business input and indirectly through the effect of unaffordable housing on employee costs of living and hence on the adequacy of wages and salaries. To reward success in competition the Commonwealth continued with tax cuts for high income individuals, and to punish failure it tightened the eligibility conditions for social security payments to people of workforce age. During the land boom the Commonwealth had ignored the inconvenient warnings of climate scientists and it continued in its dogged belief that there was no need to reduce greenhouse gas emissions. Between 2016 and 2019 Australia, like the US, avoided questions to which there was no easy political answer – questions such as the response to climate change, the financial future of an overindebted household sector, the affordability of housing and the future of work in an automated economy. Nostalgia for the noughties combined with general dithering generated a fin de siècle atmosphere, somewhat disguised by the manufacture and marketing of political personalities.

In 2020 and 2021 political attention was focussed on the pandemic, allowing further procrastination in addressing the longer-term future. Whatever emerges post-pandemic, 2018-19 was the last financial year of a quarter century of economic growth based on neo-liberal, pro-competition policies, the legacy of which will dominate the post-pandemic future. These years are to be covered in a separate *State of the Regions* report.

1.4 And the future?

This report concentrates on regional trajectories of economic growth from 1994 to 2019. In the fin de siècle years there were many who claimed that the trends of the preceding quarter century could not continue indefinitely, but as it happened the trends went haywire not as a result of internal contradictions but due to COVID-19. Australian

recessions have generally had their origins in the balance of payments – they have been associated with export slumps or import booms. This time round overseas export earnings remained healthy while, as lockdowns and travel restrictions were imposed, activity collapsed in several industries – more so in some regions than in others. There is considerable uncertainty as to what happens next, very much so at the global level and hence also at the national and regional levels. Whatever happens, Australia will need a practical understanding of the circumstances and policies which generated economic growth from the early 1990s to 2019 in order to adapt its policies to changing circumstances.

NIEIR has partnered with id.com to analyse and project economic, demographic and social data for local government areas. Though common experience makes a sharp distinction between the past, the present and the future, in statistics this distinction is blurred, since it takes time to collate and reconcile the various statistical sources. In the meantime, estimates of the major economic indicators are derived from leading indicators, identified for their past close relationships to the major indicators. Preliminary estimates of the major indicators are prepared using the leading indicators on the assumption that the relationships between the leading and major indicators continue to hold. In similar vein, NIEIR prepares short-term projections (for one, two or three years ahead) on the assumption that established relationships between economic variables continue to hold. Needless to say the assumption that established relationships continue to hold has lately been under question.

Estimates cannot be considered final until they receive detailed support from the major data sources, including individual tax returns and the census. This means that data as far back as 2017 are not fully finalised, though the data for 2018-19 are reasonably close to final. This provides a technical justification for concluding the analysis in this report with the 2019 financial year. Nevertheless, an understanding of the regional dynamics of the quarter century of uninterrupted national GDP growth which ended in 2019 remains relevant to the quarter century now in prospect. Despite the current fascination with short-term changes, it is timely to stand back and consider the regional incidence of 25 years of neo-liberal policies.

2. Regions and industries

Regional economies are differentiated not only by geographic location but by industry mix. A statistical account of their economic progress accordingly requires precise definition of the boundaries of each region and similarly precise definitions of for all the indicators used, including the definition of industries. Most of the indicators used in the *State of the Regions* reports have conventional definitions, but to fulfil the aims of the reports it has been necessary to define a specific set of regions and likewise to classify industries in a way that departs from ABS conventions. This chapter begins with NIEIR's approach to the definition of regions and then discussed the definition of industries.

2.1 Australia divided into regions

As Aboriginal people recognised, each Australian hill and gully, each forest and sand dune is unique yet connected in both obvious and subtle ways to its neighbours. Regions cohere because of these connections. Similarly with human settlements: Tumbarumba is unique and so is Nunawading, one is a town and the other a suburb but both are connected to their neighbours. Their residents regularly visit other places near and far. The natural and human links between places draw them together into regions.

Regions can be defined in many ways. They can be defined by natural features such as river catchments, climatic zones or the areas in which particular native trees or animals are endemic. They may also be defined by human activity, which translates into characteristic land use and in turn relates to industry structure. Urban regions can be differentiated from rural, and both can be differentiated by their characteristic industries. A further option is to use administrative boundaries, as is required when the data are to inform administrative authorities.

The decision as to how to define regions should relate to the purpose in doing so, which in the case of the *State of the Regions* reports is to describe regional economic differentiation. The reports therefore incline to the landuse, typical industry approach. The chief problem in this approach is that it is easy enough to specify archetypical regions but hard to classify the areas which are a bit of this and a bit of that. Land-use regions lack the natural boundaries of river catchments and similarly lack the precise legal boundaries of administrative divisions. On the other hand, within limits, the existence of transition zones allows a certain flexibility. Land-use boundaries can be adapted to meet other criteria, such as target populations.

Given that the reports cover all of Australia, an obvious question is: how many regions? The answer here is necessarily a compromise between recognising regional distinctiveness and the limits of human comprehension — too few regions and important differences are missed; too many and the commonalities dissolve into the particulars. After some experiment, NIEIR has settled on 67 regions, ranging from geographically-large remote regions to geographically small but populous regions within metropolitan areas.

2.1.1 States, territories, regions and the National Accounts

The *Reports* include demographic data from the Census and other sources. These data are presented as background to economic data which, as far as possible, replicate the economic statistics provided by the ABS in their state-level National Accounts – the intellectual structure which underpins the *State of the Regions* reports is the same as that which underlies the National Accounts. To permit reconciliation to the National Accounts published at the state level, the 67 regions have been defined to respect state/territory boundaries. Though a number of functional, land-use regions cross state boundaries, these regions remain split at state boundaries due to the requirement to benchmark regional totals against ABS state-level estimates.

In prior State of the Regions reports regional boundaries also respected local government boundaries. This was never wholly satisfactory – the City of Brisbane was always too large for easy comparison with any other region – and recent local government boundary changes have generated further difficulties. Some time ago the ABS divorced its statistical geography from local government boundaries, largely to abstract from the changes which result from local government reform, and this report follows the ABS in splitting selected LGAs. A review of the regional boundaries used in past State of the Regions reports will be found on the NIEIR website, along with more precise definitions of the regions used in the present report.

2.1.2 The major metropolitan centres and their hinterlands

In defining the 67 regions, it was recognised that population and economic activity in Australia are extraordinarily concentrated in the metropolitan areas, while there are very large tracts of country with low populations. The boundaries of the 67 regions compromise between area and population, with a target population for a metropolitan regions at around 500,000, a target also considered appropriate for the four large perimetropolitan cities, Gold Coast, Newcastle, Wollongong and Sunshine Coast. The target for a remote region, with mainly pastoral land use usually supplemented by mining, was set at around 100,000. The target population for other non-metropolitan regions was set at 250,000. Given the intersection of these targets with state boundaries, the distribution of metropolitan, country and remote regions by state/territory was as reported in Table 2.1.

It should be noted straight away that this distribution involved compromises. Darwin, though classified as remote, is largely urban. There are also considerable differences in the extent of urbanisation among the country regions. At one extreme, Townsville (Qld) and Southern Tasmania (Hobart) are quite substantially urban while at the other WA Wheatbelt has plenty of towns but no cities. SA was particularly difficult to regionalise, since the population of Adelaide justifies 2½ regions and the population of remote SA justifies ½ of a region. The resulting compromise – two metropolitan regions, one peri-metropolitan region and one country region – maintains broad comparability with the rest of Australia but would quickly be revised should the target regional populations be reduced.

The boundaries of the 67 regions emphasise geographic relationships to the principal metropolitan centres. From this point of view, the regions fall into five main bands.

Inner metropolitan regions, basically those built-up by 1950. In 1950 Australian metropolitan areas, particularly Melbourne, were star-shaped with development projecting outwards along the main suburban railway lines. Present-day inner suburban regions include the star-arms plus areas infilled between the railway lines during the 1950s. The inner suburbs are generally of moderate to high population density and are well-served by public transport. Each of Perth, Adelaide, Brisbane and Canberra have a single inner region which includes the CBD, but in Sydney and Melbourne the inner metropolitan population is large enough to permit a distinction between the central city and the other inner suburbs. As a result the six central

metropolitan regions comprise Central Sydney, Central Melbourne, Inner Brisbane, Inner Perth, Inner Adelaide and the ACT. When commenting on this group of six, it will be important to remember that, though they have similar populations, Central Sydney and Central Melbourne are more dominated by central metropolitan functions than Inner Brisbane, Inner Perth, Inner Adelaide or the ACT. Similarly the inner Sydney and inner Melbourne regions exclude the central business district.

- Outer suburbs, which range from raw commuter suburbs with poor public transport to established employment centres like Ipswich, Qld. Though they incorporate pre-existing urban areas such as Ipswich, the outer suburbs were mostly subdivided since 1950 and extend to the current outer limit of continuous subdivision.
- Farming regions and provincial cities within 175 km or so of a metropolitan centre. Land values in these areas are generally above those justified by rural production and reflect the demand for ex-urban properties, whether for retirement, holiday retreat or for home-office working. The expression of this demand varies by state. In Victoria, Melbourne is surrounded by a crescent of peri-urban country stretching from the Surf Coast via Ballarat, Bendigo and the La Trobe Valley to Bass Coast. In NSW, much of the country within 175 km of Sydney comprises national parks, which deflects peri-urban demand north and south along the coast. The southern deflection curves inland to meet up with demand emanating from Canberra. In Qld, WA and SA exurban demand is again affected by the local pattern of beaches and ranges. Around all five major metropolitan areas, these peri-metropolitan regions include places which the ABS incorporates into the metropolitan area.
- Arable country regions beyond this radius, including several regions with important cities, such as Hobart and Townsville.
- Beyond the arable regions, the remote regions generally support pastoral and at least some mining activity. In view of its small population and general remoteness, Darwin has been included in this category.

The remote regions are so large that daily life seldom involves crossing from one side of the region to the other, while the metropolitan regions are so small that daily life regularly involves crossing region boundaries — and yet the sense of regional identity can be strong in remote areas where people seldom meet, and swamped in multiple identities in metropolitan areas.

Table 2.1 Distribution of regions as defined in this State of the Regions report										
		Broadly me	etropolitan							
State	Central	Inner	Outer	Periphery	Rural	Remote	Total			
NSW	1	3	5	5	6	1	21			
Victoria	1	3	5	4	2		15			
Queensland		1	3	3	6	1	14			
SA		1	1	1	1		4			
WA		1	3	1	1	2	8			
Tasmania					2		2			
NT						2	2			
ACT		1					1			
Australia	2	10	17	14	18	6	67			
Average population ('000)	445	490	554	344	252	98	378			

2.1.3 Differences between regional and state/national economies

As with broader geographic entities such as countries, states and territories, production takes place and generates income within each region and is determined by supply (the labour and other inputs available to producers located in the region) and demand (sales opportunities both within and outside the region). This said, it is necessary to approach regions a little differently from states and territories, and very differently from the national economy, for two main reasons.

- Apart from the ACT, no region has a governmental authority with definite policy-making powers. Government policies which affect the region may be international, national, state/territory or local (most regions cover more than one local government area). The policies of private sector institutions (both profit and non-profit) are likewise generated by decision-makers whose depth of knowledge and sympathy with the residents of each region varies.
- Because the regions are small in relation to the national economy and their boundaries are open, the extra-regional horizon is even more important than it is for states and territories. The destiny of each region is determined not only by its internal resources and decisions, but by manifold and complex interregional relationships. Not only are regions interconnected by trade; people commute between them: they may live in one, work in another, shop in yet another and go visiting in yet others. Decisions affecting one region are commonly made in another and land, buildings and businesses in any region are commonly owned by residents of other regions, sometimes directly but often through complex financial relationships involving corporations.

The *Reports* address these complexities by concentrating on the pattern of production within each region. What industries are present in the region, and how busy are they? Are they trade-exposed – do they earn out-of-region incomes? Do they encounter out-of-region competition?

2.2 Distinguishing industries

The macroeconomics which underlie the National Accounts focus on aggregates and particularly on Gross Domestic Product as the favoured, though far from perfect, measure of the total value of production. From a regional point of view, GDP has two main components.

- The first, local income, is that part of the value of production which accrues to people who work in the regions where production takes place. It comprises wages, salaries, CEO remuneration packages and the mixed incomes of owner-operated businesses.
- The remainder, corporate gross profits, accrues to corporate business owners and to governments. Unlike local income, this component does not in general accrue to the regions where it is produced. It is, rather, split various ways, notably payments to overseas owners, dividends and interest to resident shareholders and creditors, the finance of government activity and the re-investment of retained earnings including investment to make good depreciated assets.

At the regional level, local income is of immediate significance, whereas corporate gross profits have very little direct effect on regional cash flows. From a regional point of view, corporate gross profits are perhaps best seen as a source of corporate power: profitable industries are in a position to make investment decisions with regional effects and can also influence state and national governments to make regulatory decisions with regional effects. In these reports we concentrate on the direct economic effects of the presence of corporate producers

in regions, hence the attention given to local income rather than to the regional equivalent of GDP, Gross Regional Product. This concentration has the advantage of foregrounding data which are statistically reasonably certain, since as will be explained below the corporate profit component of GRP can only be estimated using contestable assumptions.

Over the quarter century from 1994 to 2019, at national level the proportion of local income to GDP rose slightly, from 63 to 65 per cent. It is frequently observed that the wage share of GDP fell during this period, but this fall was more than compensated by increases in other components of local income, including salaries and the remuneration of executives and local business proprietors. The increase in the proportion of local income implies a fall in the proportion of gross corporate profits, but there may be an element of statistical illusion in this – if businesses (or their accountants) have increasingly been expensing capital expenditures rather than debiting them to retained earnings, corporate gross profits as recorded in the National Accounts will be reduced.

Regions must make their way not only as constrained by international forces but as constrained by the national and state economies of which they are part. Again, without belying the importance of local government, most of the government decisions which affect regions are made by the national and state/territory governments. In contrast to macroeconomics at the national level, at regional level attention concentrates not only on the consequences of international circumstances but on the regional effects of national and state policies. Some of these policies, particularly those on taxation, social security, interest rates and service provision, directly affect regional households, but many, particularly on trade, taxation, finance and infrastructure investment affect regional residents via their effect on regional business, both those which are locallymanaged and the branches of multi-regional businesses affected by head-office decisions. Given the importance of these business responses, business provides a starting point in analysing regional economies. Business within each region is conducted by thousands of individual businesses, but for analytical purposes it is convenient to group these businesses into a limited number of industries.

Though the data in the *State of the Regions* reports are modelled on, and reconciled to, the National Accounts, they concentrate on employment in paid work, which is allocated to regions in two separate ways: by place-of-work and by each worker's place of residence, as recorded by the ABS at the Census. Transport workers are asked to nominate their sign-on point and fly-in fly-out workers are asked to nominate their home address, not their work-camp address. This results in two different understandings of the National Accounts variables, which can be allocated to regions either by place-of-work or by place-of-worker residence.

It is difficult to understand economic activity without reference to the differing fortunes of the various industries, where industries comprise branches of the economy that produce related sets of raw materials, goods or service. Places of work are classified by industry, which is the type of productive activity carried on at the workplace. When data are reported on a residential basis, industry data refer to the industry pursued at each resident's workplace.

Industries can be defined narrowly by specifying very limited sets of products and services, or broadly, by widening the range. The Australian and New Zealand Standard Industry Classification (ANZSIC), as used by the ABS, underlies virtually all industry data published in Australia including that provided in the *State of the Regions* reports.

The ANZSIC classification allocates businesses (or recognisable parts of businesses) to industries according to the goods and services which they produce at four levels of detail. For example, a business which manufactures ice cream (ANZSIC code 1132) is also a dairy product manufacturer (code 113), a food manufacturer (code 11) and a manufacturer (division C). The classification includes 505 industry classes (4-digit codes), 225 industry groups (3-digit), 86 industry subdivisions (2-digit) and 19 industry divisions (coded A to S).

The three and 4-digit codes support detailed work on the markets for particular products, as may be required (for example) by competition policy. However, there are too many such industries for them to be manageable in a study of regional economies, and in any case detailed data is routinely suppressed at the regional level for confidentiality reasons. Accordingly the State of the Regions reports are based on data for the 86 2-digit industries. This classification is not ideal - for example, long-distance road freight using large trucks is lumped in with short-distance road freight, not to speak of the wide variety of tasks performed by buses. However, consistent estimates of industry activity are available by region and over time, and the total of 86 industries is manageable in computer-based analytical work, but the classification is much too detailed for verbal exposition. For this purpose, the ABS has for many years grouped the 86 '2-digit' industries into nineteen industry divisions.

Unfortunately, the 19-industry grouping is far from ideal for the purpose of comparing the industry structure of economic activity at the regional level. The first problem is that nineteen industries, while more manageable than 86, are still too numerous for convenient description of regional differences. It is inevitable that the number will be reduced, generally by combining some of the services, as when wholesale and retail trade are bundled, often with accommodation and food services lumped in.

The problem with such ad-hoc bundling is that it ignores the two questions which are of primary interest in analysing regional economies. These are:

- whether the industry yields high or low incomes per hour worked; and
- the locational requirements of each industry.

The 19-industry classification bundles 2-digit industries which are quite unlike in their income-generating characteristics. An example is Division N, which groups 'administrative services', which on the whole generate well-paid jobs, and 'building cleaning, pest control and other support services' which in general yield low-paid jobs.

The 19-industry classification also bundles industries with quite different locational requirements. In the analysis of industry development across regions Australia-wide NIEIR has found it useful to divide industries into three groups.

- Economic base industries in which regional employment is largely financed from sales to buyers outside the region.
- Local demand industries, comprising those where regional employment is largely financed from sales to buyers within the region, plus tax-financed services to residents.
- An intermediate category of centralised services, which combine widespread local-demand employment with concentrations of specialised employment providing services to hinterlands which include multiple regions. These services are generally office-based.

For *State of the Regions* purposes NIEIR has aggregated the 86 ABS 2-digit industries so as to reduce their number and at the same time make them more amenable to geographic analysis.

Despite best efforts to classify like with like, it remains that any industry classification, and especially the present necessarily-generalised 10-category classification, includes a great variety of workplaces in each category.

As already noted, the significance of each industry is conventionally measured by the contribution of each industry to Gross Domestic Product. However, the regional counterpart to GDP, Gross Regional Product, is not a particularly satisfactory measure of industry significance at the regional level, for two reasons.

- Much of it comprises depreciation allowances and the earnings of capital, which are not available for distribution as income to local people.
- Though depreciation allowances and capital earnings are calculated nationally for inclusion in the National Accounts, there are no direct observations of their regional significance. Estimates of GRP accordingly

depend on the assumptions used to allocate this component of GDP to regions.

Unlike GRP, regional employment and regional incomes deriving from employment can be measured directly, largely from tax and social security data.

- Employment is measured in paid hours worked.
- Local income is measured in dollars a year. Local income is essentially employment-related income, comprising wages (broadly defined to include extras such as superannuation contributions paid by employers) and the mixed capital-labour incomes of locally-owned businesses. It excludes corporate gross profits, for the practical reason that, in the present state of accounting reporting, these are very difficult to allocate to regions, and for the further reason that they do not directly add to regional household incomes they are remitted to head office where they are split between reinvestment in the firm, tax payments and dividends to shareholders near and far.

Hours worked and local incomes generated combine to generate a third measure, local income per hour, which (at least in the competitive economy of pure economic theory) is an indicator of productivity.

This chapter concentrates on industry composition and productivity at the national level, leaving discussion of the regional dispersion of industries to Chapter 3, where it will be shown that divergent industry trends result in divergent regional trends.

2.3 Ten industry groups

This report distinguishes four economic base industries.

1. Agriculture and food and beverage manufacture

The outputs of the agriculture and food industry are mainly physical goods, most of which are either exported, via intermediaries, to consumers in regions other than their region of production.

In 1994 agriculture and food processing ranked 7th out of 10 industries nationally by both local income and hours worked, but sank to 9th place in 2019. As regards its contribution to GDP, it again sank from 8th to 10th place; however, ranked by local income per hour worked it remained in 6th place.

Roughly 50 per cent of hours worked in agriculture and food processing are worked in agriculture (which includes market gardens, chook farms, orchards, dairy farms, broad-acre farms, pastoral stations and many more specialisations and mixtures) with a further 10 per cent in forestry, fishing, aquaculture and services to agriculture.

Food processing accounts for the remaining 40 per cent of hours worked.

Food and beverage manufacturers are closely related to agriculture in that many of them locate close to their source of raw materials. They are again a disparate bunch, specialised by product (wineries, canneries...) and varying in size from main-street bakeries to large factories.

Though agriculture and food processing was one of the first industries established in colonial Australia, it now

accounts for only 5 per cent of total hours worked and local income received. Hours worked in agriculture declined during the quarter century to 2019 but income per hour worked rose. Hours worked in food and beverage manufacturing rose gently along with income per hour. The expectation that tariff cuts would greatly benefit agriculture was not fulfilled. Like manufacturing, agriculture suffered from the generally over-valued exchange rate and also had problems of its own, particularly to do with marketing and water management.

Table 2.2 Agriculture and food manufacture, Australia, hours worked and income, percentage of total in 2019 and rate of growth 1994-2019

	Hours		Local income		Income per hour	
Industry	Per cent	Growth	Per cent	Growth	2019, \$	Growth
Agriculture, forests, fish	3.2	-0.7	3.0	1.2	48	1.9
Food processing	2.1	1.1	1.7	1.7	43	0.6
Agriculture and food processing	5.2	0.0	4.7	1.4	46	1.4

Note: Agriculture = ANZSIC 1-5 Agriculture (including forestry and fishing), Food processing = ANZSIC 11 food manufacture and 12 beverage and tobacco manufacture.

2. Mining

The outputs of mining (as defined for present purposes) are:

- (a) mineral ores which are either exported overseas or passed on to manufacturing industries such as smelting; and
- (b) fossil fuels, which are either exported overseas or processed within Australia into saleable energy products like electricity and petrol.

Many of the locations of production are remote. They depend on the location of mineral resources and change as resources are found and worked out.

In 1994 mining was Australia's second largest industry judged by its contribution to gross corporate profits, it was the sixth largest by its contribution to GDP and it was the smallest as measured by local income and hours worked. In 2019 it had improved its position to largest contributor to gross corporate profits and fourth largest by its contribution to GDP, while remaining the smallest industry as measured by local income and hours worked. In 1994, largely due to the pay rates required to attract reliable workers to remote regions, it generated the highest level of local income per hour worked, but 25 years of whittling down labour costs reduced this to third place in 2019.

Headline productivity (value added per labour hour) is high but a very high proportion of this accrues to corporate profits and taxes – the industry generates high resource rents. Local income per hour worked in coal mining is less than national average (it is comparable with manufacturing), in most other mining industries it is around 15 per cent above national average, and only in petroleum production is it well above national average.

The ABS includes the production of non-metallic quarry products in its mining division due to their technological similarity to the quarrying of metal ores. However, these quarries differ from mining as here defined in several important respects.

- Though their products can only be produced from suitable mineral deposits, these deposits are relatively widespread, and therefore proximity to markets is a major factor in determining workplace locations.
- Very few of their products are exported overseas they are too heavy and bulky in relation to value to cover long-distance transport costs. They are instead used as inputs by local manufacturers and construction businesses.
- They do not generate location rents comparable with those in the other mining industries. Local income per hour worked is, on average, a little below the mining industries, though not by much.

These quarries are accordingly included in the construction industry.

The broad mining industry thus defined may be divided into four major industries.

 Coal mining accounts for 0.5 per cent of total hours worked in Australia and a similar proportion of local income. Though the industry participated in the

- mining boom of 2007-16, its boom lacked the excitement of that in the other main sectors of the industry.
- 2. Petroleum and gas production is a small but highly productive industry which grew rapidly during the quarter century to 2019.
- 3. Though metal ore mining is the largest of the mining industries, it still accounts for a mere 1 per cent of hours worked nationally. It subdivides according to the minerals mined, from gold through base metals and iron ore to bauxite. Each mineral is separately priced, and it is quite possible for one part of the industry to boom while other parts are depressed. Though production and hours worked grew rapidly during the mining boom, local income per hour worked declined.
- Services to mining include mineral exploration and mining support. By themselves they are a small industry which generates above-average local income per hour worked.

During the period the mining industry benefited from strong international demand for most of its products. Though an unknown but probably high proportion of the resulting profits were economic rents, the industry defended these profits from taxation partly through state inertia and partly by appeal to the valorisation of profits in the economic theories which underlay the reforms of the 1980s. The industry now faces the need to exit from fossil fuel production and switch to products compatible with a zero-emission economy. Though the industry is inured to the inevitable fall in the value of mining leases as mineral deposits are worked out, it is now likely that the fall in value of many of its assets will be accelerated – matched, perhaps, by increases in the value of other assets in other places.

Table 2.3	Mining industries, Australia, hours worked and income, percentage of total in 2019 and rate of growth 1994-2019								
	Hours Local income		ncome	Income per hour					
Industry		Per cent	Growth	Per cent	Growth	2019, \$	Growth		
Coal		0.5	2.7	0.5	4.1	45	1.4		

	Hours		Local Income		meome per nour	
Industry	Per cent	Growth	Per cent	Growth	2019, \$	Growth
Coal	0.5	2.7	0.5	4.1	45	1.4
Petroleum and gas	0.3	7.4	0.6	9.6	108	0.3
Metal ores	1.0	4.6	1.1	3.2	58	-1.4
Mining services	0.5	4.8	0.6	3.7	59	1.1
Mining	2.3	4.4	2.8	4.2	60	-0.2

Note: ANZSIC 6, 7, 8 and 10, i.e. mining excluding non-metallic materials.

3. Non-food manufacturing

In 1994 non-food manufacturing came fifth among the 10 industries ranked by contribution to GDP and to Gross Corporate Profits, and fourth by contribution to local income and hours worked. By 2019 it was ranked eighth by contribution to GDP and to local income, seventh by contribution to gross corporate profits and sixth by contribution to hours worked. Though in relative decline by all these measures, manufacturing maintained its place as on average a low-income industry, ranking eighth by local income per hour in both years.

The inputs to manufacturing vary considerably in value per tonne, as do the outputs, and hence the importance of cheap bulk transport varies across manufacturing industries. However, all manufacturing industries produce goods as distinct from services (though they may be involved in after-sales service). These products may be exported overseas, they may become inputs to other

manufacturing industries or construction, or may be sold through intermediaries to the consumer. Some take the form of long-lived capital equipment, others are consumption goods. With food and beverage manufacturing allocated to agriculture and food (see (1) above) the ABS recognises 13 2-digit manufacturing industries which divide into three main groups. The basic manufacturing industries are those which take raw materials and bulk-process them. Despite some recent decline, in 2019 this group accounted for 2 per cent of all hours worked in Australia. Hours worked in the manufacture of equipment and in metal fabrication fell more severely, largely due to the Commonwealth decision to subject the motor vehicle manufacturing industry to short-term market forces. Even so, this group of industries survived and in 2019 generated a further 2.2 per cent of hours worked with local income per hour a little below national average. The other manufacturing industries (including textiles, sawmilling, wood chipping, furniture making and the like) generated low income per hour at

rapidly falling levels of hours worked. In non-food manufacturing as a whole employment has been declining but local income per hour worked has been increasing, though the average for the combined group remains below national average.

The 1980s reformers accused Australian manufacturing of gross inefficiency and proposed competition as a remedy which would increase productivity both within manufacturing and by diversion of resources to more productive industries. The reforms were but partially

successful: productivity increased, but only at the national average rate, and resources were transferred, but few went to high productivity alternative employment. In the name of competition manufacturing was subjected to unnecessary uncertainties which hindered capital investment. The industry was also deprived of government cooperation in infrastructure provision and public purchasing. It was forced to bear increased land costs arising from the government's housing policies and, like agriculture, suffered from the over-valuation of the exchange rate, particularly during the mining boom.

Table 2.4 Non-food manufacturing, Australia, hours worked and income, percentage of total in 2019 and rate of growth 1994-2019								
	Hours		Local i	Local income		Income per hour		
Industry	Per cent	Growth	Per cent	Growth	2019, \$	Growth		
Basic manufacturing	2.0	-0.4	2.0	1.5	50	1.9		
Equipment and fabrication	2.2	-1.0	2.0	0.8	47	1.8		
Other manufacturing	1.7	-1.5	0.9	-1.7	27	0.3		
Non-food manufacturing	5.9	-1.0	4.9	0.6	43	1.6		

Note: ANZSIC 13-25 i.e. manufacturing excluding food, beverages and tobacco.

4. Logistics

'Logistics' is not the name of a traditional industry but is here adopted to cover wholesale trade plus warehousing and long-distance transport. Conceptually, this industry provides intermediary services between industries which produce goods and those which either use them as inputs or sell them to consumers. This is particularly true of the part of the industry traditionally known as 'wholesale trade' but is also true, on balance, of long distance transport, though this also provides personal transport to consumers.

Long-distance transport is here distinguished conceptually from short-distance, for three reasons:

- 1. it has high productivity borne of economies of scale;
- by its nature its customers are interregional, with a high proportion of revenue derived from outside the region where production is based; and
- 3. (with the exception of air travel) it mainly serves business customers rather than households.

In 1994 logistics ranked ninth out of the 10 industries by GDP and Gross Corporate Profits, but was relatively labour-intensive and ranked sixth by hours worked and fifth by local income. Over the quarter century logistics was transformed by the automation made possible by digital technology. It economised on labour and by 2019 had fallen to eighth rank in terms of hours worked but risen to fourth rank judged by gross corporate profits, sixth rank by local income and seventh rank by GRP. Over the period its

rank by local income per hour worked rose from fourth to second.

In 2019 income per hour worked in logistics was well above national average as a result of rapid growth during the previous quarter century.

Unfortunately at the 2-digit level there are difficulties in making the distinction between long-distance transport subject to economies of scale and short-distance transport where economies of scale are small and indeed diseconomies of congestion are likely. In particular, road transport comprises a mixture of articulated trucks with heavy axle loads travelling long distances, suburban, school and long-distance buses and small local delivery vans with low labour productivity. Similarly rail transport mixes heavy haul freight with suburban passenger services. Since income generated per labour hour is relatively high in rail and air transport and in transport services, these have been included in the logistics industry, leaving road transport and posts and couriers to the distribution sector where their efforts are more concentrated, though ideally long-distance road transport would be separated and included in logistics. Water transport is an enigma: it is undoubtedly long-distance, but income per hour worked is reported as low.

A further ANZSIC industry division, the utilities, is too small to be considered a separate industry at the 10-industry level. The electricity supply industry was for many years closely aligned to mining, in that its major power stations were located on the coalfields, but this association is diminishing as thermal power stations are closed.

Electricity supply, water, gas and telecommunications are also aligned to logistics in that they are heavily involved in specialised long-distance transport and are also capital-intensive, with a tendency to above-average local income generation per hour worked. However they have shed labour, or outsourced it to the construction industry, to the point where their remaining employment concentrates in city-centre offices rather than in the suburban locations favoured by the logistics industry, hence they have been included in the centralised office industries (5 below).

Despite recent major reductions in employment related to rapid growth in local income per hour worked, in 2019 wholesale trade accounted for 3.4 per cent of Australian hours worked. The non-road transport industries contributed 2.3 per cent. In that these increases in productivity were achieved in a competitive environment, logistics can be counted as an industry where, broadly speaking, the 1980s reformers achieved their aims.

Table 2.5 Logistics, Australia, hours worked and income, percentage of total in 2019 and rate of growth 1994-2019								
	Hours		Local income		Income per hour			
Industry	Per cent	Growth	Per cent	Growth	2019, \$	Growth		
Wholesale trade	3.4	-0.6	4.8	2.6	71	3.2		
Non-road transport and warehousing	2.3	2.0	2.5	3.1	52	1.1		
Logistics	5.7	0.6	7.3	2.8	66	2.2		

Note: ANZSIC 33-38 wholesale trade, 47 rail transport, 48 water transport, 49 air transport, 50 other transport, 52 transport support and 53 warehousing.

There are two centralised-service industries.

5. Centralised office services

Considered as workplaces, offices produce 'administration'. They are locations of record-keeping and decision-making. All industries have their administrative component, whether it be carried out on a shelf in the back of the shop or in a grand office in a city centre tower block. Where an office is engaged in the administrative aspects of an organisation otherwise included in the industries listed 1-4 and 6-7 in this classification, it is classified to that industry. This leaves a residuum of office workplaces which provide administrative services for a variety of industries, to governments and sometimes also to households. The archetypical examples are the offices of accountants and lawyers. To these may be added the offices which provide public administration, such as courts and treasuries. To these, further, may be added the providers of generalised information inputs to decisionmakers, whether they be in governments, businesses or households. Knowledge-providers range from media to the institutions of basic scientific research (the definition of 'office' can be expanded to include 'laboratory').

The finance sector falls within this general description, but as will be explained below is not only large enough to be considered an industry in its own right, but has productivity characteristics which mark it off from the other centralised office industries. Even with this exclusion, the centralised office industries have grown rapidly. In 1974 they were the largest of the 10 industries by GDP and local income, the second-largest by hours worked, and the third-largest by gross corporate profits

(the substantial element of public administration in the office services limits their profitability). In 2019 they were the largest industry by GDP, local income and hours worked but still the third-largest by corporate profits. Reflecting their employment of professional personnel, they ranked second in local income per hour in 1994, rising to first rank in 2019.

Several components of the combined industry warrant further comment.

Judged by employment and income generation, the utilities (electricity, gas and water) are no longer large enough to warrant identification as an industry in their own right. They have been included in the centralised office industry because, thanks to high and increasing capital intensity, they now generate largely administrative jobs with a similar geographic distribution to the other centralised office industries. However, they continue to differ from most of the centralised office industries in that (like mining and finance) their contribution to value added considerably exceeds their contribution to local incomes. The telecommunications industry is also in this position.

Defence is another small industry which generates high incomes per hour worked. A dozen regions with defence bases account for three-quarters of defence hours worked. Despite its idiosyncrasies of location, defence has been included in the centralised office group of industries. It can be regarded as a subset of public administration.

Administrative services include employment agencies, travel agencies, call centres, debt collectors and various other private sector services provided largely to governments and other businesses. In the 25 years to 2019 income per hour worked in this collection of activities grew

to improbably high levels that can only be explained by the presence of highly-profitable small businesses, some of which were probably contracted by governments to perform tasks hitherto part of public administration. Contracting-out was intended to subject public services to competition but seems to have increased their cost.

Tertiary education has also been included among the centralised office industries because it is concentrated in a limited number of large institutions and also because it is a major source of knowledge inputs into administrative and business decisions.

Though employment growth was slow in information, telecommunications and the utilities (an effect of automation), and merely average in public administration and tertiary education (an effect of policies to curb public expenditure), it was rapid in the professional and technical services and in administrative services. Some of the latter growth would have been due to the privatisation of public sector responsibilities. Overall, the sector has been growing more rapidly than national average and in 2019 accounted for over 20 per cent of hours worked.

On the evidence of productivity and employment growth, the competition reforms seem to have benefited the administrative services and the professional and technical services. The reformers also seem to have succeeded in their aim of curbing growth in public administration, though they were not quite so successful in curbing public sector pay rates - high level public administrators and defence personnel continued to be well paid. As extended to tertiary education, the reforms emphasised user-pays and not surprisingly the sector grew slowly in hours worked and productivity, though it remained well paid. Finally, employment and productivity in the utilities and media grew relatively slowly. In the case of the utilities this may have been due to privatisation and the introduction of competition, but in the media it was due to technical changes which disrupted the longstanding cross-subsidy from advertising to journalism. The reformers were against cross-subsidies and they would consider this a benefit, but journalists would claim that the curbing of their activities has resulted in a less well-informed population.

Table 2.6 Centralised office services, Australia, hours worked and income, percentage of total in 2019 and rate of growth 1994-2019												
	Но	urs	Local i	ncome	Income per hour							
Industry	Per cent	Growth	Per cent	Growth	2019, \$	Growth						
Utilities	1.0	1.1	1.0	1.0	50	-0.1						
Information and telecommunications	1.9	0.5	2.0	1.5	53	1.0						
Administrative services	1.7	3.2	6.0	5.0	180	1.8						
Professional and technical services	9.1	3.5	11.0	4.9	53	1.4						
Public administration and defence	5.0	1.9	5.2	2.4	53	1.5						
Tertiary education	1.7	1.8	2.8	1.9	82	1.3						

2.4

28.0

Note: ANZSIC 54-60 information, media, telecommunications, 69 professional services, 70 computer services, 72 administrative services, 75 public administration, 76 defence, 81 tertiary education, 26 electricity, 27 gas and 28 water.

20.4

6. Money management

Centralised office services

The money management industries are similar to the centralised office industries in that they provide administrative services to other industries, governments and households. They are information-intensive and as such are strongly attracted to metropolitan centres, with the notable exception of Canberra, which they disdain. They are differentiated from the centralised office industries because they generate high corporate profits per hour worked – there are suspicions that much of their value added comprises economic rents generated though oligopolistic behaviour and through economic policies which favoured the accumulation of household debt.

The reason that the industry is termed 'money management' rather than finance is that high profitability extends beyond finance as generally defined into rental and property services and also into gambling which, though it masquerades as entertainment, exhibits locational characteristics and profitability akin to the finance sector, and which likewise deals in large transfers of funds. Fortunately the gambling industry is small.

In 1994 money management contributed more than any other industry to corporate gross profits, in strong contrast to its ranking by local income (eighth) and hours worked (ninth). Some of its high profitability would have been due to the lenient approach of the industry's regulators, who regarded high profits as necessary to re-capitalise the

1.7

banks and other financial institutions after their speculative losses in the early 1990s. However, by a combination of automation and switching from industry finance to mortgage loans the industry maintained its high profitability for the next 25 years, in 2019 coming second to mining in its contribution to corporate gross profits. In both 1974 and 2019 the industry ranked third in its contribution to GDP. In 2019 its rank by local income had risen three places to fifth and its contribution to local income had risen by two places to seventh – signs that competition, or perhaps regulatory pressure, or perhaps

the saturation of the mortgage debt market, were at last causing the industry to spend more customer service. Over the 25 years its ranking by local income per hour worked increased from fifth place to fourth.

In 2019 5.7 per cent of Australian hours worked were in money management, two-thirds of them in the traditional financial industries of banking and insurance. There is very little doubt that the industry benefited from the reforms of the 1980s and especially from the tacit policy emphasis on mortgage-financed demand.

Table 2.7 Money management, Australia, hours worked and income, percentage of total in 2019 and rate of growth 1994-2019

	Hours		Local i	ncome	Income per hour		
Industry	Per cent	Growth	Per cent	Growth	2019, \$	Growth	
Finance and insurance	3.7	1.3	4.8	3.3	70	2.0	
Rental and real estate	1.8	2.2	1.9	5.0	55	2.8	
Gambling	0.2	1.7	0.2	4.7	55	3.8	
Money management	5.7	1.5	7.0	3.8	62	2.3	

Note: ANZSIC 62-64 Finance 66 rental and hiring 67 property and real estate 92 gambling.

Finally, there are four local-demand industries.

7. Construction

The outputs of the construction industry are buildings and civil works. The industry builds and maintains capital goods for households, business and the public sector.

Construction itself cannot be exported but construction services can, at least to a limited degree (construction services such as plastering end up on-site, but prefabricated building components can be counted among regional exports). The industry as defined here is the same as the ABS Division with the addition, as noted above (2) of non-metallic quarrying.

In 1994 construction was a relatively small industry, ranking seventh out of 10 by GDP and Gross Corporate Profits, sixth by local income and eighth by local income per hour. It was a relatively high wage industry, ranking third by local income per hour worked. The reform policies had two major effects on the industry. The ready availability of mortgage finance increased demand for construction while the policy of curbing real wage rates

reduced labour costs, particularly in building construction but also in construction services (which are often wage labour under a different name). The result was that in 2019 construction moved up from seventh to fifth rank by GDP and Gross Corporate Profits, from sixth rank to fourth by local income and from eighth rank to fourth by hours worked, but fell from third rank to seventh in local income per hour worked. The fall in local in local income per hour worked could be traced to the building construction and construction services parts of the industry, where hours worked were increasing relatively rapidly – local income per hour worked actually rose in civil construction, which included not only public works but remote-area construction for the mining industry.

The reliance on mortgage-finance to maintain overall demand favoured the construction industry but the competition reforms severely limited growth in local income per hour worked. The reformers would regard this as a success, though they might have hoped that competition would increase productivity rather more than it did.

Table 2.8 Construction, Australia, hours worked and income, percentage of total in 2019 and rate of growth 1994-

	Hours		Local i	ncome	Income per hour		
Industry	Per cent	Growth	Per cent	Growth	2019, \$	Growth	
Quarries	0.2	1.2	0.1	3.8	40	2.1	
Building construction	2.9	3.6	1.6	2.5	28	-1.1	
Civil construction	1.1	3.3	1.3	7.5	59	4.2	
Construction services	6.5	3.3	6.3	3.9	49	0.3	
Construction	10.7	3.3	9.3	3.9	44	0.6	

Note: ANZSIC 30-32 construction and 9 quarrying of non-metallic materials.

8. Local distribution

The final stage in the flow of goods from producers to consumers comprises the retail industry and associated transport, including transport utilised in the delivery of purchases to households. The industry also includes the management of solid household wastes, which again involves local transport.

In 1994 distribution was the largest of the 10 industries measured by hours worked, but local income per hour worked was the lowest of all 10 industries, resulting in the industry ranking third by local income, fourth by GDP and eighth by gross corporate profits — many of its businesses were owner-operated and not very profitable. Technical changes and reform policies had similar impacts to those in logistics: automation of parts of the industry (including digital ordering) curbed hours worked and raised corporate profits. In 2019 distribution was still low paid, but had lost rank in hours worked and contribution to GDP but gained rank in Gross Corporate Profits.

Like logistics, this industry provides intermediary services. However, retail customers are more usually households, individual transactions are small and transport loads are likewise small with little scope for economies of scale, hence the low level of local income per hour worked. Digital disruption has introduced economies of scale into some aspects of retail (though not to final delivery transport) and productivity has been growing.

As discussed when considering logistics, road transport, posts and couriers have been classified as part of the distribution industry. The opportunity has also been taken to include several other low-productivity service industries which make heavy use of short-distance transport. These are waste collection, building cleaning and repairs and maintenance.

Despite recent slow growth, retail trade accounted for 8.5 per cent of hours worked in Australia in 2019. Employment in the other sectors of the industry was less affected by digital disruption and from 1994 to 2019 grew at the national average rate, ensuring that these road transport and delivery services were responsible for 3.5 per cent of hours worked, with waste management, cleaning and maintenance responsible for a further 3.7 per cent.

The reforms of the 1980s, particularly real wage suppression, may be credited with at least some of the growth of corporate profitability in this industry.

Table 2.9 Local distribution, Australia, hours worked and income, percentage of total in 2019 and rate of growth 1994-2019

	Hours		Local i	ncome	Income per hour		
Industry	Per cent	Growth	Per cent	Growth	2019, \$	Growth	
Retail trade	8.5	0.7	5.1	2.2	30	1.5	
Road transport, delivery, posts, waste	3.5	1.5	2.3	1.9	34	0.4	
Cleaning and maintenance	3.7	1.6	2.5	1.9	34	0.3	
Local distribution	15.7	1.1	9.9	2.1	32	1.0	

Note: ANZSIC 39-43 retail trade, 29 waste collection, 46 road transport, 51 posts and couriers, 73 building cleaning and 94 repair and maintenance.

9. Convivial services

The two remaining industries – convivial services and area services – have much in common. They both provide services which require personal interaction between provider and recipient. In this they have something in common with the more boutique aspects of retail, with the difference that they are not intermediaries in the flow of goods from producers to consumers. They also have something in common with professional services included in the centralised office industries, with the difference that their customers are rarely other businesses and they are not particularly attracted to city centre locations.

There are two main differences between the convivial services (9) and area services (10). First, government finance is prominent in the provision of area services. Direct state or local government provision is not unusual, and neither is provision by non-profit agencies receiving government funds or tax benefits. The reform policies have included the extension of government contracting-out, including to profit-making businesses. By contrast, convivial services are almost entirely dependent on sales income with a high proportion of small business providers. Second, personnel with tertiary qualifications are more commonly found in the area services. The upshot of these two differences is that local income generation per hour

worked in the convivial services is well below national average, though it has been growing at the national average rate.

Thanks to their low profitability and generally low wages, in 1994 the convivial services were the smallest or second-smallest of the 10 industries whether ranked by GDP, Gross Corporate Profits or local income, but they ranked fifth for hours worked. This lowly positioning was maintained in 2019, though the industry's rank by GDP, local income and local income per hour worked had, by each indicator increased by one spot.

Roughly half of employment in the convivial services is in food and beverage services. A further 10 per cent is in accommodation with the remaining forty per cent in a variety of human-contact activities including museums, creative and performing arts, sports, hairdressers, undertakers, religious services, car parks, brothels and more. The arts, sports and religious services are included in this category because, though their practitioners are highly skilled and are important elements in the knowledge economy, they are on average poorly paid.

The reforms of the 1980s were not aimed at this industry and probably had little effect on it.

Table 2.10 Convivial services, Aus 1994-2019	Convivial services, Australia, hours worked and income, percentage of total in 2019 and rate of growth 1994-2019											
	Но	urs	Local i	ncome	Income per hour							
Industry	Per cent	Growth	Per cent	Growth	2019, \$	Growth						
Hospitality (food and accommodation)	5.2	2.1	3.1	3.4	28	1.3						
Heritage, arts, sports and personal services	3.4	2.0	2.6	5.0	40	3.0						
Convivial services	8.8	2.0	5.6	4.2	33	2.2						

Note: ANZSIC 44 accommodation 45 food and beverages 90 arts 95 personal services 96 service employees in private households.

10. Area services

As noted above, area services require personal interaction between their largely-professional providers and the public. The quintessential area services are police, health care and school education. As already noted, these services are frequently state-provided or regulated, with considerable participation by non-profit agencies and, recently, by for-profit businesses.

In 1994 area services were the second-largest industry ranked by GDP and local income, the third largest by hours worked and the fourth-largest by corporate gross profit — this last a somewhat surprising ranking given the predominance of non-profit production and presumably indicating the presence of generous depreciation allowances and of retained earnings, used to finance

capital expenditures. In 2019 area services retained second rank in GDP and local income and attained it by hours worked, but the industry's rank by gross corporate profits plunged from fourth to ninth – a surprising trend in view of the move towards contracting out to profit-making businesses. It may be that service providers, denied government funds, are allowing expenditures to eat into their depreciation allowances and retained earnings, but there may also be an element of statistical re-definition involved.

In 2019 police and prison services were responsible for 1.7 per cent of national hours worked and were well remunerated. School and adult education was remunerated at rates close to national average and accounted for 6 per cent of hours worked. Social assistance was remunerated at rates a bit below national

average. It included out-of-home child care and a variety of in-home quasi-health services. Hours worked were growing rapidly, reaching 3 per cent of the total in 2019.

The various health-related services generated 8.7 per cent of hours worked. Hours worked in hospitals grew relatively slowly but generated high and rapidly-growing average local incomes per hour worked. By contrast, hours worked in medical services were growing rapidly but yielded low incomes per hour worked — an unexpected statistic since these services include general and specialised medical practitioners, dentists, optometrists, physio-therapists and ambulance services, though they trail off into less mainstream medical services. It is possible that relatively low-paid services were being transferred from hospitals to smaller clinics included in medical services, or perhaps to social assistance services.

Residential care is distinguished from convivial-sector accommodation in that it has a nursing component. Like hospitals hours worked have been growing relatively slowly, once again probably due to the transfer of hours to home care classified as social assistance.

Because the area services are substantially government-financed they were targeted by the 1980s reforms. Attempts to put them on a more commercial, competitive basis resulted in increased contracting-out. At its best, contracting-out attuned services to the needs of their clients; at worst, service provision by entrepreneurs declined in quality and were increasingly associated with land speculation.

Table 2.11	Area services, Australia, hours worked and income, percentage of total in 2019 and rate of growth 1994-
	2019

2013										
	Но	Hours		ncome	Income per hour					
Industry	Per cent	Growth	Per cent	Growth	2019, \$	Growth				
Police	1.7	2.8	3.2	3.4	101	0.6				
School and adult education	6.0	2.4	5.5	5.8	48	3.4				
Hospitals	3.2	1.8	4.5	5.9	63	4.1				
Medical services	3.8	3.3	2.7	4.4	37	1.1				
Residential care	1.7	2.6	1.9	3.7	58	1.1				
Social assistance	3.0	4.9	2.6	5.5	44	0.6				
Area services	19.6	2.8	20.5	4.5	53	1.7				

Note: ABS 77 police 80 schools 82 adult education 84-87 health care and social assistance.

11. Non-industrial activity

The 10 industries just listed cover all the activities included in the ANZSIC list. It is important to point out that this list falls way short of covering all the activities which contribute to human welfare. Many of these activities are unpaid extensions of the convivial and area services, sometimes formalised as when unpaid volunteers contribute to service provision but more often simply informal. These merge with unpaid household production for use within the household, ranging from gardening, cooking and cleaning to caring for, and educating, children. It has often been pointed out that GDP, and by implication hours worked and the local income generated in the 10 industries, grossly underestimate the total value of productive activity. More seriously, it is possible for the onmarket activities which generate local income to expand at the expense of the unrecorded, off-market activities, even to the detriment of total welfare. Let the user of the National Accounts beware.

An important borderline case of an activity excluded from the list of industries is dwelling ownership. Why not treat landlords in the same way as the hoteliers and others who provide short-term accommodation? On the other hand, why not treat landlords in the same way as other asset owners – after all, property is traded in much the same way as shares, so why not class rents received in the same general group as dividends? It's a grey area, and the National Accounting statisticians of the world have developed the following accounting conventions.

- Dwellings are not an employing industry. They are built and maintained by the construction industry and their owners sometimes employ management services provided by the real estate industry. Landlords receive rents which, after allowance for maintenance and depreciation, are treated as asset incomes like dividends and interest.
- This approach is extended to cover owner-occupied dwellings. Owner-occupants are thought of as the landlords of their own dwelling, paying themselves an imputed rent. (The same approach could be extended to car-owners and indeed to the owners of

- any household asset, but exploratory calculations have indicated that the returns involved are hard to calculate and not particularly significant in amount.)
- Unlike shares, which are claims on profits which are already included in GDP, rents (both cash and imputed) are generated as returns on assets which are not owned by producers in any of the 10 industries. Accordingly, the statisticians have created an 11th phantom industry called 'dwelling ownership', which has no employees and pays no wages but generates a gross asset return in the form of rents and imputed rents.

Because dwelling ownership is not an employing industry, it is for the most part excluded from the discussion of income generation in the *State of the Regions* reports. Where it comes into its own is in the discussion of wealth and assets. It also lies in the background of much of the discussion of the construction industry and of the realestate portion of the money management industry.

12. The knowledge economy

Over the past two decades the State of the Regions reports have frequently mentioned the knowledge economy. In concluding this list of industries, it is emphasised that the knowledge economy is not an industry. It is, rather, a shorthand description for the way in which economic growth can be accelerated when knowledgeable, innovative and entrepreneurial people work together. Such people are not confined to any particular industry, though they are frequently found in tertiary education, professional services, finance, the arts and research hospitals. Rather than association with any industry, it has been argued that successful innovation is associated with places where such people meet and form serendipitous relationships, most obviously the metropolitan centres. The main point here is that knowledge-based activity is not the prerogative of any industry.

2.4 The industries compared

Basic descriptors of each of the 10 industry groups at national level are shown in the following table. The estimates are for 2018-19 for two reasons: first, because the figures for subsequent years are preliminary and subject to revision and second, because 2019 represents the last year of a quarter century of uninterrupted economic growth, before the disruption of COVID-19.

As the industries were enumerated, they were ranked by three measures of industry size: employment, value added (contribution to GRP), gross corporate profits and local income generated, and also by local income per hour worked. Table 2.12 provides the values on which these ranks were based and Table 2.13 provides the rankings.

The tables make the point that the industry distribution of gross corporate profits is very different from that of local income. In 2019 mining and money management generated, between them, half of total corporate profits while convivial and area services contributed very little. By local income – the measure of greatest significance for regional economics – in both 1994 and 2019 the largest industry was office services, followed by area services. The two highly profitable industries were not such major contributors to local income (mining was the smallest industry in both years, but money management rose from eighth place to fifth).

By value added, the largest industry in both years was office services. This was also the largest industry by local income, but ranked third in gross corporate profits – it includes public administration and defence, which are by definition non-profit industries. Office services employ largely professional personnel and rank highly in income generated per hour worked.

By local income, the second-largest industry by value added in both years was area services. This industry includes a high proportion of government and other non-profit providers. Its contribution to corporate profits diminished, perhaps due to changes in statistical definitions but with contributions from popular service demands combined with stringency in public finance.

Though the major neoliberal economic reforms were carried out in the 1980s, during the quarter century from 1994 to 2019 Australian governments pursued both macroeconomic and microeconomic reform with an emphasis on competition as a spur to efficiency. Judging by the rate of growth of local income per hour worked, these policies were most successful in the logistics industries, thanks largely to digital disruption. They were particularly successful in increasing industry profitability, with the industry share of employment falling.

Trends in distribution faintly echoed those in logistics: the industry's share of corporate profits grew as its share of employment and of local income declined.

There was also relative success, from a low base, in the convivial industries, and from a much higher base in money management, though it is probable that some of this success was due to increased salary payments as executives shared in the additional profits generated by less than perfect competition.

The pro-market policies had serious consequences for industries facing overseas competition. As mining prospered, the resulting high market-determined exchange rate dashed the expectation that agriculture would benefit from tariff cuts. Along with manufacturing, agriculture diminished in relative size as measured by all four indicators.

The deregulation of bank lending which was an important part of the neoliberal package had the intended effect of encouraging debt-financed construction. As a result, the relative size of the construction industry increased by all four indicators, though local income generated per hour worked fell.

The 10 broad industries thus defined have distinctive ratios of employment to value added or GRP, and of local income to employment. Some, on average, yield high local incomes per hour worked, others on average yield low incomes, but in all industries these averages summarise a spectrum of rates of pay. The industries also have distinctive locational requirements, which result in different locational patterns. The next chapter describes how these patterns fit together.

Table 2.12 Summary measures of industry significance, 2019, and growth, 1994-2019, by 10 broad industries, all Australia

	Employme	ent (hours)	Value	added		orporate fits	Local i	ncome		come per our	Local income/ value added
Industry	%, 2019	r.g. 94-19, % pa	%, 2019	r.g. 94-19 % pa	%, 2019	r.g. 94-19 % pa	% 2019	r.g. 94-19, % pa	\$ hr, 2019	r.g. 94-19, % pa	% 2019
Agriculture and	73, 2020	72	7.7 = 0 = 0	72 [22	7.0, 2.0.2.0	72	70 2020	70	,, _cc_c	75 50	70 20 20
food processing	5.2	0	4.0	1.2	3.5	0.8	4.7	1.4	46	1.4	71
Mining	2.3	4.4	11.4	4.6	27.0	4.6	2.8	4.2	60	-0.1	17
Non-food manufacturing	5.9	-1.0	5.1	0.6	5.4	0.9	4.9	0.6	43	1.6	62
Construction	10.7	3.3	8.9	4.2	8.5	4.9	9.3	3.9	44	0.6	67
Logistics	5.7	0.2	7.7	3.9	9.3	6.6	7.3	2.8	66	2.5	62
Local distribution	15.7	1.1	8.6	2.6	7.0	4.2	9.9	2.1	32	1.0	75
Convivial services	8.8	2.0	4.3	3.2	1.8	0.2	5.6	4.2	33	2.2	86
Centralised offices	20.4	2.4	22.5	3.5	12.5	1.7	28.0	4.1	70	1.6	83
Money	5.7	1.8	13.5	3.8	23.0	3.5	7.0	3.8	62	2.2	34
management Area services	19.6	2.8	14.1	3.7	23.0	-3.4	20.5	4.8	53	1.9	99
Total	19.6	1.7	100	3.7	100	3.0	100	3.4	53 51	1.7	66

Source: NIEIR.

Table 2.13 Industries ranked by employment, value added, gross corporate profits and local income, Australia, 1994 and 2019

	Employment (hours)		Value added		Gross corporate profits		Local income		Local income per hour worked	
Industry	1994	2019	1994	2019	1994	2019	1994	2019	1994	2019
Agriculture and food processing	7	9	8	10	6	8	7	9	6	6
Mining	10	10	6	4	2	1	10	10	1	3
Non-food manufacturing	4	6	5	8	5	7	4	8	8	8
Construction	8	4	7	5	7	5	6	4	3	7
Logistics	6	8	9	7	9	4	5	6	4	2
Local distribution	1	3	4	6	8	6	3	3	9	10
Convivial services	5	5	10	9	10	10	9	7	10	9
Centralised offices	2	1	1	1	3	3	1	1	2	1
Money management	9	7	3	3	1	2	8	5	5	4
Area services	3	2	2	2	4	9	2	2	7	5

Source: NIEIR.

3. Regional industry economics

When regional economies are compared, it is often from the point of view of residents and concentrates on the residents' incomes and employment, including the effects of taxation, social security benefits, superannuation, home ownership and housing costs. In economic language these are essentially matters of distribution, and in this report these matters are deferred to Chapter 5. Instead, regional economies are introduced as regions of production and Chapters 3 and 4 concentrate on what happens in the workplaces located within each region. For reasons outlined in Chapter 2 we concentrate on employment and local income with but incidental mention of Gross Regional Product and Gross Corporate Profits.

National economies are separated, to greater or less extent, by legal barriers to trade, but regional economies are by their nature open, separated from other regions in the same country by no more than distance and differences in state and local regulations. Subject to the constraints of distance, producers in any region can draw on inputs from any other region and sell their outputs in any other region. However, distance provides many businesses with what used to be called 'natural protection'. Transport costs have fallen to the point where there is little natural protection for most agricultural, mining or manufactured products, though transport costs still matter where values per tonne are very low - for example, sand and blue metal. However, despite the increasing ease of remote delivery of services by IT, there is still strong natural protection for services which require personal attendance. It still makes sense to divide industries into two main groups:

- those which receive little natural protection; and
- those which are naturally protected by transport costs.

The first group may be referred to as trade-exposed industries. The horizon of competition in these industries extends well beyond the regions where they produce. They sell to buyers outside their region and have to meet competition from suppliers located outside their region. In other words, they are the economic base industries already described, and they locate in regions where they can produce competitively. The factors making for competitive locations include the resource base, inherited capital stocks, the quality and innovative capacity of the local working population and a host of other factors which affect costs of production.

The second group were encountered in Chapter 2 as the local-demand industries. As already noted, the split between local-demand and economic-base industries is a little blurred, especially by tourism and business travel, by which people from one region receive in-person services in

another. Not only this, but over the past quarter century several of these industries, notably retail, have been disrupted by internet-based competition.

In Chapter 2 we also identified intermediate industries, those which include workplaces which have local-demand functions and workplaces which perform economic base functions. At workplace level the distinction between workplaces which mainly serve local demand and those which mainly serve export demand is easier to make than it is at broad industry level. However, it remains that many workplaces serve a mixture of local and interregional demands

3.1 Contributions to the economic base at regional level

A regional economy comprises the sum of the economic activities carried out in a defined geographic area, where economic activities are those to do with the getting and spending of income and include both trade-exposed and local demand activities. In the State of the Regions reports, as in the National Accounts, there are two ways of tying economic activity to regions, namely the regions in which income is generated and the regions in which it is received. The first point of view, emphasised in this chapter, is the place-of-work: economic activity, measured by value added (GRP generated) at each business address. After subtraction of depreciation, this becomes income generated. The emphasises here is on the production, business aspect of income and is of greatest use when considering supply chains and other relationships between producers as well as productivity as measured by income generated per hour worked.

The second point of view concentrates on income receipt by place of usual residence, thus emphasising household standards of living. Income measured by place-of-work and income measured by usual residence can differ in three main ways.

- Local income, earned in places of work, may be carried across regional boundaries as workers commute.
- Corporate gross profits are pooled. Some are retained for re-investment in the business and some go overseas, partly balanced by an inflow of profitrelated payments from overseas. Roughly one-third of them circulate through the finance system before eventually reaching households, frequently as superannuation payouts.

Incomes are also redistributed regionally via taxation and social security. By convention, social security benefits are included in residential income but 'social wage' services are not.

Within our list of 67 regions, there are some where the local income generated at places of work substantially exceeds the income received by residents; regions where place-of-work incomes broadly balance against resident incomes, and regions where incomes received by residents exceed place-of-work incomes. In the main the first group comprises metropolitan centre regions plus remote regions where employers bring in fly-in fly-out (FIFO) workers. The third group include commuter suburbs and retirement regions where a great many residents receive age and superannuation pensions. In between lie the more balanced regions, without much in the way of cross-border commuting and with average dependence on pensions, superannuation and the like. In response to these distinctions, the ratio of trade-exposed production to localdemand production varies by region. This will be discussed at length in Chapter 5, leaving us free in this chapter to concentrate on production, employment and incomes by place-of-work.

The economic base of a region may be defined as the activities which generate flows of funds into the region. Strictly speaking, any activity can contribute to the economic base: a cup of coffee is a local sale when the purchaser lives in the same region as the provider and an interregional sale when the purchaser lives elsewhere. However, the trade-exposed industries are typically more involved in export sales than others. By their nature they are export-oriented industries and depend heavily on interregional (including international) sales, while localdemand industries depend mainly on local sales. The localdemand industries are often conceived as having a multiplier relationship with the trade-exposed industries: much of the income earned by the latter is spent on the services provided by the former, so that local-demand industries expand when the trade-exposed industries expand and contract when they contract.

The fundamental analysis underlying this report is that production generates income which can be used to buy products and services. If goods and services are not bought, they won't be produced and incomes will fall. If goods and services are in demand, and provided capacity is available, more will be produced, yielding more income.

3.1.1 Trade-exposed industries

At the regional level – indeed, at any level smaller than the whole globe – some of the goods and services which residents want to buy will be imports from outside the region. This applies to consumers' goods and services bought by households and also to inputs bought by businesses. Paying for imports requires the receipt of

income from other regions. Some of this will be from government or corporate sources – social security pensions, superannuation payouts and the like – but much comes from exports. If a region's exports are buoyant, they will generate income from which the region's demands for goods and services from outside the region can be financed – not only the demands of the direct recipients of income from the trade-exposed industries, but also the demands of people who receive income from the region's local-demand industries. Provided capacity is available, an increase in demand for exports allows an expansion, not only of the trade-exposed industries, but of the local-demand industries. In other words, it has multiplier effects.

Table 3.1 provides estimates, by industry, of the proportion of sales to customers in other regions to total sales. (Customers may be individuals, governments or businesses and may be located just across the region boundary or a whole world away.) There are two limit cases. The construction industry produces items which are fixed in location and are therefore not exported, though there is local trade in construction materials supplemented by limited, but more general, exports of construction services. At the other extreme, mining produces fuels and ores most of which are exported from their region of production for processing in other regions, though some ores are locally smelted and some crude oils and gases are locally refined. Mining is a trade-exposed industry while construction responds to local demands (though it may be financed interregionally).

Roughly two-thirds of the sales of the agriculture and manufacturing industries cross region boundaries. The remaining third consists largely of local sales within the broad industry (a farmer sells milk to the local dairy, an oil refiner sells feedstocks to the local chemical industry). Both agriculture and manufacturing are regarded as economic base industries, exposed to competition from other regions including overseas competition, though this is not necessarily true of all businesses within the industries – for example, some small manufacturing plants such as bakeries serve purely local markets.

Moving down the scale, more than half of total sales in logistics are to interregional customers. This is in the nature of wholesaling and long-distance transport and contrasts with the relatively low interregional sales of the local distribution industry.

This completes the list of industries in which export sales account for more than 50 per cent of total sales. The table also reports that these four industries, which generate 19 per cent of employment and 20 per cent of local income, are responsible for nearly half of all ex-region exports. The other half of ex-region exports is generated by the remaining industries, which fall into two groups: local service industries and centralised service industries.

Table 3.1 Contribution of each of 10 broad industries to employment, local income and regional export sales, Australia, 2019

	Employ -ment	Local income	Export sales		
	mene	meome	•		
			%	%	
			national	industry	
	0/ 0040	0/ 0040	total,	sales,	
Industry	% 2019	% 2019	2019	2019	
Agriculture and					
food processing	5	5	9	64	
Mining	2	3	16	88	
Non-food					
manufacturing	6	5	12	66	
Logistics	6	7	9	54	
Centralised offices	20	28	20	43	
Money					
management	6	7	13	33	
Construction	11	9	4	11	
Distribution	16	10	7	37	
Convivial services	9	6	4	38	
Area services	20	21	7	39	
Total	100	100	100	43	

Note: Export sales include international and interregional exports.

3.1.2 Centralised service industries

The centralised service industries comprise centralised offices and money management. These two combined generate an estimated one-third of ex-regional exports, a proportion which is of the same order as their contribution to employment and local income. Given that these are service industries, they do not generate physical flows of goods to serve as markers of their exports, which accordingly have to be estimated indirectly. Both industries have widespread local representation, which can be interpreted as a response to local demand, with excess production over this base level serving to identify regions in which businesses within the industry concentrate on export activity.

3.1.3 Local demand industries

Construction, local distribution, convivial services and area services are basically local service industries. In aggregate, they generate 40 per cent of local income and (since they are on average low-productivity industries) 56 per cent of employment. Area services like police and government schools are financed from taxation but meet local demand according to administrative rules, but other local demand industries respond to export demand should buyers appear from other regions. Particularly in the cities, residents often cross regional boundaries when they go shopping or seek health care; therefore local distribution, convivial services and area services all generate export incomes, though for each of these industries local demand

predominates. The industry group generates 22 per cent of all ex-region exports and includes businesses which are decidedly export-oriented, notably those businesses which serve tourists.

Tourism does not fit into the conventional industry classification since it is a source of demand, not a set of production skills or capital stock. Like export sales themselves, tourism is a source of demand which spreads across a number of the 10 industries, notably logistics (tourists demand air transport), local distribution (from which car-borne tourists buy their petrol and sandwiches) and the convivial services (which include accommodation, which is much more export-oriented than cafes and pubs). By international agreement, the ABS has adopted a broad definition of tourism, including just about all services provided to individuals who are not in their home region, including educational and health services. In Tourism contributions to the Australian Economy (2014) the ABS estimates that tourism demand generates approximately 25 per cent of value added in the convivial industries, 6 per cent in local distribution (chiefly related to road transport), 5 per cent in logistics (chiefly in air transport) and around 1 per cent each in area services and centralised office services, with the distribution between these two groups depending on how 'tourist' demand for education is split between area services (schools) and centralised office services (tertiary education).

3.1.4 The economic base and its multipliers

The economic base of each region thus includes:

- most of the activity in mining, agriculture and manufacturing;
- a fair proportion of the activity in logistics;
- activity in centralised services and money management beyond basic service, mostly in centralised locations; and
- a small proportion of activity in local distribution, convivial services and area services, mostly associated with tourism.

Conversely, local-demand industries include:

- construction;
- the greater part of activity in local distribution, convivial services and area services;
- basic provision of centralised services, money management and logistics; and
- a small proportion of activity in mining, agriculture and manufacturing.

The local-demand industries are loosely linked to the economic base by demand multipliers. If export activity declines, there is likely to be a consequential decline in production for local demand; if export activity increases,

there is likely to be an increase in production for local demand, though this is subject to under-employed resources being available to meet the increase in demand.

Referring back to Table 2.12, over the quarter century to 2019 the rate of growth of local income was well below average in the established economic-base industries of manufacturing, agriculture and logistics. It was above average in mining, which, however, remained a small industry in terms of local income generation.

3.2 Ex-region exports and the economic base

Homing in on the regional economic base requires more detailed attention to exports. Ex-region exports include all goods and services produced in a region which are sold to purchasers located in other regions, whether within Australia or overseas. From a regional point of view, though the revenue from sales to other regions within Australia is just as acceptable as overseas sales, there are three reasons to maintain the distinction between international and interregional exports.

- The statistics for international exports are more accurate than for interregional exports. Data on international exports are collected assiduously at national level and some of this accuracy trickles down to regional level.
- Many of the factors driving international exports are outside Australian control. These factors feed back to regional prosperity both directly, through demand for the region's goods and services, and indirectly through the effect on the Australian economy as a whole. In principle, Australian decision-makers determine what happens within the country and have but limited ability to determine what happens internationally.
- The policy instruments relevant to international and interregional trade are different, as indeed are the levels of government in charge of the policy instruments.

Over the 22 years to 2019 Australian international exports of goods and services grew at the average rate of 3.7 per cent a year. As is well known, growth in mining industry exports was rapid – 6.8 per cent a year. The prosperity of mining was due largely to overseas factors: basically strong demand for materials to support the industrialisation of China and other countries, coupled with the capacity of the Australian mining industry to supply those demands. The inference is that international sales have contributed strongly to prosperity in regions with mining in their economic base.

The prosperity of mining had an important side-effect. As noted in discussing Table 2.12, a much higher proportion

of the revenue earned from mining exports flows to corporate gross profits than is the case for the other economic base industries, with a correspondingly low proportion directed into regions of production in the form of local income. Much of the export income earned in the industry is either re-invested or returned in profits to overseas owners, and the rest of the corporate profits are distributed across Australia – a small proportion as dividends paid directly to households and a larger proportion through the arcane mechanisms of the money management industry and governments.

By contrast with mining, international export growth in the other economic base industries was insipid. Regions dependent on these industries were in trouble. To some extent this was a direct result of the prosperity of mining. The boom in mining exports resulted in a sustained rise in the value of the Australian dollar, easily managed by the booming mining industry but to the great detriment of the other trade-exposed industries whose export prices in overseas currencies remained more or less constant. The high Australian dollar meant that their export prices in Australian dollars fell. This made exporting unremunerative. The high exchange rate also cheapened competing imports, reducing returns on the domestic market. Mining prospered but the decades up to 2019 were not a happy time for regions economically based on agriculture and manufacturing. With hindsight, it would have been better for Australia to recognise the mining boom as temporary and follow the lead of countries which managed such booms, generally by combinations of taxes and contributions to sovereign wealth funds. This opportunity has been lost.

There were also industry-specific reasons for the underwhelming export performance of agriculture and manufacturing. In many regions agriculture found itself running up against resource constraints: limitations to the availability of water and of arable land and various weather events related to underlying, adverse climate change. The industry-specific reasons for the poor export performance of manufacturing are more complex, though it is worth noting that the targeted measures which the Commonwealth government had instituted during the early 1990s to encourage export-oriented manufacturing industries were later in the decade wound down in the name of free trade.

The logistics industry exports internationally by providing transport, warehousing and wholesaling services which are paid for by overseas buyers. In the decades to 2019 the rate of growth of international export revenue from these services was low, similar to manufacturing. One may conjecture various reasons for this. The high exchange rate would have favoured the transfer of wholesaling overseas, while the change in the overall composition of Australian exports towards metal ores is likely to have reduced domestic transport cost per dollar of export revenue. It should also be noted that, because of its generally local market and low labour productivity, road transport has

been included in the distribution industry, but over the period road transport was increasingly involved in the carriage of goods for overseas sale, generating rapid growth in the international exports of the distribution industry. Despite this leakage into distribution, the four main trade-exposed industries still contribute 80 per cent of Australian overseas exports.

Trends in international exports accordingly had major regional effects. What about trends in interregional exports? NIEIR estimates that international exports contributed a mere quarter of total ex-region exports in 1997, rising to 29 per cent in 2019. The remaining 70 per cent of sales outside the region of production were interregional, that is, to other regions within Australia (Table 3.3). It is theoretically possible that the low rate of growth of international sales in the agriculture and manufacturing industries might be compensated by increased interregional sales – by the diversion of goods and services from the international to the domestic market. However, the factors constraining international exports in agriculture and manufacturing worked equally against domestic sales, and interregional sales grew very slowly, confirming the weakness of agriculture and manufacturing as economic base industries. Among the four main trade-exposed industries mining was by far the star performer.

The composition of interregional exports differed from international exports. While in 2019 mining provided 43 per cent of all international exports, it contributed very little to interregional exports – a mere 4 per cent, and falling as overseas shipments increased and shipments for processing within Australia fell. The other three trade-exposed industries were much more interregionally oriented and were responsible for 28 per cent of interregional exports. As a whole, the trade-exposed

industries, which supplied 80 per cent of international exports, were responsible for no more than a third of interregional exports and hence for less than half of all exregion exports.

By contrast, the centralised services, which accounted for 11 per cent of international exports, were in 2019 responsible for 42 per cent of interregional exports. Not only this, but their ex-region exports were growing at above-average rates. Increasingly the centralised services could be seen as a mixture of services catering to local demands and central offices serving state-wide if not national demands and hence acting as an economic base industry in the regions hosting these central offices. In the main these were the central metropolitan regions. Since mining is prominent in the economic base of a limited number of regions, most of them located within flying rather than motoring distance of the metropolitan centres, while the centralised services are concentrated in the metropolitan centres, its dominance underlays the characteristic trend of regional activity during the period: production was buoyant in the metropolitan centres and in a number of mining regions and generally lacklustre everywhere else. This general observation will be fleshed out in the following sections.

Finally, it should be noted that in 2019 local-demand services accounted for 21 per cent of ex-region exports. Many of these were short-distance exports – people crossing regional boundaries to shop, go to school or to health services, and in many cases there would have been balancing cross-border flows going the other way. Because these services were widespread they did not in general distinguish the economic base in any region, with the partial exception of the convivial services in regions with tourism exports.

Table 3.2 Australia – Rate of growth of international, interregional and total exports, 1997-2019, and percentage of total exports by industry, 2019										
	Interna	ational	Interre	egional	All ex	All exports				
Industry	Growth % pa	Growth % pa % Total		% Total	Growth % pa	% Total				
Agriculture	2.3	12	0.7	8	1.2	9				
Mining	6.8	43	2.1	4	5.5	16				
Manufacturing	1.4	17	0.3	10	0.7	12				
Logistics	1.3	8	2.6	10	2.2	9				
ECONOMIC BASE INDUSTRIES	3.8	80	1.2	32	2.3	46				
Centralised offices	3.9	8	3.4	25	3.1	20				
Money management	2.5	3	4.3	17	4.2	13				
CENTRALISED SERVICES	3.5	11	3.5	42	3.5	33				
Construction	3.1	1	4.5	5	4.4	4				
Distribution	4.4	4	2.3	8	2.6	7				
Convivial services	2.5	4	2.8	4	2.7	4				
Area services	3.0	1	4.3	10	4.3	7				
LOCAL-DEMAND INDUSTRIES	3.0	8	3.0	27	3.0	21				
TOTAL	3.7	100	2.6	100	2.9	100				

Changes in the ratio of international and interregional exports by industry

Macroeconomic discussions generally focus on the balance of payments and hence on overseas exports. One of the major aims of neo-liberal policy was to integrate Australia into world production networks – globalisation, in other words – in the expectation that this would increase efficiency by exposing Australian producers to international competition. The degree of potential exposure varied; agriculture, mining and manufacturing are fully exposed, but many services and some goods (such as construction) can only be produced on-shore and are hence not subject to import competition – and, by the same token, lack export opportunities.

In three of the trade-exposed industries – agriculture, manufacturing and mining – the policy of exposure to import competition had the desired effect of increasing the proportion of export sales to total sales. The increase was spectacular for mining, for two reasons: overseas exports of gas, which are minimally processed, expanded relative to total mining exports, and exports of metal ores (particularly iron ore) increased relative to production for local smelting. In agriculture and manufacturing there was a marginal increase in the ratio of international to total sales.

As documented in Tables 3.3 and 3.4, the policy of exposure to import competition did not increase the proportion of international export sales in logistics.

The remaining industries are not major sources of international exports. Thanks to international education, the proportion of international export sales rose a little in the centralised office industries, but the proportion fell in the convivial services and money management and by its nature remained low in construction and the area services.

When industries are compared, mining had by far the highest proportion of international exports to total ex-region exports. In agriculture roughly two-thirds of ex-region exports went to buyers in other domestic regions, whether for direct consumption or as inputs for further processing. In logistics, distribution and manufacturing the ratio was roughly 40 per cent international and 60 per cent to other domestic regions. In the local-demand industries international sales occurred when overseas visitors patronised the industry and interregional sales occurred when patrons come from other Australian regions. The proportion of overseas sales was thus quite high in the convivial services, which had a higher proportion of overseas customers than the area service or construction industries – this contributed to the claim of tourism to be considered as a trade-exposed activity. Finally, the centralised offices had significant international export revenue (due largely to overseas students) but money management did not.

Table 3.3 International export sales as a percentage of total export sales										
Industry 1997 2019 2020										
Agriculture	26	33	32							
Mining	63	82	83							
Manufacturing	34	40	40							
Logistics	32	26	24							
Centralised offices	10	12	11							
Money management	9	6	6							
Construction	8	6	6							
Distribution	11	16	16							
Convivial services	28	27	25							
Area services	3	2	2							
Total	24	29	29							

Table 3.4 Exports as a percentage of total sales, Australian industries, 1997 and 2019									
	Internation	nal exports	Interregion	nal exports	All exports				
Industry	1997	2019	1997	2019	1997	2019			
Economic base industries									
Agriculture	16	21	44	42	59	64			
Mining	40	72	24	16	64	88			
Manufacturing	20	26	38	40	58	66			
Logistics	17	14	36	40	52	54			
Centralised services									
Centralised offices	4	5	39	38	43	43			
Money Management	3	2	25	31	28	33			
Local-demand industries									
Construction	1	1	13	10	14	11			
Distribution	4	6	29	31	33	37			
Convivial services	11	10	28	28	40	38			
Area services	1	1	31	32	32	33			
Total	10	12	32	30	42	43			

3.3 Industry dispersion

Table 3.5 introduces the geographic characteristics of the various industries as indicated by a measure of dispersion – the standard deviation of the percentage contribution of each industry to the local income of each region in relation to the average. Mining stood out as the industry most concentrated in particular regions, followed by agriculture. The other industries were all relatively dispersed. Tentatively, further trends may be adduced.

- As agriculture has contracted it seems to have become a little more concentrated regionally.
- The reverse for mining: it has expanded both in total and regionally, perhaps due to the transfer of support activities to urban areas, especially round Perth.

The convivial services seem to have become more concentrated regionally, perhaps reflecting the growth of tourism as a source of demand.

It should also be noted that, contrary to expectation, the measured dispersion of activity in the concentrated office and money management industries was low. This was because these industries' contribution to local income was concentrated in a small number of regions — over a quarter of local income generated in money management was generated in Sydney Central alone and nearly a quarter of local income generated in centralised office services was earned in two regions, Sydney Central and the ACT. Once outside the metropolitan centres there industries were fairly equally distributed across regions.

Table 3.5 Contribution to local income (per cent) and a measure of industry dispersion, Australia, 1994 and 2019 1994 2019 Relative Relative Industry Average Dispersion dispersion **Average** Dispersion dispersion Agriculture and food processing 10.2 1.3 7.8 4.7 7.8 1.7 2.3 8.6 3.7 2.8 8.9 3.2 Mining Non-food manufacturing 3.2 9.8 6.3 0.6 4.9 0.7 Construction 8.2 3.8 0.5 9.3 3.2 0.3 7.3 0.5 Logistics 8.5 3.5 0.4 3.7 Local distribution 13.7 3.1 0.2 9.9 2.8 0.3 Convivial services 4.7 1.5 0.3 5.6 3.6 0.6 28.0 9.0 Centralised offices 23.9 8.3 0.3 0.3 Money management 6.4 2.3 0.4 7.0 2.7 0.4 Area services 14.6 7.7 0.5 20.5 11.9 0.6 **Total** 100 100

Notes:

Dispersion = the standard deviation of the percentage contribution to local income, by region. A high number indicates an industry concentrated in some regions rather than others; a low number indicates a widespread industry.

Relative dispersion = the dispersion indicator divided by the average.

Not only are industries dispersed between regions, they are dispersed within regions, particularly within geographically large regions. Dispersion across a region is most likely when an industry is characterised by small business units, as is broadly true of agriculture, local distribution and convivial services. At the other extreme, when an industry tends towards large business units, or where it comprises smaller units which co-locate due to a need to interact, it is likely that activity will be concentrated at particular locations within regions. For example, one or two large employers can dominate the employment, value added and local income estimates for a whole region when in fact they primarily affect one or two towns, leaving the rest of the region with a quite different economic base. This is particularly noticeable in mining, for two reasons: it is prone to large business units and it tends to locate in geographically large, remote regions.

3.4 Mapping the economic base

Having classified industries into export-oriented industries, centralised industries and local-demand industries, we return to the concept of the economic base – the industries which earn export income for a region. Since 1997 NIEIR has estimated both international and interregional exports by industry and by region. These estimates are necessarily approximate, but are sufficiently accurate to pinpoint the industries which serve as the economic base for each region. The following patterns emerge.

Metropolitan centres

Not surprisingly, in the metropolitan centres the centralised office industries are prominent as a source of exports. The economic base of the ACT is solidly in office

services – the various services centrally administered by the Commonwealth government, including defence. Canberra has failed to diversify its economic base, being as heavily dependent on the provision of Commonwealth services in 2019 as it was in 1997. In Sydney and Melbourne exports of centralised services are joined by money management. Over the 22 years to 2019 the importance of money management increased in Sydney but not in Melbourne. As a reflection of the mining boom, the economic base of Central Perth broadened to include the head and operational offices of mining companies along with the centralised office industries. In Adelaide and Brisbane the centralised office industries remained unchallenged as the regional economic mainstay.

Metropolitan suburbs

Many residents of the metropolitan suburbs rely on commuter incomes so the local-demand industries tend to be prominent in their mix of production. However, in 1997 most suburban regions hosted significant trade-exposed manufacturing industries – the major exceptions were in Sydney, where the Inner East and the North had little manufacturing though they hosted some logistics. Some of the inner suburbs of Melbourne and Sydney also exported the services of centralised offices, including tertiary education. With the rise of logistics, between 1997 and 2019 the position of manufacturing in the suburban economic base weakened, though it remained the dominant export industry in 11 of the 22 metropolitan suburban regions. Logistics became the dominant export industry in 8 of them and centralised offices in the remaining four – the inner East and South of Melbourne and the Inner West and Parramatta in Sydney. There was, accordingly, a certain decentralisation of centralised offices (which includes tertiary education) to the inner suburbs of the two largest metropolitan areas.

Peri-metropolitan regions

Though rural in appearance, the peri-metropolitan regions are semi-suburban in that they house commuters as well as residents who work locally. Reflecting the growth of commuting, the importance of local-demand industries in their production mix has increased. This said, they comprised a varied group.

- In 1997 Geelong and Wollongong depended on manufacturing for their economic base. Despite the weakening of manufacturing, this was still the case in 2019.
- In the classification of industries, electricity and gas were included in the centralised office industries. In 1997 their operations were less centralised, and in conjunction with mining they formed the economic base of two regions, Gippsland and Inland Hunter, spreading into Newcastle. In 2019 mining remained important in the economic base of each of these regions, but electricity production fell in relative significance and in Gippsland agriculture regained second place in the economic base.
- Though the SW of WA is known for its forestry and agriculture, its dominant export industries in both 1997 and 2019 were manufacturing and mining – the complementary industries of bauxite mining and alumina smelting.
- Agriculture (including food processing) was in 1997, and still remains, a major part of the economic base in the following peri-urban regions: Inland SEQ, NSW SE, Vic Inner North, Vic Inner West and the Adelaide Ranges.
- There remain four peri-urban regions in which there is no dominant economic base industry. These are Sydney Highlands, NSW Central Coast, the Gold Coast and the Sunshine Coast.

Rural regions

Further away from the metropolitan centres the great majority of regions in 1997 were economically based on agriculture. In a few regions, such as Tasmania North and Wide Bay, agriculture was supplemented by manufacturing. Agriculture was supplemented, or even supplanted, by mining in WA Wheatbelt, Central Queensland and Mackay. By 2019 manufacturing had diminished in significance in Tasmania N and Qld Wide Bay and mining had increased in WA Wheatbelt, NSW Northern Inland, Darling Downs, Mackay and Central Queensland — indeed in Central Queensland manufacturing (the smelters of Gladstone) had eclipsed agriculture as

second to mining in the economic base. There were two other exceptions to the general dominance of agriculture in the country regions. These were Townsville and Hobart (Tasmania S) where the centralised office industries were dominant in the economic base in both 1997 and 2019. This would reflect the state-capital functions of Hobart and the prominence of defence activity in Townsville.

Remote regions

Among the remote regions, the centralised office industries (particularly defence) dominated the economic base of Darwin in 1997 but were supplemented by mining in 2019. Mining was dominant in the economic base of Pilbara Kimberley, Gladstone Goldfields and the NT Outback in both 1997 and 2019. In the remaining two remote regions, Qld Outback and NSW Far West, mining increased in relative importance (or, maybe, agriculture diminished).

Tourism

As previously remarked, tourism is an elusive industry from an economic base point of view. The convivial services can be taken as a marker of tourism output, judging by which tourism contributed relatively strongly to the economic base in Gold Coast, Sunshine Coast and NSW SE. It also contributed fairly significantly in NSW Northern Rivers, NSW Mid North Coast and the NT Outback, with noticeable but less crucial contributions in the inner suburbs of Sydney, in Geelong (which includes the Victorian Surf Coast) and in Cairns.

Conclusion

The interregional variety and dispersion of economic base industries ensured that, on a place-of-work basis, there were considerable differences of industry structure between regions. This meant that the fortunes of the different export industries had major effects on regional prosperity. The fortunes of the trade-exposed industries resonated through each region and their overall effect was readily approximated using demand multipliers. However, this did not mean that the local-demand industries were passive followers in the story of local economic change. This was far from the case, since the local-demand industries related to the export industries on the supply as well as on the demand side, and had their own technological changes and efficiencies. All this made for complicated relationships.

4. Regional industry performance 1994-2019

As outlined in Chapter 1, after recovering from the 1990 recession regional economies have interacted their way through a land boom, a mining boom and a fin de siècle period. Since their inception in 1998 the *State of the Regions* reports have chronicled these phases. Building on the industry patterns described in Chapters 2 and 3, this chapter provides an overview of trends in regional production over the quarter century from 1994 to 2016 as a whole. This chapter concentrates on regional production and productivity, especially on how much local income was generated in each region. The distribution of these incomes to households is covered in Chapters 5 and 6.

4.1 Translating the economic base into place-of-work local income

At this point it is convenient to recognise two determinants of local income: hours worked and income per hour worked. Over the quarter century from 1994 to 2019 both increased, but differentially both by industry and by region. Table 4.1 covers the all-Australia trends. Growth in ex-region exports and GRP have already been discussed but are included in the table for comparison with growth in hours worked and in local income.

4.1.1 Hours worked

As a measure of labour input, hours worked is preferable to employment. It measures hours on the job, abstracting from changes in the incidence of overtime and of part-time work

Hours worked in Australia grew at an average rate of 1.7 per cent a year from 1994 to 2019. Reflecting export performance, hours worked grew strongly in mining, but unfortunately mining is a very small industry when measured by hours worked. Among the three other trade-exposed industries, hours worked were stable in logistics and agriculture and declined in manufacturing. Overall, hours worked in the trade-exposed industries changed little.

In all other industries combined, ex-region exports grew at a little over 3 per cent a year with hours worked growing at 2.2 per cent. The relationship between growth in ex-region exports and growth in hours worked was not as strong as among the trade-exposed industries, but even so there was a general tendency for hours worked to increase relatively rapidly in the industries with growing ex-region

exports. The relationship was weakest in money management, where (mostly interregional) exports grew by 4.2 per cent a year but hours worked by only 1.5 per cent.

Given differential rates of growth in hours worked by industry at the national level, it follows that the growth rate of total hours worked should have been high in regions specialising in high-growth industries and low in regions where employment was concentrated in low-growth industries. This effect can be assessed for 1994-2019 by comparing the change in regional hours worked had they increased in each industry at industry-average rate with the change had hours worked increased at the single all-Australia rate. The pattern which emerges might be termed the industry-mix effect on hours worked.

In the metropolitan centres and inner suburbs this effect was, in general, positive though not large – the relatively high rate of growth in centralised office services was somewhat offset by the low rate in money management. The effect in the suburban regions was decidedly negative, due to their heavy reliance on manufacturing, while the effect in the rural districts was also negative, due to their reliance on agriculture. This leaves the mining districts, where the effect was moderately positive in the coalmining regions and very positive indeed in the three remote regions heavily engaged in metal-ore mining and much less engaged in agriculture – Pilbara Kimberley, Gascoyne Goldfields and NT Outback.

This estimate of growth in hours worked which would have resulted had each industry in each region increased its employment at the same, national, rate, can be compared with the actual increase in hours worked to give an indication of changes in regional economic structure. This allows us to focus on the particular factors working in regions where hours worked increased more rapidly than expected from their industry mix and those where growth was slower. Working outwards from the metropolitan centres:

- growth in hours worked in Central Melbourne and Central Sydney was well in advance of expectation, a little above in Inner Brisbane, close to expectation in Inner Perth and well below in Inner Adelaide and the ACT. The process of centralisation favoured the major money-management centres;
- growth in hours worked in the suburbs was patchy, varying from well below expectation in suburbs such as Sydney North to well above in Perth South Coast and Melbourne Outer West. In general, the slow-growing suburbs lacked room for expansion. Rapid growth in Perth South Coast and Melbourne Outer West followed the construction of new commuter

- rail links. It is interesting that construction which improved access to city centre employment should be associated with the generation of local jobs;
- among the peri-urban regions, hours worked increased more than expected on the Sunshine Coast and Gold Coast, also in WA SW, but less than expected in the older-established NSW cities of Newcastle and Wollongong, in NSW SE and in the Adelaide Ranges. Hours worked were above expectation in two of the Victorian peri-urban regions (Geelong and Inner West) but below expectation in the other two;
- growth in hours worked was below expectation in all the more distanced country regions save the Darling Downs, where it was as projected from industry mix. Growth in hours worked was subdued in rural regions beyond a couple of hours' drive from a metropolitan centre; and
- finally, hours worked were way below expectation in four of the six remote regions NSW Far West, Gascoyne Goldfields, Qld Outback and NT Outback. They were a little ahead in Pilbara Kimberley and well ahead in Darwin. To some extent this reflected the poor performance of the non-metropolitan regions generally, but it also reflected such matters as the mining mix: base metals mining did not boom as much as iron ore. Darwin remained firmly based on defence and consolidated its position as a regional capital.

Putting the industry mix and regional effects together, and again working outwards from the metropolitan centres (Table 4.2):

- hours worked grew by a little over 3 per cent a year in Central Melbourne and Central Sydney, by 2.5 per cent in inner Brisbane and less than this in inner Perth, the ACT and inner Adelaide;
- among the Sydney suburban regions, hours worked hardly increased in either the Mid-West or North. They increased at around 1 per cent a year in the other inner suburbs and by as much as 2 per cent a

- year in Parramatta, the Outer West and the Outer South West. In Melbourne the rate of growth in the inner suburbs and also the Outer East was around 1 per cent, grading up to 3 per cent in the outer west. Brisbane and Perth did rather better, with growth in hours at around 2 per cent rising to 3.5 per cent in Perth South Coast. Reflecting low growth in Adelaide Inner, growth in Adelaide Outer North was around 1 per cent a year;
- growth in the peri-urban regions round Brisbane and Perth was well above national average (up to 3.2 per cent in Sunshine Coast), was at or below national average in the peri-urban regions of NSW and Victoria, and well below in Adelaide Ranges;
- among the more distanced rural regions growth in hours worked varied from hardly any at all (NSW Northern Inland, SA Outer) to just short of national average (Mackay, Townsville); and
- in the remote regions hours of work declined by 0.5 per cent a year in NSW Far West, were stable in Qld Outback, rose gently in NT Outback and Goldfields Gascoyne and rose at 3 per cent a year in Pilbara Kimberley and Darwin. The remote regions have relatively small economies heavily dependent on the fortunes of a small array of industries, hence the considerable variation between them.

In 1994 the mining industry generated the highest average local income per hour worked and also the greatest regional variation in income per hour. In 2019 it lost the high-income distinction to the centralised offices (Table 4.3) but retained the high level of variation between regions. Regional dispersion of average earnings increased in agriculture (perhaps because of seasonal effects) and construction (probably because of increased construction activity in high-wage mining-oriented remote regions). Regional dispersion in average local incomes per hour seems to have diminished in distribution and the area services.

Table 4.1 Australia – Rate of growth of exports, GVA, hours worked, local income and local income per hour worked, by industry, 1994-2019 (%/year), and local income per hour worked, 2019 (\$)

Industry	Ex-region exports (growth rate)	GVA (growth rate)	Hours worked (growth rate)	Local income (growth rate)	Income per hour (growth rate)	Income per hour (\$)
Agriculture	1.2	1.2	0.0	1.4	1.4	46.30
Mining	5.5	4.6	4.4	4.2	-0.1	60.20
Manufacturing	0.7	0.6	-1.0	0.6	1.6	42.50
Logistics	2.2	3.9	0.2	2.8	2.5	65.60
EXPORT ORIENTED INDUSTRIES	2.3	2.8	0.0	1.9	1.9	52.60
Centralised offices	3.1	3.5	2.4	4.1	1.6	69.70
Money management	4.2	3.8	1.5	3.8	2.2	62.30
CENTRALISED SERVICES	3.5	3.6	2.2	4.0	1.8	68.00
Construction	4.4	4.2	3.3	3.9	0.6	44.10
Distribution	2.6	2.6	1.1	2.1	1.0	32.00
Convivial services	2.7	3.2	2.0	4.2	2.2	32.60
Area services	4.3	3.7	2.8	4.8	1.9	53.20
LOCAL-DEMAND INDUSTRIES	3.0	3.4	2.2	3.8	1.6	42.10
TOTAL	3.3	3.3	1.7	3.4	1.7	50.90

Note: GVA (gross value added) by industry sums to GRP (gross regional product).

Source: NIEIR.

Table 4.2 Rates of growth of hours worked, local income and local income per hour worked, by industry, Australia, 1994 to 2020

	Hours worked			Local income			Income per hour					
Industry	1994- 2007	2007- 2016	2016- 2019	2019- 2020	1994- 2007	2007- 2016	2016- 2019	2019- 2020	1994- 2007	2007- 2016	2016- 2019	2019- 2020
Agriculture and food processing	-0.1	-0.3	1.0	1.2	1.2	2.0	-3.3	-3.1	1.3	2.3	-4.3	-4.5
Mining	3.6	6.5	1.3	-1.5	3.9	6.4	2.9	1.1	0.3	-0.1	1.6	2.6
Non-food manufacturing	-0.1	-2.6	0.3	-1.3	2.6	-2.0	1.1	7.9	2.7	0.6	0.8	9.2
Logistics	0.2	0.0	1.1	-1.0	3.9	1.0	1.6	-1.6	3.7	1.0	0.5	-0.6
Office services	2.9	1.9	2.1	1.3	4.8	3.1	3.5	0.9	1.9	1.0	1.4	-0.4
Money management	2.0	1.0	0.8	1.0	1.0	1.3	1.9	7.2	1.0	0.3	1.1	6.2
Construction	4.5	1.5	3.9	-1.4	5.2	3.4	4.3	1.7	0.7	0.9	-5.2	3.1
Distribution including road transport	1.3	0.6	1.3	-3.8	2.5	1.4	1.0	0.5	1.2	0.8	-0.3	4.3
Convivial services	2.1	1.3	3.3	-8.7	4.5	3.9	1.3	-8.9	2.4	2.6	-2.0	0.2
Area services	2.4	3.5	2.8	0.6	4.5	5.8	2.5	6.8	2.1	2.6	-0.3	6.2
Total	1.9	1.3	2.1	-1.2	4.0	2.8	1.7	2.0	2.1	1.8	-0.4	3.2

Source: NIEIR.

Table 4.3 Average local income and regional dispersion of income per hour worked in each region, by industry, Australia, 1994 and 2019

		1994		2019			
Industry	\$/hour	Dispersion (\$)	Relative dispersion (%)	\$/hour	Dispersion (\$)	Relative dispersion (%)	
Agriculture and food processing	33	6	11	46	11	23	
Mining	62	35	56	60	21	35	
Non-food manufacturing	29	4	13	43	6	14	
Logistics	35	5	15	66	8	15	
Centralised offices	47	9	19	70	12	17	
Money management	36	5	15	62	8	13	
Construction	38	4	11	44	9	19	
Distribution	25	4	16	32	3	10	
Convivial services	19	3	16	33	5	16	
Area services	33	9	26	53	10	20	
Total	33	8	25	51	12	24	

Notes: Dispersion = the standard deviation of the percentage contribution to local income, by region. A high number indicates an industry concentrated in some regions rather than others: a low number indicates a widespread industry.

Relative dispersion = the dispersion indicator divided by the average. Income in 2018 dollars. Regions where the industry generates less than 4 million hours a year omitted in calculating dispersion.

Source: NIEIR.

4.1.2 Local income

Excluding the 8 per cent of GDP which is generated by dwelling ownership, the gross value added at places of work can be split into three components:

- corporate gross profit;
- the gross profits of locally-owned businesses and non-profit producers; and
- wages, salaries and other payments to labour.

As already noted, corporate gross profit cannot be allocated to places of work except by invoking heroic assumptions, but the other two components can be and together form what in this report is called 'local income'. The components of local income are:

- wages, salaries and supplements, approximately78 per cent;
- the income component of the mixed capital/labour incomes of local business, approximately 15 per cent; and
- depreciation allowances of local businesses, approximately 7 per cent.

Because it includes an element of depreciation, local income is not wholly income which can be spent on consumption without eating into capital. Theoretically it would be desirable to cleanse business mixed income of depreciation, but the split between income and depreciation is at best approximate and simply cannot be estimated accurately by region and industry. As usual, we

persevere with measures which are practicable if not wholly ideal.

As pointed out above, the ratio of local income to value added varies by industry. The share of corporate profits is particularly high in mining and also in money management, hence these two industries contribute a lot less to local income than they do to GDP. At the other extreme, area services, which by and large are non-profit, are much more prominent as components of local income than they are as contributions to GDP.

From 1994 to 2019 the rise of mining and the partly consequential decline of agriculture and manufacturing resulted in a small decline in the percentage contribution of the export-oriented industries to GDP and a magnified fall in their contribution to local income (Table 4.4). This decline was largely offset by an increase in the contribution of the centralised services, once again magnified into an increased contribution by these industries to local income. As argued above in discussing hours worked, it seems that the centralised service industries have two components: local service and nationwide service, the latter from major concentrations of activity in the metropolitan centres. During the quarter century to 2019 city centre activity increased, so that the centralised services increased their salience in the economic base of the major city centres. During the period there was plentiful commentary on this trend, centring on the rise of the 'knowledge economy'.

In addition, an increase of one percentage point in the contribution of the local-demand services to GDP was translated into an increase of 5.7 percentage points in

their salience in local income. This took place despite the digital disruption of distribution and was largely due to an increase in local income generation in the area services, led by a rapid increase in expenditure on hospital services and supplemented by an increase in school education. This implied an increase in the proportion of tax-financed industries in the generation of local income.

Table 4.4 Distribution of GDP (gross value added) and local income by industry, Australia, 1994 and 2019 (per cent)										
Value Local added income										
Industry	1994	2019	1994	2019						
Agriculture	6.7	4.1	7.8	4.7						
Mining	8.4	11.4	2.3	2.8						
Manufacturing	9.8	5.1	9.8	4.9						
Logistics	6.7	7.7	8.5	7.3						
EXPORT-ORIENTED INDUSTRIES	31.6	28.2	28.4	19.7						
Centralised offices	21.6	22.5	23.9	28.0						
Money management	11.9	13.5	6.4	7.0						
CENTRALISED SERVICES	33.5	36.0	30.3	35.0						
Construction	7.2	8.9	8.2	9.3						
Distribution	10.4	8.6	13.7	9.9						
Convivial services	4.4	4.3	4.2	5.6						
Area services	12.8	14.1	14.6	20.5						
LOCAL-DEMAND SERVICES	34.8	35.9	40.2	45.9						

4.1.3 Local income per hour worked

The reallocation of local income away from the tradeexposed industries and into the centralised and localdemand services mirrored the reallocation of hours and did not much upset the pattern of local incomes per hour worked. Over the quarter century to 2019, local income per hour worked in Australia increased by 1.7 per cent a year. The rate of increase was very similar in the tradeexposed industries taken as a whole, in the centralised services taken as a whole and in the local-demand industries taken as a whole. Among the trade-exposed industries, growth of local income per hour was severely constrained in mining (where it was already very high) but was rapid in logistics, where it was associated with constrained growth in hours worked. Among the centralised services, it was more rapid in money management, where it was again associated with

constrained growth in hours worked. Among the localdemand industries, it was most rapid in the convivial services (starting from a low base) and slowest in construction (Table 4.1).

Industry mix had an effect on regional growth in local income per hour worked, just as it had on hours worked. Thus regions specialising in industries which generated high incomes per hour could expect rapid growth in local income per hour worked. In 2019 these industries were, in descending order of local income per hour, centralised offices, logistics, money management and mining - a different pecking order from that assessed from value added per hour, which had mining very much in top position followed by money management, logistics and centralised offices. Below the top four and again in descending order, local income per hour worked was above national average in the area services (which tended to employ highly-paid professional workers), followed by agriculture, construction and manufacturing, the latter generating local income per hour about 17 per cent below national average. Finally, the two low-income industries were distribution and the convivial services, both generating local income per hour worked around twothirds of the national average (Tables 4.1 and 4.3).

On these numbers, one would expect strong growth in local income per hour worked in the city centres and mining regions and slow growth in the manufacturing suburbs and agricultural regions — much the same pattern as for hours worked. The pattern was, however, somewhat upset by the strong growth in local income per hour in logistics, which was by and large a suburban industry. The following patterns appeared.

- The strongest regional rate of growth in local income per hour over the quarter century to 2019, 2.6 per cent a year, took place in inner Perth, where growth in hours worked in high-paid mining industry employment outweighed a decline in hourly rates of pay in the industry. Growth was also strong in the ACT, dominated by well-paid public administration. In the other metropolitan centres it was around, or a little below, national average.
- In the suburbs of Perth and Brisbane local income per hour grew at or above national average, in the suburbs of Melbourne and Adelaide at or a little below national average, and in the suburbs of Sydney at rates varying from national average (1.7 per cent a year) down to 1.2 per cent a year.
- Peri-urban WA experienced gratifying growth in local income per hour worked while peri-urban SEQ reported growth at around the national average rate. In peri-urban Victoria and SA the growth rate was in the 1.3 to 1.6 per cent range, and in the regions peri-urban to Sydney it went as low as 1.0 per cent a year. However in SE NSW, much of which is peri-urban to the ACT, it reached the national average rate.

- Beyond the peri-urban regions, growth in local income per hour was low in the regions heavily dependent on agriculture (as low as 0.8 per cent a year in Victoria Outer West) but was much higher in regions where the balance of employment was shifting into mining (as high as 2.4 per cent a year in Central Queensland). It was also above national average on the non-mining parts of the Queensland coast and in Tasmania.
- In the remote regions growth in local income per hour worked ranged from 1.1 per cent a year in NSW Far West to 2.4 per cent a year in Darwin, with much depending on the local fortunes of the mining industry.

As a result of these trends, in 2019 local income averaged \$51 per hour worked nationally. The regional patterns were as follows.

- At an average local income of \$74 an hour, workers in the ACT were by far the best rewarded in the country. The next most highly paid were in Central Sydney (\$66) with Central Perth, Inner Brisbane and Central Melbourne all above national average and Inner Adelaide slightly below.
- Income per hour worked in the Perth suburbs was a little above national average, as also in the inner suburbs of Sydney including Parramatta. However, it was below average in Sydney Mid West, Outer West and Outer South West. This pattern was repeated at a lower level in Melbourne, with the Inner East and Inner South at national average and the outer suburbs below, generally around \$45 an hour the same as in Adelaide North and similar to the Brisbane suburbs.
- In peri-urban WA income per hour was around national average, but it was below national average in all other peri-urban regions, particularly those in Victoria.
- In the more distanced rural regions local income per hour worked was at national average in WA but well below elsewhere. Even in Central Queensland and Mackay, where it had been increasing due to job generation in mining, it remained below national average substantially below in Mackay.
- Once again, the general fortunes of the remote regions aligned with the fortunes of their particular mining industry, and local income per hour varied from \$41 in NSW Far West to \$61 in Pilbara Kimberley.

Mention of the disparate fortunes of the mining industry in different regions highlights the fact that all-Australia industry averages provide no more than a very rough guide to local income generation by industry at the regional level. Table 4.3 indicates that in all industries regional levels of local income per hour were dispersed around the

national mean. Patterns of dispersion also varied: for example, the extreme regional dispersion of mining incomes in 1994 had moderated a little by 2019 but the dispersion of construction incomes increased. In Section 4.2 we turn to the regional dispersion, by industry, of local income per hour worked.

4.2 Regional employment and local income by industry on a place-of-work basis in 2019

Activity in each industry is spread unevenly across the regions. As already noted, various measures of industry activity are available: employment, value added and local income among them. The several measures generally reveal similar patterns, which will be described using employment and local income as our selected indicators, both of them on a place-of-work basis. We consider first the trade-exposed industries, then the centralised services, and finally the local-demand industries.

NIEIR has divided Australia into 67 regions with 2020 populations ranging from 66,000 to 662,000. To simplify regional comparison, the local income generated, by industry, in each region has been divided by population, as a crude measure of region size.

It should be noted that the estimates of local income by industry are in part reverse-engineered from Census and tax data. Though they are reconciled to ABS National Accounts data at the state level, they depend on the accuracy of the original data collections from which they derive, including the assumptions used to fill in for missing data. The estimates for hours worked derive from a mixture of Census data and sample surveys and are accordingly subject to random error as well as to mistakes in the answers to questions. The estimates of income per hour worked by industry by region accordingly emerge from a long trail of measurement, assumption and calculation and should be treated as suggestive rather than definitive.

In this section the regional patterns are discussed systematically industry by industry, beginning with employment and moving on to the generation of local income.

4.2.1 The trade-exposed industries

Agriculture and food processing

Employment

For present purposes agriculture is broadly defined to include farms, pastoral stations, forestry, aquaculture and

fishing and also food processing. In 2019 the industry generated local income of \$2,100 for each Australian resident – roughly the same amount, in real terms, as it had in 1994. Nationally, hours worked in the industry declined slowly during the land boom and the mining boom, associated with increases in local income per hour worked. During the fin de siècle years, however, hours worked increased and income per hour worked plunged. This is probably because the industry was offering lowwage, unskilled employment in a time of slack labour markets, but the story was complicated by the incidence of drought and fire within Australia and by unstable international markets.

Agriculture and forestry both have high land requirements, hence their typically rural locations. Fishing, as distinct from aquaculture, does not have such requirements and is dispersed along the coast – the region with the greatest number of hours worked in fishing in 2019 was Outer SA, with its long coastline. The locational patterns of food and beverage manufacture are split between workplaces which require proximity to supplies from farms (e.g. dairy products, sugar mills and wineries) and workplaces which seek proximity to urban consumers (such as biscuit makers).

Agriculture was most important, as a percentage of hours worked, in country regions which lacked provincial cities (e.g. WA Wheatbelt and Victoria Outer West, both 25 per cent of hours worked) and in remote regions where the mining industry had declined (e.g. NSW Far West, 27 per cent). In country regions along the Queensland and NSW coast and in Tasmania it was generally under 10 per cent, with inland regions such as NSW SW reporting around 15 per cent. Some of the urban periphery regions, such as Wollongong and Newcastle, were fully urbanised and lacked agriculture, but on other urban fringes the industry remained an important source of employment, providing as many as 12 per cent of hours worked in Inland SEQ.

The importance of food processing in local economies depended on the agricultural products to be processed. Food processing, particularly wineries, accounted for 6 per cent of hours worked in Adelaide Ranges. Food processing was also a significant contributor to hours worked in Victoria Outer North (8 per cent), Victoria Inner North and WA SW. However, the sugar mills of the Queensland coast no longer showed up in the statistics, due to local industry diversification. The food and beverage industry was also present in urban areas, accounting for 4 per cent of hours worked in Melbourne Outer South and Brisbane Outer West.

Local income

Though local income per hour worked varied considerably between workplaces (notoriously so in farming, where productivity varies between good and bad seasons and high-productivity agriculture co-exists with low-

productivity retirement and hobby farms) the average level for farming and food manufacture was similar, being somewhat below national average. Productivity in forestry and fishing was reported as somewhat higher, but these made relatively small contributors to the total.

In 2019 local income from agriculture and food processing in the metropolitan regions, whether inner or outer, was generally around \$1,000 per resident. This level also applied in the more urban peri-metropolitan regions such as Wollongong and the Gold Coast, but rose to the \$3,000 to \$4,000 range in such regions as Inland SEQ, Adelaide Ranges and the inner Victorian country regions, and even further to \$7,000 in WA SW, where substantial food processing and forestry industries were added to basic farming.

Agriculture in regional economies

In general, agriculture was strongly characteristic of the country regions located more than a two-hour drive from the metropolitan centres. In the WA Wheatbelt it generated \$13,000 per resident in 2019, closely followed by SA Outer. At the other extreme, the industry was poorly represented in income generation in Townsville (a city located in a region of unproductive land) and in the NSW Mid North Coast (where farms have been converted to retirement properties).

Over the quarter century to 2019 income from agriculture and food processing, per resident, increased in some regions, balanced by others where it fell. Thus in the NT an increase in Darwin was balanced by a decrease elsewhere. In Queensland increases in Central Queensland and the Outback were balanced by decreases in other coastal regions and Inland SEQ, probably due to loss of farmland to urban and peri-urban development and to increases in the non-farm population. Similarly, in NSW income generation from agriculture and food processing fell, in relation to population, in Inland Hunter and the Sydney Highlands, but increased in the Far West, Northern Inland and SW, in which regions population was falling or growing but slowly. Similarly in Tasmania increases in farm incomes generated per capita reflected a combination of growing output and slow population growth.

Across Australia, local income in the combined industry averaged \$46 per hour worked in 2019. There were pronounced state variations, reflecting ABS control totals, with agricultural incomes per hour reported as high in Tasmania and WA and low in Victoria. Within each state, income per hour in the industry was generally relatively high in the metropolitan centre, thanks to food product manufacturing and agribusiness offices. It then graded down towards the state border, with the regions furthest from the metropolitan centre reporting agricultural local incomes per hour roughly three-quarters of those in the metropolitan centre.

The patchy performance of the agricultural industries would have disappointed the reformers of the 1980s and 90s. The industry was expected to benefit from the program of tariff cuts and also from the privatisation of bulk handling and marketing and from reforms to water management. These reforms were not entirely successful and in addition the industry was damaged by the high mining-boom exchange rate, which also damaged manufacturing. The industry also faced deeper problems than trade reforms could address – basically the fundamental agricultural problem of living within environmental limits, whether these be expressions of the variability of Australian weather or more fundamental climate changes.

Mining

Employment

Despite its massive yield of resource rents and 25 years' growth at the creditable rate of 2.8 per cent a year, across Australia in 2019 mining generated but \$1,200 per capita in local income. Nationally, hours worked in mining increased by 3.6 per cent a year during the land boom and by 6.5 per cent a year during the mining boom. However, during the fin de siècle years the rate of growth slackened off to well below the national rate of growth in hours worked. Local income per hour worked was high, on average, but remained more or less constant in the years of rapid employment growth and only began to rise in the last few years of the quarter century.

The industry was near enough to absent from the Sydney, Melbourne, Adelaide and ACT urban areas, but mining head offices and support activities generated substantial incomes in Inner Brisbane (\$3,000 per capita) and even more in Inner Perth (\$12,000). In both of these city centres this reflected rapid recent growth in mining employment. By contrast, over the 25 years to 2019 Central Melbourne lost mining employment.

In 2019 the major coal-mining regions were Mackay (where it generated 17 per cent of hours worked), Inland Hunter (15 per cent) and Central Queensland (7 per cent). Coal mining had a small but increasing presence in NSW Northern Inland, a small and fairly constant presence in WA SW, Brisbane Outer SW, Tasmania N and Gippsland, and a small and declining presence in SA Outer, Newcastle, Wollongong and the Sydney Highlands.

The major petroleum regions in 2019 were Pilbara Kimberley and Darwin with a small presence in Queensland Outback and Gippsland, also in Perth Inner presumably due to administration.

In 2019 metal ore mining accounted for 34 per cent of hours worked in Pilbara Kimberley, 28 per cent in Gascoyne Goldfields, 13 per cent in Queensland Outback and 9 per cent in NT Outback. In the NSW Far West it had declined to 7 per cent but in the WA Wheatbelt had risen

to 6 per cent. There were metal ore mines in half a dozen other regions and metal ore corporate offices in Inner

Services to mining, including exploration, were widespread, but were particularly significant in Gascoyne Goldfields and in Perth.

Local income

Taking the industry as a whole, the two major mining regions, both remote, were Pilbara Kimberley (\$51,000 local income per capita) and Gascoyne Goldfields (\$31,000). The Pilbara Kimberley had experienced growth thanks to the boom in iron ore and natural gas, but the Gascoyne Goldfields region, with its specialisation in less fashionable metals, was merely holding its own. The same was true in Queensland Outback, where mining contributed \$8,000 and in Outback NT (\$6,000). After decades of declining output, the contribution of mining to local income was down to \$2,000 per resident in the NSW Far West, which had been a famed mining region in its day. Its classic mines at Broken Hill and Cobar were close to worked out.

Among the rural regions distanced from the metropolitan centres, coal mining provided substantial income in Mackay (\$9,000 per capita after 25 years' growth at 5.6 per cent a year), with smaller but still significant contributions (\$4-5,000 per capita) in Inland Hunter and Central Queensland. In these three regions growth in mining income was at above-average rates.

The contribution of mining to local income was near enough to zero in the peri-urban regions except for WA SW.

Local income in mining averaged \$60 per hour worked in 2019. It was well above this in Darwin and in Perth (both Central Perth and the two southern suburban regions) where industry activity concentrated on professional support. Local income generated per hour worked in mining averaged \$60-67 in the mining regions of WA and the NT but was down to around \$40 an hour in the mining regions of Queensland and NSW – indeed as low as \$33 an hour in NSW Far West. Local income per hour in mining was thus high in regions providing professional services within the industry, quite high in regions producing petroleum and iron ore, and much lower in coal mining and in established mining regions where the resource was running down.

It is hard to argue that the reforms of the 1980s and 1990s were responsible for the mining boom. Activity in Australian mining was, as ever, responsive to international demand – hence the history of high activity in base metals around 1970, high activity in export coal in the 1990s and high activity in export iron ore in the more recent mining boom. This said, the reforms encouraged a mindset in which it was relatively easy for the industry to counter

government attempts to divert resource rents from industry owners to the public purse. In particular, state governments missed a golden opportunity to capture resource rents through royalty payments.

Non-food manufacturing

Employment

During the post-war boom manufacturing was a favoured and somewhat cosseted industry but in the neo-liberal decades it lost this status, especially after 1996 when the various industry plans which aimed to update it were abandoned. During the land boom the industry gradually reduced employment but raised income per hour worked, but then came the mining boom and the years when the Australian dollar floated high. This destroyed the incentive to invest in Australian manufacturing and hours worked declined rapidly with local income per hour more or less stagnating. During the fin de siècle years the decline in hours worked was stemmed but local income per hour failed to rise commensurately.

Location characteristics for manufacturing industry include the availability of land at reasonable cost, the availability of labour with appropriate skills and the availability of appropriate transport and utilities. The industry is accordingly mostly located in urban areas, but not in metropolitan centres; its highest concentrations are in outer metropolitan regions. As with food manufacture, processing is sometimes carried out near the source of the raw material (particularly if a considerable reduction in bulk occurs). However, with the exception of the alumina smelters in SW WA and Central Queensland (Gladstone), the major Australian smelters are no longer located close to raw materials and power sources – the industry, if anything, seeks a location at a major port. With the exception of the alumina smelters, the three major components of the industry distinguished in Chapter 2 (basic manufacturing, equipment manufacture and fabrication, and other less capital-intensive manufacturing) follow similar location patterns.

Local income

Despite significant recent contraction, in 2019 non-food manufacturing yielded as much local income as agriculture (including food manufacture): \$2,100 per capita.

The city centres and inner suburbs were once important manufacturing regions, but their factories have been crowded out by high land values. Manufacturing has also failed to keep up with population growth in most outer suburbs and also in Wollongong and Geelong. However, growth in manufacturing income outstripped population growth in Perth. In 2019 manufacturing generated local income of \$3,000 to \$5,000 per capita in the four western Sydney suburban regions. It generated similar incomes in Melbourne in the Central region and in the outer suburbs,

in inner Perth and the two southern suburban regions, in Outer West Brisbane and in Northern Adelaide.

The peri-metropolitan regions include some with long histories of manufacturing and in 2019 the industry generated local income of \$3,000 per resident in Newcastle. However the industry has declined in other established provincial cities including Wollongong and Geelong. The highest level of manufacturing income generation in a peri-urban region was no longer in an established manufacturing area but in WA SW, where the smelting industry had recently risen to prominence. Similarly, among the more distant rural regions non-food manufacturing was generally an unimportant source of income generation, with the exception of the Central Queensland region where the smelters of Gladstone generated income. Finally, manufacturing contributed very little to local income in the remote regions.

Local income in non-food manufacturing averaged \$43 per hour worked in 2019. It was generally high in WA, where all regions with significant manufacturing industry reported local incomes above average – as high as \$61 an hour in Perth Outer North and Perth South Coast. This presumably reflected generally high wage rates thanks to the prosperity of the WA mining industry, not only due to competition for labour but because many WA manufacturing plants were integrated into mining supply chains. In Sydney manufacturing generated \$51 an hour in the North down to \$40 in the Inner west, but in all regions in Melbourne, Brisbane and Adelaide manufacturing local income per hour averaged within a narrow range centred on \$39 per hour. In many cases differences in local income per hour in manufacturing were associated with the types of manufacturing prominent in the region, hence relatively high income per hour in Inland Hunter was associated with chemical plants and fabricated metals while in the ACT low income per hour was associated with furniture manufacturing (an appropriate industry in an office-based city, and a low-wage industry in a generally high-wage region).

The reformers of the 1980s targeted manufacturing, which they accused of inefficiency. Though they argued that their reforms would spark efficiency increases, the reforms were implemented in a way which created uncertainties. These in turn limited investment and therefore downsized the industry and reduced its productivity thanks to the loss of economies of scale and to increasing technological backwardness. As in agriculture, a particularly unfortunate consequence of the reforms (or of the way in which they were managed) was the high exchange rate during the mining boom. Again, though a promising start was made with sophisticated, low-cost industry policies, these were abandoned by the more dogmatic policy-makers who gained power during the land boom.

Logistics

Employment

In 2019 the logistics industries (wholesale trade and high-productivity transport) generated \$3,100 per capita in local income, after growing at 1.4 per cent a year for the previous quarter century. This increase in local income was not due to increased hours worked but by increases in local income per hour, which were particularly rapid during the land boom thanks to the application of digital management techniques in the industry.

Logistics requires space and proximity to major customers - customers which generate large tonnages (or in air transport large passenger loads) over long distances. It is accordingly an urban industry but prefers not to locate in city centres – its concentration in places like Central Melbourne reflects historic investments, not current preferences. Concentrations of activity in the non-road transport side of the sector tend to occur at major ports and airports. Helped along by the co-location of Port Botany and the airport, in Sydney Inner East they provided 11 per cent of hours worked. They also contributed generously in Melbourne Outer North, Melbourne Outer West and Brisbane Outer North. Long-distance transport also had a significant presence in outer suburbs such as Outer West Sydney and Outer West Melbourne, but in these it tended to take second place to wholesaling.

Recent trends in wholesaling have brought reductions in employment as a quid pro quo for increases in local income per hour. Wholesale trade has tended to co-locate with manufacturing in the metropolitan outer suburbs.

Local income

Though logistics accounted for just two per cent of hours worked in the metropolitan centre regions, in 2019 it generated local income of \$11,000 per capita in Central Sydney and \$9,000 in Central Melbourne. In Central Melbourne this was partly due to the location of the port within the central region, but in Sydney both port and airport were in Sydney Inner East (\$8,000 per capita in logistics income). These city centre concentrations probably reflected head offices. Recent growth was stronger in Inner Perth and Inner Brisbane than in the other metropolitan centres, suggesting a relationship to mining.

In Sydney logistics employment grew rapidly in the Centre and in the two Outer West regions, but noticeably fell behind population growth in the Mid-West (where it failed to compensate for the decline in manufacturing) and the North. Similarly in Melbourne growth favoured the Centre and the outer suburbs over the inner suburbs. The peak suburban region in Sydney was \$7,000 per capita (Parramatta) and in Melbourne \$5,000 per capita. The Inner region had the highest level of logistics income

generation in Brisbane and Perth, but in Adelaide the highest level was in the North – all these peaks were in the \$5,000 to \$7,000 range.

In the peri-urban and other country regions logistics generally contributed \$2,000 or less, but more in regions like Mackay where mining required logistics support. Similarly, among the remote regions logistics generated local incomes of \$4,000 per capita in Pilbara Kimberley, Gascoyne Goldfields and Darwin, but only \$1,000 in NSW Far West. SA Outer was the only region with a significant level of industry activity in which income generation from logistics declined over the quarter century to 2019, probably due largely to reductions in railway employment in Port Augusta (the former operational headquarters of the Commonwealth Railways).

Income per hour worked in the logistics industries averaged \$66 in 2019. It was a little above this average in all the metropolitan centres except the ACT. It was also above average in all the suburbs of Perth, in Sydney Outer North and Parramatta, in Melbourne Inner East, Outer East and Inner South and (marginally) in Adelaide North, but in the outer suburbs of Sydney, Melbourne and Brisbane it was a little below national average (down to \$58 in Melbourne Outer West). In peri-urban NSW and Queensland it was a little below national average and in peri-urban Victoria it was further below at around \$57 an hour. Except in WA, regions beyond the metropolitan periphery generally returned low local income per hour for such logistics activity as they retained, with the lowest rate of \$50 an hour reported from NSW Northern Rivers, where the industry had but a small presence.

With rapid growth in local income per hour worked, the logistics industries could be regarded as successes of the reform policies. However, the success was at base technological, deriving from automation. At the most it could be claimed that the anti-union aspects of economic reform smoothed the introduction of labour-saving technologies. As in other high-income countries, this raised uncomfortable questions about the automation of work.

4.2.2 The centralised service industries

The centralised industries service are characterised by widespread local-service provision managed from concentrations of activity in the metropolitan centres. In the centralised office industries the national level of local income generation per capita was, in 2019, exceeded in a mere 9 of the 67 regions. In money management the distribution was even more skewed in favour of the metropolitan centres, with the national average exceeded in only seven regions. These distributions support the hypothesis that the centralised industries provide local-demand services in all regions and interregional export services from a limited number of metropolitan centres.

Centralised office-based services

Employment

As has been noted in past *State of the Regions* reports, much of the knowledge economy is included in the office industries, which have hence been growing more rapidly than the economy as a whole. Growth in hours worked was particularly rapid during the land boom. Local income per hour worked has been well above national average and has grown steadily, though generally at a rate a little below the national average. It even grew during the fin de siècle years, when the rest of the economy was in the doldrums.

A major characteristic of the office industries is that they depend on the recruitment of specialised personnel and on the sharing of information between people. This accounts for their preference for location in urban areas and particularly in metropolitan centres. (It helps that their land requirements are modest.) This requirement may be relaxing somewhat as zoom meetings are substituted for face-to-face conversations, but it remains to be seen to what extent this trend will survive during recovery from the Coronavirus pandemic.

As noted above, the utilities are ring-ins to this group of industries because widespread automation is shrinking employment outside the city centre head offices. This has long been true of water management and is increasingly true of the electricity supply industry as it abandons its coalfield generation plants in favour of widespread generation from renewables, which requires little labour once installed. However, in 2019 electricity supply still contributed as much as 3 per cent of hours worked in Central Queensland and Darling Downs, and 2 per cent in Inland Hunter and Gippsland.

Once upon a time every country town had its newspaper and telephone exchange, but in this digital age employment in telecommunications, information and media is concentrated in the metropolitan centres, particularly Central Sydney, where in 2019 it accounted for 6 per cent of hours worked, with Central Melbourne not far behind. Despite this withdrawal to the metropolitan centres, the industry still contributes one or two per cent of hours worked in most other regions.

The administrative services component of the office industries is also highly concentrated in Central Sydney and Central Melbourne but is represented in all regions.

Not surprisingly, the peak region for public administration is the ACT, where in 2019 it provided 28 per cent of hours worked. Thanks to the location of defence bases, the proportion was high in both NT regions (11-13 per cent) and in Townsville (10 per cent). In the state capital regions it ranged from 6 per cent (Central Melbourne) to 10 per cent (Inner Brisbane). Elsewhere, whether suburban, country or remote, the proportion was in the 3-5 per cent range.

Given their strong association with the knowledge economy, professional services are an industry to watch. They are indeed concentrated in the metropolitan centres, in 2019 contributing 26 per cent of hours worked in Central Sydney and 22 per cent in Central Melbourne, followed by Inner Brisbane, Inner Perth and the ACT down to Inner Adelaide at 11 per cent. In the two large metropolitan areas they have spread to selected, mainly high-status suburbs like Sydney North and Parramatta and Melbourne Inner East. Elsewhere they generally accounted for 4-6 per cent of hours worked.

Employment in tertiary education, an industry also strongly associated with the knowledge economy, was concentrated in the metropolitan centres, selected suburban regions (such as Perth Outer SE) and selected metropolitan periphery regions such as Wollongong and Geelong.

Local income

The office industries were generally above-average in local income generated per hour worked. However, many of them were in the public sector or were otherwise non-profit, so their percentage contribution to GRP was less than their contribution to local income.

After a quarter century of per-capita growth a 2.6 per cent a year, in 2019 the centralised office industries generated local incomes of \$11,900 per capita nationally. Growth was significantly ahead of population growth in Inner Perth and Inner Brisbane but merely matched population growth in Central Sydney, Central Melbourne, Inner Adelaide and the ACT. In Brisbane above-average growth spread into the outer suburbs and indeed to both the Gold Coast and Sunshine Coast and in Perth it spread into the Outer North, but in Sydney it didn't spread much beyond the Inner East and in Melbourne much further than the Inner North. Outside the metropolitan areas growth was generally above-average in regions associated with mining but was minimal in regions lacking in urban centres.

The greatest concentration of the centralised office industries was in Central Sydney, where they generated incomes of \$113,000 per capita of the residential population. Central Melbourne was not far behind with income generation of \$87,000 per capita, with the ACT following at \$41,000, Inner Brisbane at \$39,000, Inner Perth at \$30,000 and Inner Adelaide at \$21,000. The remaining above-average regions were Parramatta, Darwin and Melbourne Inner South. Leaving Parramatta aside, the range for metropolitan regions other than those including the CBD was from \$4,000 in the Melbourne outer suburbs and in Sydney Mid West to \$12,000 in the Melbourne Inner South. In the peri-metropolitan regions the range was again from \$4,000 to \$11,000 - the latter figure attained in Newcastle. The range in the more distant country regions was from \$3,000 (outer SA) to \$10,000 (Townsville, thanks partly to defence activity there). The

range in the remote regions was from \$4,000 to \$11,000 (Pilbara Kimberley) and \$19,000 (Darwin). The high level in Pilbara Kimberley was presumably to support the mining industry, while Darwin is an administrative capital with defence barracks.

Local income generated in the centralised office industries averaged \$70 an hour in 2019, with a considerable regional range. The major concentrations of industry activity were also regions where the industry paid handsomely in income per hour, resulting in income per hour being above the national average in a mere seven of the 67 regions. There was a long tail of regions where local income per hour from the office industries was very ordinary.

- In the metropolitan centres, local income per hour was highest in the ACT (\$99) followed by Central Sydney (\$88) and Inner Brisbane and Central Melbourne (\$73-4), with Inner Perth close to national average at \$69 and Inner Adelaide well below at \$58.
- In two suburban regions (Sydney Inner East, Melbourne Inner South) local income per hour was above national average, and in the rest it was not seriously below the lowest level was \$42 in Melbourne Outer East.
- In one peri-metropolitan city (Newcastle) local income per hour worked was above national average, and again it was not seriously below in most of the other peri-urban regions. The exception was WA SW at \$38 an hour.
- Further away from the metropolitan centres, the highest level of local income per hour in the centralised services was in Townsville \$65 an hour, thanks to the presence of defence personnel. Elsewhere the income generated in the scattered branch offices of the centralised office industries was well below national average, with a minimum of \$29 an hour in Outer SA.
- In the remote regions there were similar differences between Darwin (just short of national average at \$67 an hour, thanks to defence and public administration) and NSW Far West at \$30 an hour.

The office industries were not, in general, targets of the economic reforms of the 1980s and 90s. This said, their strong preference for city-centre locations stressed the metropolitan transport systems and highlighted the failure of the reformers' reliance on private infrastructure investment. They also contributed to the boom in inner-urban residential land prices.

Money management

Employment

The money management industries are close kin to the centralised office industries and are usually included as participants in the knowledge economy. Employment in money management grew at the national average rate during the land boom, at a little less than this rate during the mining boom and well below it during the fin de siècle years. Employees in money management are, on the whole, well rewarded but growth in local income per hour worked as been restrained.

Aided by digital communications and abetted by management philosophies which de-emphasised local knowledge and contacts, finance and insurance have been withdrawing to their citadels in the metropolitan centres. In 2019 they provided 15 per cent of hours worked (and growing) in Central Sydney and 11 per cent (again growing) in Central Melbourne. The industry disdained the ACT but provided 4-6 per cent of hours worked in Inner Brisbane, Inner Adelaide and Inner Perth. Apart from overflow into metropolitan suburbs such as Parramatta, Inner West Sydney and Inner East Melbourne and into peripheral cities including Sunshine Coast, Wollongong and Geelong, finance and insurance provided one or two per cent of hours worked in all other regions.

Rental and real estate are here included with money management on account of their high profitability which, like the profitability of the finance sector proper, was partly a result of neo-liberal policies. However, their geographic distribution was more like that of an area service — one or two per cent of hours worked in almost all regions. Unlike the typical area service with its strong element of government finance, and like finance and insurance, rental and real estate are thoroughly profitoriented. An alternative classification would place them with retail in the distribution sector, but they do not generate enough low-income jobs to qualify for this. As pointed out above, they fit into the scheme of industries as junior partner in the money management industry.

For all the noise and social dislocation which it creates, gambling is a very minor generator of employment.

Local income

Growth in local income generation per capita in the money management industries averaged 2.3 per cent a year in the 25 years to 2019, a little less than the centralised office industries. Despite high levels of value-added, the industry generated much less local income than the centralised offices – \$3,000 per capita. Growth was unequivocally concentrated in the metropolitan centres, particularly Sydney (where some of the growth leaked into the Inner East) and Brisbane. The only other region with growth worth noticing was Darwin. This pattern of growth

accentuated the concentration of the industry in the metropolitan centres. In 2019 the main centres were Central Sydney (\$43,000 per capita) and Central Melbourne (\$27,000). Income generation per capita was above national average in Inner Brisbane, Inner Perth and Inner Adelaide, but not in the ACT or Darwin. In Sydney activity had decentralised slightly into Parramatta and the other inner suburbs and in Queensland real estate and gambling bumped up the level of activity in the Gold Coast. Everywhere else, whether suburban, country or remote, income generation hovered in the \$1,000 to \$2,000 per capita range.

As regards local income generated per hour worked, in 2019 money management was very much a Sydney industry. Local income per hour worked peaked at \$73 an hour in Sydney Central and was above the national average of \$62 an hour in six of the nine Sydney metropolitan regions. The only other regions where it was above national average were the ACT (the wages of lobbyists?) and Inner Perth. In Central Melbourne it was a whisker below national average and in Inner Brisbane and Inner Adelaide a little further below again. In each metropolitan area suburban incomes per hour tended to reflect those in the relevant city centre, but a bit lower. Income generated per hour worked was higher in the NSW and Qld urban peripheries than it was in the peri-metropolitan regions of Victoria, SA or WA. Further out, local income per hour varied from \$40 an hour in the two outer Victorian regions to \$57 an hour in Central Queensland.

Financial deregulation and the withdrawal of governments from infrastructure finance were major features of the 1980s reforms and the money management industries certainly benefited from them. The industry also profited from the policy of demand-creation through mortgage lending, as against more prudent policies which would have seen higher taxation matched by higher redistributive government spending. The privatisation of government-owned competitors also removed from the industry a number of businesses which, at various times in the past, had pursued values other than short-run profit maximisation.

4.2.3 Local-demand industries

As already noted, local-demand industries are typical 'multiplier' industries in that they expand with resident demand and also with demand from the trade-exposed industries. Despite the overall multiplier relationships, some businesses in the local-demand industries serve export demands. Though local income generation in distribution has been growing but slowly, over the past quarter century Australia has increasingly depended on the other three local-demand industries (construction, convivial services and area services) for the generation of local income.

Construction

Employment

Construction is the least export-oriented of the 10 industries, catering for local demand generated by households, business and governments, frequently with assistance from money management. Its basic level of local demand reflects maintenance requirements, to which may be added demands arising from population and income growth, business growth and government investment. One would accordingly expect local income from the industry to grow at roughly the national income growth rate, but over the 25 years to 2019 the rate of growth was somewhat faster, buoyed by monetary policies which encouraged borrowing to invest in bricks and mortar and also by the construction requirements of the mining boom. The rate of growth of hours worked was hectic during the land boom, tapered off during the mining boom then revived during the fin de siècle years. Growth in local income per hour worked was restrained during the land boom, increased to just above national average rate during the mining boom and then collapsed.

Thanks to the mining boom, local income from construction grew particularly rapidly in Pilbara Kimberley, the Queensland and NT Outback and in Darling Downs. Growth was also rapid in the metropolitan centres. On the other hand, activity tailed off in several regions where it had previously boomed, including Sydney North and the Gold Coast.

The three main components of the industry, building construction, civil works and services to construction, are complementary and readily co-locate. This was reflected in the regional patterns of employment, save that civil construction was unusually prominent in Pilbara Kimberley and building construction (most likely extensions and modifications) in some of the inner suburbs and provincial cities. By contrast, services to construction, with their element of pre-fabrication, were prominent in outer suburban and peripheral urban regions.

Local income

Local income generation from the industry in 2019 was \$4,000 per capita. In relation to resident population, the highest levels of activity were in regions with high levels of business activity. Business demand outstripped household demand in Pilbara Kimberley and in the city centres of Melbourne, Sydney, Perth, Darwin and Brisbane though not in Adelaide or the ACT. In the WA regions and along some parts of the Queensland coast activity was around \$5,000 per capita, while elsewhere it was in the \$2-4,000 range.

In 2019 construction generated local income averaging \$44 per hour. There were strong state differentials in the estimated levels, with WA and the NT flying high and

Tasmania sunk improbably low. In order of the reported levels of local income per hour:

- the two NT regions reported \$62-64 an hour;
- the WA regions ranged between \$56 an hour
 (Wheatbelt and \$67 an hour (Pilbara Kimberley);
- the ACT checked in at \$54 an hour;
- the Queensland regions ranged between \$41 an hour (Wide Bay) and \$50 an hour (Inner Brisbane);
- the Victorian regions ranged from \$37 an hour (Vic Inner West) to \$45 an hour (Melbourne Outer East);
- the SA regions ranged from \$36 an hour (Inner Adelaide) to \$39 an hour (Adelaide North);
- in NSW the lowest rate of income generation was
 \$35 an hour and the highest \$46 (Sydney North); and
- finally, the industry generated \$28-9 an hour in Tasmania.

In other words, interstate relativities depended strongly on ABS control totals, while within each state and territory the industry generated remarkably small regional differentials.

The main reform contribution to the construction industries lay in the maintenance of wage restraint.

Local distribution

Employment

Thanks to digital disruption, hours worked in local distribution have been growing at well below the national average rate for decades. Local income per hour worked has been low and getting relatively lower. It grew at roughly half the national average rate, and declined during the fin de siècle years.

Despite recent slow employment growth (0.7 per cent a year), in 2019 retail services contributed 8.5 per cent of national hours worked. They were prominent in the employment mix in regions which depended on commuting for income, such as Sydney North and South East and Melbourne Outer East. They also loomed large in retirement regions such as NSW Northern Rivers. In suburbs and peri-urban regions with strong economic base industries they generally accounted for 8 to 10 per cent of hours worked, in other country regions for between 6 and 8 per cent, and in remote regions other than Darwin for 2 to 6 per cent.

Road transport, in which hours worked were growing at the national average rate, was a similarly widespread industry with strong outer suburban associations: its highest contribution to hours worked was 11 per cent in Melbourne Outer West, associated with warehousing and manufacturing. Similar associations supported road transport in other outer suburban regions in the other

metropolitan cities. In most country regions road transport accounted for around 4 per cent of hours worked, and a little less in most remote regions.

Cleaning was a widespread industry whose contribution to hours worked was similar across all regions, varying little from the national average of just under 4 per cent of hours worked.

Local income

Distribution as a whole is a widespread industry which in 2019 generated local income of \$4,200 per capita. Unlike logistics, where digital disruption was associated with declining employment and increased income per hour worked, between 1994 and 201 both employment and local income grew, albeit slowly – local income increased at a mere 0.6 per cent above the population growth rate. Growth was particularly slow in the metropolitan centres and the inner regions of Sydney but was above average in most outer suburbs. In the peri-urban regions it varied from less than the population growth rate to 1.5 per cent above; in the further country regions it varied from slightly less than the population growth rate to 2 per cent above and in the remote regions it was generally faster than the population growth rate.

Income per resident in nearly all regions fell within the \$3,000 to \$5,000 range. In Central Sydney, Central Melbourne and Inner Perth demand from inbound commuters raised this a little while in the NT Outback income generation in local distribution was low.

In 2019 the industry generated an average local income of \$32 per hour worked, with remarkably little regional variation. Regional concentrations of industry activity were associated with lower earnings.

- In the metropolitan centres local income per hour worked was a little below average, due perhaps to the proliferation of boutique retailing with its substantial number of low-income small businesses. The exception was the ACT, where income generated was roughly 28 per cent over national average.
- The highest regional income from distribution, \$43 per hour, was reported from North Sydney, possibly due to above-average wage levels reflecting high local costs of living. Otherwise suburban regions generated distribution incomes ranging from \$32 per hour (Melbourne Outer West) to \$39 an hour (Sydney Inner West).
- The range was similar in the peri-urban regions.
- In the outer country regions it was similar but a dollar a week or so higher, except in Tasmania where it was \$29 an hour.

The range in the remote regions was from \$29 an hour (Outback NT) to \$41 an hour (NSW Far West) — quite possibly exaggerated by statistical variation due to small sample sizes in estimating hours worked.

One area where the theories of the 1980s reformers were studiously ignored was road finance, and continued public investment in roads underlay the growth of the road transport industry. Both road transport and retailing benefited from wage restraint on the supply side and suffered from it on the demand side.

Convivial services

Employment

Employment in the convivial services grew at around the national average rate during the land boom and the mining boom but surged ahead during the fin de siècle years. Local income per hour worked has been low, but during the land boom increased at national average rate and during the mining boom increased more rapidly than in any other industry. However, during the fin de siècle years it fell rapidly, suggesting that wages and employment in the convivial services are sensitive to labour market conditions. This raises questions about the policy of raising immigration to swamp the low-wage labour market: were the immigrants attracted during the mining boom too few, or unsuited in practical skills, to prevent wages from rising in the convivial industries? Similarly, the concurrence of increasing employment and declining local income per hour during the fin de siècle period smacks of increased low wage employment (including refuge self-employment of people who would otherwise be unemployed) during a period of slack labour demand exacerbated by high immigration.

Though food services and accommodation are significant employers in all regions, their contribution to hours worked varied in 2019 from 3 per cent in Melbourne Outer SE to 10 per cent in Gold Coast and NSW SE. In the metropolitan centres they provided between 5 and 7 per cent of hours worked, spilling into the inner suburbs particularly in Sydney. They tended to be more important on the urban peripheries and in coastal NSW and Queensland than they were in the other country regions, where they typically provided 4-5 per cent of hours worked. They were also important contributors to employment in the remote regions unaffected by the mining boom, providing 7 per cent of hours worked in NT Outback and NSW Far West. Though many cafes, pubs and clubs serve purely local demand, this provides an indication that tourism activity is widespread.

The other personal services were likewise widespread, with a slight tendency to urban concentration – typically 4 to 5 per cent of hours worked in the city centres, inner

suburbs and peripheral cities like Gold Coast and 2 to 3 per cent in outer suburbs and the rest of the country.

Local income

Across Australia local income generation per capita in the convivial services grew at 2.7 per cent a year from 1994 to 2019. Growth was relatively rapid in the metropolitan centres – the convivial services seem to have been moving into space vacated by retailing as it contracted. The industry also tended to move into the inner suburbs of Sydney and Melbourne. Growth in the coastal resorts was generally a little below national average. The only country region to report significant growth was Central Queensland and the only remote region was Queensland Outback.

Local income from the convivial services averaged \$2,400 per capita in 2019. In 49 of the 67 regions the level was below this, though not generally less than half. The convivial services have a major role in supporting the centralised services, hence their concentrations in Central Sydney (\$12,000 per capita) and Central Melbourne (\$9,000) and to a lesser degree in Inner Brisbane, Inner Perth, Darwin, the ACT and Parramatta. They are also associated with tourism, which would help to account for above-average production (in the \$3,000 to \$4,000 range) in Gold Coast, Sydney Inner East, NSW SE, NT Outback and Cairns.

In 2019 local income in the convivial services averaged \$33 per hour worked. As in distribution, regional variation was limited, reported as from \$18 an hour to \$40 an hour. The distribution was skewed, with incomes above national average in five of the nine Sydney regions plus NSW Central Coast, the ACT and (somewhat improbably) Central Queensland – 8 of the 67 regions. Apart from Central Queensland, the highest level – \$39 per hour – was in Sydney North, where, as in distribution, the wage-enhancing effects of high local costs of living combined with the costs of getting to the northern beaches from parts of Sydney where rents are a little more affordable combined to increase cash income. Income per hour was on the low side in most outer suburbs and in the country.

Like distribution, the convivial services benefited from wage restraint on the supply side and suffered from it on the demand side. The recreation and artistic side of the industry is also dependent on public grants and suffered as the reformers prioritised commercial entertainment over culture more broadly defined.

Area services

Employment

Hours worked in the area services increased at well above the national average rate throughout the period. Local income per hour worked increased at the national average rate during the land boom and at more than the national average rate during the mining boom but declined during the fin de siècle years. Given the dependence of most area services on public finance these are surprising trends for a neo-liberal era and underline strong political demand for police, education and health services. The circle has to some extent been squared by providing government finance in the form of tax concessions and by subcontracting many services so that they are not directly provided by the public sector.

Police are responsible for local law and order and are accordingly widespread, accounting for 1-2 per cent of hours worked in nearly all regions. The percentage rises to 3 per cent in Outer West Melbourne (which is known for its collection of privatised prisons) and also in the two NT regions.

Employment in school education follows the children, though with a lag – school capacity does not always keep up with the juvenile population, with the result that many outer suburban children commute to inner suburban schools, or sometimes outwards to established schools on the urban periphery. As with other area services, the proportion of school employees in the workforce tends to be relatively high in regions which depend on commuter incomes and lack trade-exposed industries. In 2019 the contribution of school education to hours worked was well above average in SEQ Inland and Sydney North and was substantial in Perth Outer North, the Sunshine Coast, the Sydney Highlands and Melbourne Inner East. It was decidedly low in the metropolitan centres of Sydney and Melbourne, partly as a consequence of the dominance of other activities but also because such children as lived in the central-city children tended to commute to schools in the more spacious inner suburbs.

Hospitals can be very large institutions and therefore have the potential to dominate employment in neighbourhoods if not in whole regions. They are, however, a state government responsibility and by and large are equitably spread across regions, though with a lag so that outer suburban residents and residents of metropolitan-periphery regions which lack established towns often find themselves referred to a hospital in an adjacent region. In 2019, in most regions hospitals supplied around 3 per cent of hours worked. The regions with the highest reliance on hospital employment were Inner Brisbane and Melbourne Inner North (both 6 per cent) and those with least reliance were Pilbara Kimberley, Inland SEQ, Sydney Highlands, Melbourne Outer West and Perth South Coast (1 per cent).

Medical services are widespread. In 2019 they were responsible for around 3 per cent of hours worked in Central Sydney and Central Melbourne and more like 5 per cent in inner Brisbane, inner Adelaide and Inner Perth. Their contribution to hours worked was well above average in Sydney North and Outer South East, Melbourne Inner North and Inner East, NSW Central Coast and in Townsville and was below average in Pilbara Kimberly,

Gascoyne Goldfields and Queensland Outback but not in NT Outback.

Residential care was definitely not a central city activity but contributed to hours worked in most other regions, peaking at 4 per cent of hours worked in Adelaide Ranges, NSW Central Coast and NSW Mid North Coast.

Social assistance accounted for 1 per cent of hours worked in Central Melbourne, Central Sydney, Pilbara Kimberley and Gascoyne Goldfields, but contributed around 3 per cent in most regions and up to 5 per cent in Sydney North, Melbourne Inner North, the NSW Central Coast, Mid North Coast and Northern Inland. One may suspect that child care was prominent in the metropolitan regions and home care in the country regions.

Local income

The area services are primarily services to residents rather than to business and are largely government-funded, directly or indirectly. One would therefore expect that, adjusted for population growth, income generation would grow at similar rates in all regions. The range reported for the quarter century from 1994 was, however, from 1.9 per cent (Melbourne Central) to 5.2 per cent (Darwin). Given that many area services are state responsibilities, it is not altogether surprising to find that rates of growth in local income generation followed state patterns. In the Melbourne metropolitan area they ranged from 1.9 per cent a year to 3.3 per cent (and to 3.8 per cent elsewhere in Victoria). In NSW the range for the Sydney metropolitan area was from 2.4 per cent to 3.7 per cent (and for NSW from 2.1 per cent to 4.0 per cent). Growth rates per capita hovered a little above national average in SA, WA and South East Queensland and were well above in the rest of Queensland, in Tasmania and the NT.

In population-serving activities with a high level of government provision one would expect the level of income generation per capita to be similar across all regions – not far above or below the 2019 average of \$8,800 per capita. For this to happen, service provision needs to follow population growth, but it doesn't. Due to economies of scale, particularly in health services, service expansions tend to concentrate in and around existing major hospitals. Even when economies of scale are absent, employment tends to follow population growth with a lag. Thanks to these two factors, in 2019 local income generation per capita was well above national average in the metropolitan centres, reaching \$26,000 in Central Melbourne, though growing only slowly. In Melbourne and Sydney area service activity was partly decentralised into the inner suburbs (in Sydney, particularly to Parramatta); in NSW there had also been some success in decentralising activity from the metropolitan area to Newcastle and the Central West, and in Queensland from Brisbane to Townsville. In Tasmania both the South and the North reported income generation above national average levels.

Among the remote regions, activity was above national average in Darwin, the NT Outback and the Queensland Outback. At the other end of the scale, low levels of area service activity of around \$5,000 per capita were reported from SEQ Inland, the Sydney highlands, Melbourne Outer West and Perth South Coast. It is likely that residents of these regions depended on area services provided in adjacent, more established regions, local provision having lagged population growth.

In terms of local income per hour worked, the distribution was somewhat different.

- In the metropolitan centres, local income per hour worked varied from \$48 in Sydney Central to \$60 in inner Perth.
- In the metropolitan suburbs, the range was from \$55 (Perth South Coast) to \$74 (Melbourne Outer West).
- In the peri-urban regions, the range was from \$53 (Newcastle) to \$72 (Gippsland, also SW WA).
- In the outer country regions, the range was from \$46 (Townsville) to \$78 (Tasmania North).
- In the remote regions, the range was from \$62 (Darwin) to \$82 (Far West NSW).

There was some indication here of relatively low income per hour worked in the major centres of area service provision and of high incomes in remote areas. These latter presumably compensate professional personnel for working far from their preferred city mileau. The low hourly incomes in the major centres is unexpected – presumably the ratio of low-paid assistants to professionals was higher in these areas.

In area services one major aim of the 1980s and 90s reformers was satisfied: their desire to shift production from public to private sector provision was achieved by contracting out. However, their desire to reduce taxes led to a stalemate. Each publicly-financed service had its political constituency and most were stoutly defended, even to the point of demanding tax increases to fund better services. The result was a standoff: the reformers did not gain their desired plunge in the ratio of tax revenue to GDP, but tax increases were resisted even if they took the form of the withdrawal of dubious tax concessions. Opportunities for automation were limited and service providers had difficulty in maintaining, let alone extending, services. Treasuries federal, state and local were left with the uncomfortable task of reconciling demand for better services with political commitments to tax cuts.

4.3 A quarter century of work hours

Taking all industries together, hours worked in Australia as a whole increased at an average rate of 1.7 per cent a year

from 1994 to 2019. Regional rates of growth varied between 3.5 per cent a year in Perth South Coast and a decline (-0.5 per cent a year) in NSW Far West. In Perth South Coast the major economic base industry was manufacturing, supported by logistics and mining services. It is unexpected to find a manufacturing region with rapid growth in hours worked, but in this case manufacturing held its own and hours worked in the region increased rapidly as a result of the increased local demand from a rising commuter population, in its turn due in no small measure to the opening of a fast rail line to Perth CBD. In NSW Far West the economic base industries were agriculture and mining. Hours worked in mining were maintained but agriculture succumbed to drought and the failure of government water-management authorities to maintain flow in the lower Darling.

The metropolitan centres

During the quarter century, hours worked increased by a little over 3 per cent a year in both Central Melbourne and Central Sydney, reflecting the rise of the centralised office services and money management as economic base industries in metropolitan centres. The increase in hours worked was also above the national average rate in Inner Brisbane and Inner Perth, but was below in the ACT and Adelaide. In the case of the ACT this was due to Canberra's failure to diversify away from Commonwealth government administration and defence, leaving it exposed to the federal government policy of limiting tax-financed activity and passing responsibility to the states and to the private sector. The slow growth of Adelaide as a metropolitan sector reflected the weakness of the SA economic base as a whole, coupled with the drift of centralised office services and money management to Sydney and Melbourne.

The Sydney suburbs and periphery

Among the Sydney suburban regions hours worked increased at above the national average rate in the Outer West and Outer South West, both growing outer suburbs, and also in Parramatta. Hours worked grew particularly slowly (0.4 per cent a year) in the North whose residents sought to maintain their suburbs as pristine residential areas and accordingly commuted out not only for employment but for most other employment-generating activities as well. More seriously, hours worked grew very slowly (0.3 per cent a year) in the Mid-West, a region with a hitherto sound economic base in manufacturing. In this region hours worked in manufacturing declined by 2.6 per cent a year and no other industry stepped in to fill the gap. The fate of the Mid-West contrasted with Parramatta to its immediate north. In this region, the gap in the local economic base from the decline of employment in manufacturing was made up by the expansion of the office service industries already established at Parramatta.

In three of the Sydney periphery regions (Newcastle, Wollongong and the Central Coast) hours worked grew at less than the national average rate thanks to declining employment in their manufacturing base, somewhat offset by increases in office service employment. In the Sydney Highlands hours of work grew mainly in the local-demand services, serving an increasing population of ex-urban commuters. Employment growth in NSW SE also depended on commuting and ex-urban living but distance from Sydney and slow employment growth in the ACT limited the growth of local-demand industries and resulted in growth in hours worked at the low rate of 0.9 per cent a year.

The Melbourne suburbs and periphery

The lowest rate of growth of hours worked among the Melbourne suburban regions was 0.8 per cent in the Outer East, a region which bears comparison with Sydney North – both were commuter suburbs of relatively high socioeconomic status where fringe expansion had stopped for environmental reasons. The rest of the Melbourne fringe had one rapidly growing outer suburban region (Outer West) and two more where hours were growing more rapidly than national average. In Melbourne Outer West the main economic base industry, manufacturing, held its own in terms of hours worked during the quarter century but was overtaken by a new lead industry – logistics. The story was similar in Melbourne Outer North (though with a little less emphasis on logistics and more on food processing) and even in Melbourne Outer South East, though here the switch to a logistics base was much less pronounced. As in the Outer East, growth in Melbourne Outer South was limited for environmental reasons.

On the Melbourne periphery, Geelong suffered severely from the decline of manufacturing but increasingly became involved in the provision of office services and even money management. The economic base of Gippsland, when measured in GRP, was weighted towards the Bass Strait oilfields and the La Trobe valley power stations, though judged by hours worked the region's economic base was in agriculture, in which hours worked were constant. In both petroleum and power production value added declined during the quarter century, but in petroleum production hours worked actually increased and the decline in hours worked in electricity production was made up by increased area service hours as the region became popular for exurban commuting, tourism and retirement. In Victoria Inner North and Inner West hours worked in the main economic base industry, agriculture, increased gently, supplemented by increases in the area services due to increased numbers of ex-urban commuters and (in Ballarat) increased employment in office services.

South East Queensland suburbs and periphery

In all three Brisbane suburban regions hours worked grew at above the national average rate. In all three regions, but particularly the Outer West, increased employment in logistics supplemented steady employment in manufacturing, but growth in hours worked mainly came from increased area service employment and hence increased commuting.

On the Brisbane periphery, the Gold Coast continued to diversify its economic base: hours worked in gambling were constant but employment in financial services increased and hours worked also increased in manufacturing, logistics and (especially) in office services. On the Sunshine Coast there was less diversification, with continued reliance on area services employment financed from tourism and retirement incomes. Though agriculture continued as the mainstay of the economic base of Inland SEQ, the region relied on area services supported by the increasing ex-urban population for growth in hours worked.

Perth suburbs and periphery

Among the Perth suburbs, the reasons for the rapid growth of hours worked in Perth South Coast have already been mentioned. Hours worked in the other two Perth suburban regions did not increase quite so rapidly (they grew at the national average rate) but as in Perth South Coast a mixture of reasonably robust manufacturing and increased commuting which raised local-demand activity also applied in Perth SE. There was more emphasis on commuting in Perth Outer North. The economic base in WA SW, on the southern periphery of Perth, included agriculture, manufacturing and mining (bauxite). Hours worked in mining increased rapidly during the quarter century, hours worked in agriculture less rapidly and hours in manufacturing were constant, yielding (multipliers) growth in hours worked of 2.1 per cent a year.

Adelaide suburbs and periphery

Hours worked in the economic base of Adelaide North, non-food manufacturing, declined during the quarter century. An increase in food processing, combined with increased commuting (which boosted the local-demand services), brought the rate of growth of total hours up to 1 per cent a year, equal to Inner Adelaide. In 1994 the Adelaide Ranges had a solid agricultural base, but increased commuting meant urban land conversion which limited hours worked in this economic base industry. Though commuting raised activity in the local-demand industries, the resulting overall growth in hours worked was slow, at 0.7 per cent a year.

Country regions

Beyond the metropolitan peripheries but short of the remote regions there were, broadly, two groups of country regions: those largely dependent on agriculture as their economic base and those which were somewhat diversified, one way or another. In 1994 a dozen country regions depended on agriculture and nothing much else for their economic base. By 2019 one of these, Mackay, had diversified into coal mining but the rest remained basically agricultural, in some regions (such as Outer SA) supplemented by manufacturing. As noted above, neither agriculture nor manufacturing could be relied on to increase hours worked, and in none of these eleven regions did hours worked increase more rapidly than national average – the highest rate of growth was 1.5 per cent a year in Darling Downs, thanks to construction linked to coal seam gas extraction. The other regions in this bracket, listed in order of growth in hours worked, were NSW Northern Inland (0.2 per cent), SA Outer (0.3), North Tasmania (0.3), Victoria Outer West (0.4), NSW Central West (0.6), NSW SW (0.7), WA Wheatbelt (0.7), Victoria Outer North (1.0), Wide Bay (1.2) and Cairns (1.3) – the latter two benefiting from tourism.

In three of the more diversified country regions (Central Queensland, Mackay and Inland Hunter) the economic base was dominated by coal mining. Over the quarter century, hours worked in mining increased rapidly but the other industries did not follow this lead, resulting in overall growth in hours worked of 1.3-1.6 per cent.

In NSW Mid North Coast and NSW Northern Rivers agriculture remained prominent in the economic base but retirement incomes fostered the growth of local-demand services, resulting in growth in hours worked of 1.2-1.4 per cent a year. In Townsville agriculture played second fiddle to manufacturing and office services (including defence) and hours worked grew by 1.6 per cent a year. Southern Tasmania includes the capital of the state and hence office services were a major part of its economic base but hours worked increased slowly, at 1.0 per cent a year.

The remote regions

Among the remote regions, Darwin is the capital of the NT and as such its economic base lies in office services (including defence), supplemented by mining. Hours worked grew rapidly over the quarter century (2.9 per cent a year). The economies of the other remote regions all oscillated between dependence on mining and pastoral agriculture. The parlous consequences for NSW Far West have already been mentioned and in Queensland Outback, NT Outback and Gascoyne Goldfields specialisation in unfashionable minerals resulted in low rates of growth of hours worked. The star performer, mentioned many times in these pages, was Pilbara Kimberley, which reported the second-highest rate of growth of hours worked among the 67 regions.

4.4 A quarter century of local income

Over the quarter century from 1994 to 2019 hours worked in Australia grew by 1.7 per cent a year but local income grew by 3.4 per cent a year, adjusted for inflation. Local income per hour worked accordingly grew by 1.7 per cent a year. As reported in Table 4.1, it increased most rapidly in logistics, followed by money management, the convivial services and area services. Local income generation grew a little slower than the national average rate in manufacturing, office services and agriculture, slower again in distribution and construction, and not at all in mining. We have already noted that this pecking order bore no relation to the ranking of income per hour – indeed there was a tendency for total income generated to grow more rapidly in industries with low income per hour, thus contributing to the low overall rate of growth in national productivity. Regional rates of growth of overall income per hour worked depended on the industry mix of each region and were affected by changes in regional industry mix, as well as by region-specific factors.

Growth in local income per hour

Average local income per hour increased most rapidly in jobs located in Inner Perth, largely due to the increased importance of mining in the industry mix (income per hour in mining may have been declining, but was much higher than in the industries it displaced). Mining also contributed to rapid income growth in Central Queensland and Darwin, though in both these regions local factors were also at play. The fourth region to report high growth in income per hour (2.5 per cent a year) was the ACT. Given that the Australia-wide growth rate of income per hour in the ACT's prominent industry of public administration was fairly low, this increase was due to factors specific to Canberra. The Commonwealth government, while restraining hours worked, appears to have increased the average rate of pay per hour, perhaps simply by abolishing support-level jobs and by crediting workers with large superannuation contributions and also by substituting contractors for employees.

In the other metropolitan centres growth in income per hour was over the national average in Inner Brisbane, which benefited from an infusion of mining industry jobs, but at 1.4-1.6 per cent was below average in Central Sydney, Central Melbourne and Inner Adelaide. Relatively rapid growth in hours worked in low-paid convivial services contributed to this.

In most of the suburbs of Brisbane and Perth, and on their peripheries, income per hour increased at above the national average rate, possibly as spinoff from the mining boom. In the inner Melbourne suburbs income per hour grew at around the national average rate, with lower rates

in the outer suburbs and on the periphery. In and around Adelaide growth was a little below national average and in and around Sydney generally below – as low as 1.0 per cent a year on the Central Coast.

Growth in income per hour in the country agricultural regions ranged between 0.9 per cent a year (SA Outer, Outer West Victoria) to 2.0 per cent (North Tasmania, Darling Downs, Wide Bay and Cairns). There was a tendency for the regions with higher rates of growth in hours worked to record relatively rapid increases in local income per hour – diversification, even if moderate, pays.

The lowest rate of growth in income per hour among the country diversified regions was 1.4 per cent in NSW Mid North Coast. Among the three coal mining regions income per hour grew rapidly in Central Queensland but at close to the national average rate in Mackay and Inland Hunter. As already noted in discussing hours worked, in these two regions the prosperity of the coal mining industry did not spin off into other areas of activity whereas Central Queensland had a broader economic base from which to diversify.

In the remote regions, income per hour increased rapidly in Darwin and also in Pilbara Kimberley, where the mines were expanding. In NT Outback and Qld Outback it grew at the national average rate and in Gascoyne Goldfields and NSW Far West at the low rate of 1.1 per cent a year.

Local income by region of workplace

Combining the changes in hours worked and income per hour, local income from the jobs in each region grew most rapidly in two WA regions (Pilbara Kimberley and Perth South Coast) and in Darwin, all at rates above 5 per cent a year and all related to the mining boom. Local income in the metropolitan centres of Melbourne, Brisbane, Sydney and Perth grew at between 4.5 and 4.8 per cent a year, in the ACT at just under 4 per cent and in Inner Adelaide at 2.7 per cent – the only metropolitan centre to report income growth at less than the national average rate.

In the suburbs and on the peripheries of Perth and Brisbane local income grew at above the national average rate, as it also did in the outer west, north and south-east of Melbourne and (on Melbourne's periphery) in Geelong. In the other suburbs and on the rest of the periphery of Melbourne, and in the suburbs and on the periphery of Sydney, the rate was below national average. It was particularly low in Sydney Mid-West, basically due to lack of growth in hours worked.

Among the coal-mining regions growth in local income was below national average in Inland Hunter, close to national average in Mackay and above in Central Queensland. Among the other diversified country regions growth was close to national average in Townsville but, thanks to a low rate of growth in hours worked, well below average in Tasmania South.

In the agricultural country regions the rate of growth of local income varied from 1.2 per cent a year in SA Outer to 3.5 per cent in Darling Downs, a wide range related to the growth rate of local industries other than agriculture.

As already noted, the remote regions included two (Darwin and Pilbara Kimberley) in which local income grew rapidly. In three regions, Gascoyne Goldfields, NT Outback and Qld Outback, it grew modestly, and in NSW Far West it grew very slowly, at 0.6 per cent a year.

4.5 Change in regional shares of local income

There has been a great deal of debate about the extent to which the neo-liberal quarter century was marked by increases in economic inequality. The debate has largely been at the macro level: inequality between nations and, within Australia, inequality between households and individuals without reference to where they are living. The debate is supported by data from sample surveys which, however, yield little of significance at the regional level.

Despite data limitations, there is latent interest in regional inequality, for some because the Australian political system depends on geographic electorates but for others because needs for services, not to speak of assessments of community quality of life, are commonly made on a residential basis. Accordingly, the primary definition of regional inequality of income is based on the residents' incomes. Two generalised assessments using this definition have already been given in the introduction to this report, and further detail will be provided in Chapters 5 and 6, which cover household income on a residential basis. The data in the present chapter are different: they cover local income generated by region, whether or not it accrues to residents of the region.

On this basis, there is still a question worth asking: did the concentration of local income generation by region increase from 1994 to 2016, or not? Table 4.5 gives an unambiguous answer: during the quarter century, the proportion of local income generated in the metropolitan centres increased from 25 per cent to 32 per cent - from a quarter to one-third. The remote regions and the three major coal-mining regions retained their share of local income: growth in hours worked in the mining industry was sufficient to maintain the share of these regions but not to increase it. The share of all other types of region declined. Given the poor fortunes of agriculture, the decline in the regions economically based on agriculture was not a surprise, but the failure to maintain the share in the metropolitan suburbs and on the peripheries was less easy to explain, given continued population growth in those regions. The decline of that quintessentially suburban industry, manufacturing, is largely to blame.

Table 4.5 The distribution of local income by placeof-work, Australian regions, 1994-2019

			Difference
Region type	1994 (%)	2019 (%)	(percentage points)
Metropolitan centres	25.2	31.7	6.5
Metropolitan suburbs	39.7	37.5	-2.2
Metropolitan periphery	14.1	13.2	-0.9
Country: diverse	3.4	3.0	-0.4
Country: coal regions	2.4	2.4	0.0
Country: agricultural	11.8	8.6	-3.2
Remote	3.3	3.4	0.1
Total	100.0	100.0	0.0

Notes:

Metropolitan centres = sum of Central Sydney, Central Melbourne, Inner Brisbane, Inner Perth, Inner Adelaide and the ACT.

Metropolitan suburbs = suburban regions of the above metropolitan areas.

Metropolitan periphery regions = In NSW, Sydney Highlands, Central Coast, Newcastle, Wollongong and NSW SE (regarded as peripheral to the ACT as much as to Sydney), in Victoria Geelong, Gippsland, Inner North and Inner West, in Queensland Gold Coast, Sunshine Coast and SEQ Inland, in SA Adelaide Ranges, and WA SW.

Diverse country regions (country regions with a diverse economic base) = NSW Mid North Coast and Northern Rivers, Townsville, South Tasmania.

Coal country regions (regions dependent on coal mining for their economic base in 2019) = NSW Inland Hunter, Central Queensland, Mackay

Agricultural country regions (country regions distant from the metropolitan centre with an agricultural economic base) = in NSW the Central West, SW and Northern Inland, in Victoria the Outer North and Outer West, In Queensland Darling Downs, Wide Bay and Cairns, plus SA Outer, WA Wheatbelt and Northern Tasmania.

Remote regions = NSW Far West, Queensland Outback, Darwin, NT Outback, Pilbara Kimberley and Gascoyne Goldfields.

Changes in the distribution of local income across the metropolitan regions are detailed in Table 4.6. As already noted in Table 4.5, the share of the metropolitan regions in local income rose from 79 to 83 per cent at the expense of the country regions, with the whole, and more, of this increase in share accruing to the inner metropolitan regions. Knowledge-economy industries dominated employment growth in the quarter century, led by office services with substantial support from money management. This caused major problems for state governments: how to deal with the increased flow of citycentre commuters and how to deal with the buoyant demand for housing close to the city centres. Leaving commuter transport to the market created road congestion and leaving the demand to for innermetropolitan accommodation to the market produced a rapid increase in the price of inner-urban residential land which had the desired effect of promoting high-density redevelopment but also raised the price of housing and increased the inequality of household wealth.

Among the metropolitan areas, South East Queensland (Brisbane and its periphery) had the greatest gain in the share of local income, followed by Perth. Melbourne also gained share, with the increase in the share of the city centre outweighing loss of share in the suburbs and periphery. Though Sydney remained by far the largest metropolitan area as measured by local income generated, (especially if the ACT is included), during the quarter century it lost share by 1.1 percentage points - the gain in share in its CBD region was roughly equal to that in Melbourne, but the loss of share in its suburbs and on its periphery (including Newcastle and Wollongong) was much greater. Finally, the Adelaide metropolitan area lost share in the middle, in the suburbs and on the periphery, reflecting the continued dependence of the SA economy on agriculture and manufacturing.

Table 4.6 Distribution of local income, by place-of-work, across the metropolitan regions, Australia, 2019, and change, 1994-2019

	Share of local income, 2019 (per cent)				Growth in local income, 1994-2019 (percentage points)			
Metropolis	Centre	Suburbs	Periphery	Total	Centre	Suburbs	Periphery	Total
Sydney	9.3	13.9	5.1		+2.2	-2.6	-1.1	
ACT	2.8			31.1	+0.3			-1.1
Melbourne	7.7	12.8	2.8	23.3	+2.2	-0.7	-0.4	+1.1
Brisbane	4.7	4.9	3.6	13.3	+1.2	+0.7	+0.9	+2.8
Perth	4.6	4.5	0.7	9.8	+1.1	+0.9	+0.1	+2.1
Adelaide	2.6	1.5	1.0	5.1	-0.5	-0.4	-0.4	-1.3
Total	31.7	37.5	13.2	82.6	+6.5	-2.2	-0.9	+3.6

Notes: Regions allocated to centre, suburbs and periphery as per Table 4.5. Though the ACT is not part of the Sydney metropolitan region, it shares a peripheral region, NSW SE, with Sydney.

5. Income received by region of residence

Chapter 4 of this report concerned trends in hours worked and income generated by region of production, covering both the industries which provide the economic base of each region and the industries in which employment depends mainly on local demand. The main measure employed was local income, defined as Gross Regional Product less corporate gross profits, or alternatively as the sum of wages and salaries paid at worksites within the region and the mixed labour and capital incomes of businesses (including non-profit businesses) operating in the region. These incomes provide the basis of local prosperity, not only for the region of production but to some extent for other regions as well, due mainly to interregional commuting.

Local incomes are not the whole of national income. As emphasised in Chapter 2, corporate profits are not included in local income. Part of corporate profits are retained by businesses for re-investment, part are remitted to governments in corporate taxation and part are paid to overseas creditors and business owners. The remainder reaches residents as dividends, interest payments and the like and also as the payouts of superannuation schemes.

Finally, governments raise revenue by direct and indirect taxes. Most direct taxes are extracted from local income via pay-as-you-earn deductions, while taxes on corporations as well as indirect taxes such as the GST do not affect local income – they are essentially treated along with corporate profits. Governments recirculate some of their tax revenue to residents as social security payments and also finance government production, including a substantial proportion of the output of area services.

A further complication concerns dwelling rents. As noted in Section 2.2, Item 11 above, the complications arise in two ways:

- by convention, dwelling ownership does not generate employment in the 'dwelling ownership' industry. All employment in the construction and maintenance of dwellings is credited to the construction industry while management expenses are either borne by the owners (as for self-managed investment portfolios) or contracted out to the real estate industry; and
- though approximately one-third of Australian housing is provided by landlords, who could be treated as local small businesses, two-thirds is provided by owner-occupiers who do not like to think of themselves as business operators. The National Accounts treat them as split personalities, who in their capacity as householders pay rent to themselves in their capacity as landlords.

The accounting convention has been to treat dwellings as a separate component of the National Accounts, excluded from the concept of local income discussed in this report so far. Instead, the rents of tenanted dwellings are bulked in with the imputed rents of owner-occupied dwellings and made available for inclusion in income, or exclusion from it, as the users of the statistics see fit. Since they concentrate on cash flows, the *State of the Regions* reports do not include dwelling rents in local income.

5.1 Commuting

There is a considerable literature on commuting as a component of the demand for transport, not to speak of commuting as the time-cost of the separation of activity sites. Our present interest, however, is in the role of commuting in shifting local income from the regions in which it is generated to other regions where it contributes to residential income. In many regions there is very little cross-border commuting and hence very little transfer of income across regional boundaries, but in others the crossboundary flows are considerable. Much will obviously depend on how the regional boundaries are drawn – the tighter the boundary around a major employment centre the greater the amount of cross-border income transfer. Again, commuters cross regional boundaries in both directions – some live in A and work in B, while other live in B and work in A. Transport economists are interested in both flows, but for present purposes it is enough to consider net flows in or out. Though some city centre residents work in the suburbs, the net flow of commuters is from suburb to centre and the net flow of income is accordingly from city to suburb.

5.1.1 Interregional transfers of local income by commuting in 2019

On this basis, and with the boundaries as drawn for the *State of the Regions* reports, in 2019:

two-thirds of the local income generated in both Central Sydney and Central Melbourne accrued to suburban residents. In Inner Brisbane and Inner Perth this reduced to a little less than 40 per cent, in Inner Adelaide to 30 per cent, and in the ACT to 7 per cent due to the relatively small size of Canberra and its relative lack of suburbs outside the ACT;

- only one suburban region generated a net outflow of local income. This was Parramatta, with just over
 per cent of the income generated in the region accruing elsewhere; and
- two remote regions generated substantial outflows of local income thanks to long-distance commuting by fly-in fly-out workers. These were Pilbara Kimberley (38 per cent of local income generated) and Gascoyne Goldfields (27 per cent). There were smaller net outflows from NT Outback and Queensland Outback.

Turning from outflows to inflows, three regions depended on commuting for around 50 per cent of local income received by residents. These were all in or around Sydney: the SE suburbs, the North and the Highlands, with the Inner West not far behind. In the Melbourne metropolitan area the Outer East was the region most dependent on commuting for local income (41 per cent of resident local income from commuting), followed by the Inner North and the Outer West (both around 32 per cent). The other metropolitan areas all had regions dependent on commuting for around 40 per cent of local income – around Brisbane, SEQ Inland, around Adelaide, the Ranges, and around Perth, the Outer North.

A number of outer suburban and metropolitan-periphery regions came close to balance between inbound and outbound commuting, notably Newcastle (which contributed commuter incomes to residents of Inland Hunter and the NSW Mid-North Coast, but received them from Sydney) and Melbourne Outer South East (which contributed commuter incomes to Gippsland but received them from elsewhere in Melbourne).

In the absence of fly-in fly-out the local incomes generated in remote regions and in country regions beyond the metropolitan peripheries mostly accrued to people living the same region.

5.1.2 Changes in commuting 1994-2019

With the increase in the concentration of local income generation in the metropolitan centres from 1994 to 2019 (see Chapter 4) it was inevitable that the flow of income outwards from these six centres would increase, as it indeed did by 38 per cent. The only suburban or metropolitan-periphery region to generate an increase in net commuter incomes accruing outside the region was Parramatta. Despite these increases in the flow of commuter incomes out of the metropolitan centres, except in Sydney the proportion of local income generated in the central region which flowed to the outer suburbs did not increase much, thanks to population increases in the inner suburbs.

As a corollary, resident dependence on commuter incomes increased in most suburban regions. The increase was

particularly noticeable in Inner North Melbourne and Inner West Sydney, where reductions in local employment were balanced by increases in commuting, in both cases associated with gentrification and the decline of local manufacturing. A particularly noticeable case was Sydney Mid-West, which in 1994 was, on balance, more than self-sufficient in employment. As recorded in Chapter 4, during the following quarter century its manufacturing base collapsed and was not replaced, leading to increased dependence on commuting. By contrast, the Sydney Outer South West managed to increase its retention of locally-generated income.

In several suburban and peripheral regions population growth outran job growth leading to increased reliance on commuting for income. These regions included Sydney North, Sydney Highlands, SEQ Inland and Perth South Coast.

Outside the metropolitan areas the development of fly-in fly-out in the two WA remote regions brought a similar percentage increase in the transfer of local incomes out of the regions. Smaller increases were associated with mining developments in Mackay and Darling Downs.

As observed in Chapter 4, during the quarter century to 2019 the growth of the centralised service industries, combined with the relative decline of agriculture, increased the concentration of income generation in the metropolitan areas – the proportion of local income so generated rose from 65 to 69 per cent (Table 5.1). Commuting transferred around 5 per cent of this to the metropolitan periphery regions. There was a small reverse flow, around 1 per cent of the total, as fly-in fly-out workers transferred income from the remote regions to the metropolitan areas, chiefly Perth.

Table 5.1 Percentage of total national local income generated/received in metropolitan regions, Australia, 1994 and 2019

Basis 1994 2019

Place-of-work 64.9 69.1

Usual residence 61.6 65.6

Note:

Metropolitan regions: inner and suburban Sydney, Melbourne, Brisbane, Adelaide, Perth and the ACT, excluding peripheral regions.

Within the metropolitan areas the effect of commuting in spreading income from the city centres to the suburbs was much more noticeable (Table 5.2). In 2019 31.6 per cent of all Australian local income (that is, the best part of half of all metropolitan local income) was generated in the six metropolitan centre regions, but only half of this (15.7 per cent) was received by residents of those regions. The remaining half was carried into the suburbs by commuters.

As already observed in Chapter 4, the proportion of local income generated in the six central metropolitan regions rose during the quarter century to 2019 by 6 percentage points, indicating an increase in the regional inequality of income generation. The corresponding increase in the proportion of income received in these six central-metropolitan regions was 2 percentage points, again indicating an increase in regional inequality.

In the fourth and fifth columns of Table 5.2 attention shifts from the six central metropolitan regions to the six largest regions as measured by local income. On a place-of-work basis this makes little difference to the list, but on an income-received or residential basis it changes the list

significantly. The message remains the same, income concentration by region has increased on both a place-of-work and residential basis.

Columns six and seven of Table 5.2 check the other end of the distribution: the half dozen, mostly remote, regions with low shares in national local income. As expected, given the increase in the share of the metropolitan regions, the share of these regions fell over the quarter century. Despite the effect of fly-in fly-out in one or two of the remote regions, residential incomes were more or less balanced against place-of-work incomes.

Table 5.2 Percentage of total national local income generated and received by regional groups, Australia, 1994 and 2019									
	Metro	centres	Six larges	Six largest regions Six smallest regions		st regions			
Year	Place-of-work	Residential	Place-of-work	Residential	Place-of-work	Residential			
1	2	3	4	5	6	7			
1994	25.5	13.6	26.3	14.4	3.1	3.0			
2019	31.6	15.7	31.6	16.7	2.4	2.5			

Notes:

Groups are the six metropolitan central regions, the six largest and the six smallest regions measured by local income generated/received.

Region membership: columns 2 and 3: Sydney Central, Melbourne Central, Brisbane Inner, Perth Inner, Adelaide Inner, ACT.

Region membership col 4, 1994, as for col 2 except that Parramatta replaces ACT. For col 4 2019, as for col 2.

Region membership, col 5, 1994, Sydney Central, Outer North, South East, Parramatta and Melbourne Central and Inner East. Col 5, 2019: Sydney Central and Outer North, Brisbane Inner, Perth Inner and Outer North, ACT.

Regional membership, col 6, 1994: NSW Far West, Inland SEQ and Qld Outback, WA Gascoyne Goldfields, NT Darwin and Outback. Col 6, 2019, as for 1994 except that NSW Northern Inland replaces Darwin.

Region membership, col 7, 1994: NSW Far West, Queensland Outback, WA Pilbara Kimberley and Gascoyne Goldfields, NT Darwin and Outback. Col 7 2016: as for 1994 except that NSW Northern Inland replaces Darwin.

In relation to population, in 2019 incomes generated at places of work in Central Sydney amounted to \$219,000 per resident, and in Central Melbourne to \$183,000. Redistribution of these incomes to other regions by commuting meant that Central Sydney residents received local incomes of \$74,000 per capita and Central Melbourne residents \$60,200. At the other end of the scale, in 2019 the two regions with the lowest place-of-work local incomes per capita were Inland SEQ (\$21,100) and Adelaide Ranges (\$21,300). Commuting augmented these incomes to \$35,600 and \$35,700 respectively.

By its nature, commuting broadened the economic base of commuter-source regions without necessarily narrowing it in the recipient regions. Its effect on local income per hour worked depended not only on the industry mix of the commuters, but on where they fitted in the distribution of incomes within their industry. Per hour worked, resident average income tended to be higher than place-of-work income in regions where the socio-economic status of residents was higher than that of the jobs within the region. In 1994 this applied in all four coastal Sydney regions and in Melbourne in the Centre, Inner South and the east. In Adelaide the inner region had relatively high status. Brisbane and Perth did not have equivalent high-

status regions, though that could be due to the way regional boundaries were drawn. In the opposite direction, regions where local income per hour worked by residents was less than place-of-work income fell into two groups: low-status suburbs and periphery regions like Sydney Mid West and mining regions like Pilbara Kimberley, where high income jobs were held by fly-in fly-out workers.

These patterns were broadly maintained during the quarter century to 2019, though there were marginal changes. The income-per-hour advantage of fly-in fly-out workers seems to have diminished in Pilbara Kimberley but to have been maintained in Gascoyne Goldfields. There were also changes in metropolitan areas. In Perth, Brisbane and Adelaide the income advantages of living in the Inner region increased but in Sydney and Melbourne the advantages of central location were captured by the inner suburbs, particularly those where the population had gentrified (Inner West Sydney, Inner North Melbourne). There were four regions where the outflow of commuters received lower incomes per hour than people who worked in the region: Inland SEQ, Sydney Outer SW, Sydney Mid-West and Melbourne Outer SE. This could have come about by a combination of high-income jobs within the region being taken by inbound commuters and outbound

commuting by people on low hourly wage rates – for example, local work by qualified tradespeople and outbound commuting by low-paid young workers. Despite these cases, commuters tended to gain income by commuting, presumably at least enough to cover their commuting costs.

More broadly, commuting spread the onrush of local income into the metropolitan centres and also into the mining regions mainly to the metropolitan suburbs and peripheries. It did very little to relieve the failure of agriculture to provide income growth in the country regions and even within the metropolitan areas was patchy in its benefits, generally failing to compensate suburbs dependent on manufacturing employment for the downcast state of their local economic base. In relation to resident population, the national average income per resident of \$42,700 a year was distributed as follows.

- The metropolitan centres were high-income zones.
- High local incomes per resident extended into the inner suburbs of Sydney and (to a lesser extent)
 Melbourne.
- They did not necessarily extend into the outer suburbs, and particularly not into Mid-West or Outer South West Sydney, or to Adelaide North, where local incomes per resident were in the \$32-33,000 range, less than half average resident local income in Central Sydney.
- However, in the afterglow of the mining boom the outer suburbs of Perth received local incomes per resident well above national average (helped along by fly-out fly-in).
- Local income per resident on the urban peripheries was generally a bit below national average.
- It was generally a bit further below in the country regions, which included the two with the nationally lowest levels of local income per resident: Wide Bay (\$26,000) and NSW Mid North Coast (\$28,000).
- Finally, resident local income per capita in the remote regions reflected the strength of local place-of-work activity, ranging from \$35,000 in NSW Far West to \$65,000 in Pilbara Kimberley.

Over the quarter century to 2019 resident local incomes per capita grew most rapidly in three kinds of region.

- Regions well-placed to take direct advantage of the mining boom, most obviously Pilbara Kimberley – but note that not all mining regions were so advantaged and growth in resident income per capita was particularly slow in Gascoyne Goldfields, since gold and nickel were out of fashion.
- Regions well placed to take indirect advantage of the mining boom, most obviously Perth and Darwin. The ACT also seems to have benefited, though the

- relationship of its prosperity to mining is not so obvious.
- Gentrifying suburbs like Inner North Melbourne, where the proportion of residents commuting to high-paying city-centre employment increased and the proportion working in lower-paid local manufacturing jobs decreased.

Resident local income per capita grew slowly in suburbs which were undergoing the opposite of gentrification (precarification perhaps?) with increasingly low-paid working-class populations. The prime examples were Outer South East Melbourne and Outer South West Sydney. Otherwise most of the regions with slow-growing resident incomes per capita depended on agriculture for their economic base.

5.2 Dwelling rents

In 2019 dwelling rents added 15 per cent to local income. On a place-of-production basis, dwelling rents were low in relation to place-of-work local income in regions served by commuter workforces (both central metropolitan regions and fly-in fly-out mining regions), and also in country regions where rents were low. At the other extreme, dwelling rents added a full 33 per cent to place-of-work local income in Sydney North, where rents (including imputed rents) were high and productive activity within the region was limited. In five other regions dwelling rents added more than 25 per cent to place-of-work local income. Four of them were Sydney suburbs or on the Sydney periphery (Sydney Inner East, Sydney SE, Sydney Highlands and NSW Central Coast) and the fifth was Adelaide Ranges.

Taking the alternative point of view and assessing the significance of dwelling rents in relation to residential local income, the ratio of rents to local income did not vary greatly across most regions. The exception was mining regions, where in 2019 the percentage was as low as 4 per cent in Pilbara Kimberley, probably for two reasons.

- An above-average proportion of residents would have been living in institutional or corporate accommodation.
- The high incomes from mining which were enjoyed by residents working in the mines were combined with low-rent housing for residents not so working, traceable to low land costs in settlements within the region but a long way from the mines.

Something similar applied in the ACT, where high public service wages were combined with relatively low housing costs, thanks to the foresight of the founders of the Territory in ensuring that all land was held under leasehold and that the supply of residential land could be matched to population growth by the subdivision of public lands.

In two regions (NSW Northern Rivers and NSW Mid North Coast) dwelling rents ran as high as 21 per cent of resident local income, with the ratio also high in several other lifestyle regions such as the Sunshine Coast. These regions were noted for retirees living in up-market dwellings which reflected the standards of living attained earlier in their life and hence generated high imputed rents in relation to their owners' current earnings. These households may also have had investment properties, but there was little evidence of flows of rents across regional borders into the retirement regions. In so far as cross-regional flows of rental incomes occurred in 2019, they were mostly generated in regions where the dwelling stock had been growing, both outer and inner suburban, and were received in established suburbs.

Given recent alarms over rising house prices, it is somewhat surprising that, over the quarter century from 1994 to 2019, dwelling rent fell in relation to local income. Over the period, the stock of dwellings grew at roughly half the rate of growth local income and this slow rate of growth was not compensated by growth in rent per dwelling. It seems that landlords were content to take their returns as capital gains rather than by raising rents at a faster rate than prices in general. This fed into the imputed rent component of total dwelling rents, since owner-occupier rents are imputed from cash rents, not from landlord returns including capital gains.

Though aggregate dwelling rents decreased in relation to local income by four percentage points, they increased slightly (or at least fell relatively slowly) in the remote regions apart from Darwin. They fell most severely along the east coast, everywhere from SE NSW to Cairns, with the most severe reduction in Gold Coast (nearly 12 percentage points). An increase in the proportion of flats in the dwelling stock may have contributed to this, and there is also some evidence of a fall in the proportion of lowincome, large-house retirees in the population. Maybe, again, in these regions rents could have been more affected by the promise of capital gains than they were elsewhere. Away from these coastal regions, the proportion fell most rapidly in the ACT, where dwelling rents simply failed to keep up with the rapid increase in average wage rates. In Inner North Melbourne an increase in the proportion of flats contributed to the lag between the typical dwelling rent and the gentrification of gross private income.

Between 2018-19 and 2019-20 dwelling rents increased nationally by 2.0 per cent, slightly ahead of the 1.6 per cent growth in the dwelling stock. The increase was most rapid in Melbourne Outer West, where aggregate dwelling rents grew by 8 per cent, divided equally into increases in the stock and increases in rent per dwelling. Increases of 6 per cent in Sunshine Coast, the ACT, Inner West Victoria and Geelong were similarly divided, and so also the more modest increases in other parts of metropolitan Brisbane, Melbourne and Adelaide, and indeed in non-metropolitan Queensland, NSW and Victoria. In Tasmania the dwelling

stock continued to grow slowly, reflecting past low rates of population growth, but rents increased, to the extent that aggregate rents in Tasmania South rose by 7 per cent.

Metropolitan Sydney was at a different point in the cycle of rental values and dwelling investment, with average rents per dwelling declining. Rent per dwelling also declined in all WA and NT regions, gently in Perth and precipitously in the four remote mining regions including Darwin. Much of this reflected the fallout from the mining boom, exacerbated in the remote regions by the growing popularity of fly-in fly-out.

5.3 Private income

Ideally speaking, the cash incomes of households from private sources comprise incomes from employment (local income) plus cash incomes from property. This is the broad concept of income which lies behind the income tax and also behind the provision of social security benefits subject to income tests. Once income taxes have been paid and social benefits received, households are then, ideally, left with disposable income: what they can comfortably spend without eating into their savings. The first step in translating this abstract concept into practical statistics is to define private cash income (or income from market sources) as local income less a depreciation allowance for small business assets plus property income from the corporate sector plus cash rents received by landlords. In the National Accounts the ABS approximates this concept by adding:

- wages, salaries and various other employment related incomes in so far as they are recorded in the data sources, particularly income tax data; plus
- business mixed incomes, again basically as recorded in the data sources, but without deduction for depreciation, due to the difficulty of defining and applying this theoretical concept; plus
- dividends, interest and other returns on financial assets, including the earnings of superannuation funds; and
- dwelling rents, both cash and imputed.

There is a fair amount of imputation in this concept of 'gross primary income', including imputed rents attributed as income to home owners and the earnings of superannuation funds, to which contributors have no immediate access but which are imputed to them as income. In the case of superannuation funds, this approach has the advantage that it smooths over the deluge of cash which might otherwise be accounted as income when superannuitants cash in their lump sums, but in the meantime, as with imputed rents, it overstates what people are likely to regard as their income. Rather than become entangled in arguments of accounting theory, at this point we define private income as the sum of the first

three components on the above list, leaving out dwelling rents but including imputed superannuation earnings (but not superannuation payouts, since these have already been counted as income). This involves accepting business mixed incomes as incomes, including their depreciation component. Dwelling rents are excluded because they include both depreciation and a fair whack of imputation.

5.3.1 Property income

Property income in relation to private income

In 1994 property income comprised 11.7 per cent of private income. It was fairly evenly distributed across the regions, reaching a maximum of 15 per cent of private income in five regions: the ACT, Sydney North, Sydney Inner East, Melbourne Inner South and Inner Brisbane. With the possible exception of Inner Brisbane, these were regions with established reputations for high socioeconomic status. The proportion was also above average in retirement regions such as NSW Mid North Coast. Conversely, the proportion was relatively low in the non-retirement outback and in working-class suburbs such as Sydney Outer West.

In 2019 the same general pattern remained, with the regions clustered round an increased average: property income now comprised 14.7 per cent of private income. Factors contributing to this increase would have been the policy of wage restraint and the growth of superannuation earnings coupled with the ageing of the population. The growth of superannuation entitlements was particularly marked in the ACT, where property income rose to comprise 25 per cent of private income. Property income also increased in relative significance on the NSW retirement coast and remained significant in Inner Brisbane and in the high-status inner Sydney regions, leaving the counterparts of these regions in Melbourne and Adelaide hard pressed to keep up. The proportion remained low in the non-retirement outback and along the Queensland coast from Central Queensland northwards. Despite universal superannuation it remained well below national average in working class outer suburbs such as Sydney Outer West.

Property income per capita

Per capita of resident population, average property income in 1994 was highest in Central Sydney, followed by Sydney North – the North Shore may have had the richest households, but Central Sydney had fewer people per household (less children, in particular) hence higher percapita incomes. Other regions with high per capita property incomes were the ACT, Melbourne Central and its Inner East and South, Inner East Sydney and Inner Brisbane – within the metropolitan areas the same pattern as appeared when considering property incomes as a

percentage of private income. However, in retirement regions such as NSW Mid North Coast property incomes per resident were merely average – they were high as a percentage of income simply because total private income was low. The lowest per-capita property incomes were in remote regions including NT Outback and Queensland Outback, and also in Darling Downs and Central Queensland, both of which abut outback regions. Percapita property incomes in the working class suburbs of Sydney, Melbourne, Adelaide and Perth were around 30 per cent below national average and around Brisbane around 12 per cent below.

In 2019 the per-capita pattern was more complicated. Thanks to the superannuation entitlements that the Commonwealth government accumulates in the names of its public servants, the ACT had roared ahead to receive property incomes per resident over three times the national average. Apart from the ACT, the highest percapita property incomes were still in Central Sydney, with the North and Inner East not far behind and the Inner West in a much improved position thanks to gentrification. Inner Brisbane, Inner Perth and Melbourne Inner South all commanded property incomes per capita roughly 50 per cent over national average and Darwin had also improved its position. In contrast with Darwin, the NT Outback retained its position as a region with low property income per capita (around 60 per cent of the national average) and was joined by Townsville. Per capita property incomes were not much higher than this in the working-class outer suburbs of Sydney and Melbourne, but were around 70 per cent of national average in Sydney Outer West (which was not quite as working class as it had once been) and in Adelaide North and Perth South East.

The land boom, mining boom and after

Most of the increase in property income which took place between 1994 and 2019 occurred during the first half of the quarter century, the land boom of 1994-2007. During this period national property income per capita increased at the rapid rate of 5.3 per cent a year. The rate of growth was most rapid in the ACT and Darwin (over 8 per cent a year in both), presumably due largely to superannuation increases for Commonwealth employees. There were also relatively rapid increases in the two Queensland coalmining regions and in Perth, though not in the WA mining regions themselves. The lowest rates of increase occurred in outer Melbourne and in parts of the Sydney metropolitan area. It might have been expected that increasing superannuation coverage would raise property incomes in the working-class suburbs, but these increases still lagged behind increases elsewhere. Intriguingly, the rate of increase of property income per capita was also low in Central Sydney and Parramatta, perhaps due to an influx of new residents (such as students) less asset-rich than those who were already there.

During the mining boom, 2007 to 2016, the rate of growth of property income per capita subsided to 1.1 per cent a year - mining may have been highly profitable, but somehow the profits did not percolate through to the population in general. As during the land boom, the highest rate of growth in per capita property income was in the ACT (but no longer in Darwin), with relatively high rates also reported from some of the rural regions with WA Wheatbelt in the lead. Property incomes stopped growing in the Queensland coal mining regions and declined in the NT Outback. Within the metropolitan areas, the case of Melbourne is instructive. Property incomes per capita declined in Central Melbourne, presumably reflecting an influx of students and other low-asset residents, but they increased in the Inner North, which was gentrifying. Similarly in Sydney property incomes failed to grow, per capita, in the North (which was already gentrified) but increased in the gentrifying South East and Outer West.

In the attempt to re-ignite the land boom, interest rates were reduced during the fin de siècle years (2016-19). As a result, property income per capita fell by 4.7 per cent a year. The ACT suffered a correction to its previous rapid rate of growth in property incomes, but the reductions were widespread. However, some regions, such as the Sunshine Coast and Gold Coast, seem to have avoided the fall, perhaps because their residents' asset portfolios were less exposed to low interest rates.

5.3.2 Business mixed income

Business mixed income as a component of private income

Business mixed income comprises the labour and capital returns of locally-owned businesses, as distinct from corporate businesses which pool their profits across regions and return part, but not all, of them to regional residents in the various forms of property income. Noncorporate businesses generating mixed income have been responsible for significant production in industries with limited economies of scale, generally identified as agriculture, distribution (both retail and road transport), some professional services, the convivial services and such area services as fall within the private sector. Their contribution has been much less in mining, manufacturing, logistics, money management and such centralised officebased services as public administration and utilities. The regional distribution of business mixed income has, accordingly, reflected the mix of industries that employ the residents of each region.

In 1994 business mixed income contributed 13.5 per cent of gross private income in Australia as a whole. It comprised 28 per cent of private income in WA Wheatbelt and in Queensland Outback (where it seems that the

pastoral industry beats mining as an income source). The ratio was also over 20 per cent in other country regions like Victoria Outer West, SA Outer, North Tasmania and Darling Downs. It was around 20 per cent in Gold Coast and Sunshine Coast, presumably due more to business activity in the convivial services than to agriculture. In various other country and peri-urban regions business income was less important, for example in NSW Mid North Coast the convivial services failed to make up for the low level of agricultural activity so that the proportion of business mixed income to private income was around national average. In the metropolitan areas, it was generally around national average in the city centres and high-status suburbs and well below in working-class suburbs.

During the quarter century from 1994, when the Commonwealth government would have argued that it was pursuing pro-small-business policies, the proportion of business mixed income to private income declined to 12.3 per cent. This was accompanied by a marked change in the regional distribution of business mixed income, which provided an increased proportion of private income in some regions and a much reduced proportion in others. The sector increased its share of private income in Central Melbourne and Central Sydney and in several high-status or gentrifying metropolitan suburbs, notably Sydney Inner East, Sydney North and Melbourne Inner North, presumably associated with increased earnings in small professional-service businesses – it is interesting that the corporate sector failed to capture these earnings, which may have been tax-advantaged and are also protected from corporate capture by diseconomies of scale. Local business also maintained or even increased its share of private income in rural and pastoral regions. At the other extreme, there were marked decreases in business mixed income in the ACT (from 13 per cent to 4 per cent of private income), in western Sydney (for example, in the Outer West from 9 per cent to 4 per cent) and in nongentrifying suburbs generally, and also on the periphery of Sydney. These reductions were probably associated with the penetration of local distribution and some convivial services by corporate business but may also have been due to a switch from small-business to corporate suppliers of office-based services, e.g. by the Commonwealth government.

Business mixed income per capita

As with property incomes, in 1994 business mixed incomes per capita were highest in Central Sydney, where they were a little over double national average. These high incomes would have been generated largely in professional services, as were the above-average business mixed incomes received by residents of the other central and inner metropolitan regions. Far away from the metropolitan centres, per capita business mixed incomes nearly double the national average were also generated in

the Queensland Outback and the WA Wheatbelt. The lowest business incomes per capita, which were around half the national average, were found in manufacturing-oriented outer suburbs such as Melbourne Outer North, Melbourne Outer West and Adelaide North.

In 2019 these patterns remained but had become more accentuated. Rather than twice national average, the highest levels of regional per-capita business incomes were now around three times national average while the lowest levels fell from 50 per cent of national average to 30 per cent. For the record, the three highest levels were in WA Wheatbelt, Queensland Outback and Sydney Inner East, while the lowest were all in Sydney – Mid West, Outer South West and Outer West.

Land boom, mining boom and post-boom

At the national level, business mixed income grew slower than property income during the land boom (2.1 per cent a year) but held up better during the mining boom (1.9 per cent). There appear to have been state patterns in this growth. During the land boom business income grew at above the national average rate in 14 of the 15 Victorian regions and below the national average rate in 10 of the 14 Queensland regions. The rate of growth was negative in the ACT and in Sydney Outer West and Outer South West but was above national average in Inner Adelaide and around it in the rest of SA, while in WA it was rapid in Inner Perth, in Gascoyne Goldfields and the Wheatbelt, but low in the southern Perth suburbs. Apart from state-level influences, these rates were sensitive to the effects of weather on agricultural incomes and the effects of gentrification and of corporate capture of business opportunities on suburban incomes.

During the mining boom this pattern was partially reversed. Business income per capita stabilised in the ACT. Though it continued to decline in western Sydney, it grew at well above the national average rate in all four coastal Sydney regions. Similarly in Melbourne it grew in the Inner South and East but declined in the Outer South East, Outer North and Outer West. In Perth, likewise, business income per capita grew in Inner Perth but declined in the two southern Perth regions.

In contrast with property income, at national level business mixed income remained stable during the fin de siècle years. However, the regional pattern was quite disturbed. There were particularly rapid declines in Pilbara Kimberley, in suburban Perth and in WA SW, probably associated with the effect of the ending of the mining boom on small contractors. However, local business in WA Wheatbelt seems to have had a good three years. In Queensland there were good business times in Gold Coast and Sunshine Coast and even in Mackay, but not so good in Darling Downs. In both NSW and Victoria business incomes grew in the suburbs north and south of the metropolitan centre, were fairly stable in most of the other

suburbs but declined in such peripheral regions as Gippsland and the Sydney Highlands. All of this is compatible with the changes in the role of local business in different industries.

5.3.3 Wages

The wage contribution to private income

The third component of private income, wages and salaries (or, in ABS language, compensation of employees) was by far the largest. As here defined, including superannuation contributions (in the SOR appendix it is reported net of these) it provided 75 per cent of all gross private income in 1994. The regional pattern of reliance on wages was the inverse of property and business incomes. Wages were less than 65 per cent of private income in three regions -Outer West Victoria, WA Wheatbelt and the Far West of NSW. They were close to 66 per cent in a further six regions, including Darling Downs and Northern Tasmania all them regions with substantial business incomes from agriculture. Going in the other direction, wages comprised more than 80 per cent of private income in another seven regions, including Pilbara Kimberley and regions associated with manufacturing such as Melbourne Outer West, Sydney Outer West and Wollongong.

A quarter century on, wages had fallen to 73 per cent of national private income, due to the enlargement of property incomes. The three regions with the least reliance on wage incomes were still Outer West Victoria, Far West NSW and WA Wheatbelt, with other agricultural regions following suit. Thanks to the growth of superannuation payouts and of business incomes from centralised services, several metropolitan regions joined the agricultural regions in relatively low reliance on wages, notably Sydney North and Inner East. In the other direction, wages were 80 per cent or more of private income in eight regions led by Pilbara Kimberley and Sydney Outer West, as in 1994. Wollongong dropped out from third place and was replaced by Townsville.

Wage income per resident

In 1994 wages per resident were highest in Central Sydney and were significantly greater than in the next group of six regions – the three Sydney suburban regions adjoining the Centre, plus Central Melbourne, the ACT and Pilbara Kimberley. Wages per resident were low mainly in agricultural regions, with their reliance on business earnings, and also in retirement regions.

During the following 25 years a surge in Commonwealth public service pay rates (including superannuation) pushed the ACT to top position in wages per resident. Central Sydney marked time and ended up in second place. Darwin pushed Pilbara Kimberley from third position and joined a

group with wage incomes per resident roughly 35 per cent above national average – the other members of this group were Central Melbourne, Central Perth and the three regions bordering Central Sydney. Apart from the surge in incomes in the ACT, these changes did not greatly alter the pecking order. The same was true at the bottom end of the distribution, where in both 1994 and 2019 Wide Bay had the lowest average wage income per resident. In both 1994 and 2019 Wide Bay received per capita wages 60 per cent of national average, and in both years the best-paid region received wage income 1.9 times the average.

Growth in wages per capita results from growth in hours worked per capita and in wages per hour worked, both of which were explored on a place-of-work basis in Chapter 4.

Land boom, mining boom and after

During the land boom 1994-2007 national wages per resident grew by 2.9 per cent a year. Reflecting an increase in both hours worked per resident and pay per hour the rate of growth of wages per resident was highest in Darwin (4.9 per cent a year). This was due in no small measure to the in-movement of defence personnel. The growth rate of wage incomes per resident was also well above national average in all Queensland regions, including mining regions (coal in Central Queensland and Mackay, metals in Queensland Outback and coal seam methane in Darling Downs) but also including regions with a broader range of employment, such as Inner Brisbane and the Sunshine Coast.

One might have expected a land boom to generate high wages in construction and so benefit the other metropolitan areas, but it turned out that wages per capita grew relatively slowly in Sydney, Melbourne and Adelaide – the rate of growth was above national average only in gentrifying regions like Inner North Melbourne. In Central Sydney the rate of growth was particularly slow, levelling down the very high levels previously attained. In the country regions wage incomes grew at roughly national average rates.

During the mining boom, 2007-16, wage incomes per capita grew, in aggregate, much slower than during the land boom – the growth rate was down to 1.3 per cent a year. In the ACT, Darwin and all the WA regions except Gascoyne Goldfields, wage incomes kept growing as they had during the land boom, but elsewhere their rate of growth declined to around 1 per cent a year. The contribution of coal mining to wage growth began to decline, reducing the growth rate of wages per resident to less than 1 per cent a year in most Queensland regions, though Inner Brisbane, Gold Coast and Sunshine Coast showed a little more resilience. As explained in Chapter 3, the high exchange rate which persisted during the mining boom destroyed much of Australia's manufacturing capacity (or, rather, prevented it from developing) with serious consequences for wage incomes in western Sydney and in much of Melbourne. Agricultural industry was also affected and wage incomes per resident grew at 1 per cent a year or less in most agricultural regions except WA Wheatbelt, which benefited from marginal involvement in mining.

In the fin de siècle years, growth in wages per resident diminished to 0.8 per cent a year. The end of the mining boom brought decline in all WA regions except the Wheatbelt. Growth was anaemic in Queensland and also declined in the two other jurisdictions which had benefited greatly from the mining boom, the ACT and NT. It was more or less maintained in SA and Tasmania but accelerated in those parts of Victoria and NSW which had been adversely affected by the mining boom.

5.3.4 The regional distribution of private income

Adding the three sources of private income together (wages + property income + business income) and dividing by population gives a crude indicator of average regional income from private sources. It is crude for all the reasons of statistical estimation already discussed and also for others, some of which relate to wealth – an income indicator disregards both the benefits of wealth and the costs of housing, which tend to be high in wealthy regions. Local wealth also includes environmental assets, and income should be adjusted downwards when these assets are reduced or destroyed. In addition, using population as the denominator fails to take into account differences in need that occur across the life cycle. With these caveats, gross private income per capita gives a rough measure of regional inequality of income on a residential basis.

High and low income regions

In 1994 national gross private income per capita averaged \$30,000 a year in 2019 dollars. The Sydney metropolitan area dominated in the high-income stakes, for not only was Central Sydney the highest-income region (\$58,000) but four of the six regions with average private incomes of \$40,000 and more were in Sydney – the other two were Melbourne Central and the ACT. (The rich Sydney regions comprised the Centre plus the three regions adjoining the Centre, all of them with harbour or sea views.) Another dozen regions ranked between the national average income and \$40,000. They comprised three more Sydney suburban and periphery regions, three more Melbourne suburban regions and the inner regions of Brisbane, Adelaide and Perth, plus Darwin and the two remote WA mining regions. The remaining 49 regions were bunched under the national average, with the lowest average incomes in country regions attractive to retirees plus a handful of metropolitan regions which had been hard hit by the decline of manufacturing during the 1980s -

Adelaide North, Melbourne Outer North and Sydney Mid-West.

By 2019 average gross private income had risen to \$50,000, again in 2019 dollars. It had grown in all regions not for everybody, but for average people with average spending priorities as incorporated into the price indices used to adjust nominal dollars. The various factors buffeting income distributions tended to cancel out and the regional distribution of average private income in 2019 was a recognisable descendant of the 1994 distribution. The Sydney metropolitan area now supplied three of the top six regions and the ACT remained in the top six: there were two newcomers, Central Perth and Darwin. Though Central Melbourne and Sydney Inner West lost their places in the top six, they remained at number seven and eight respectively, closely followed by Inner Brisbane. At the other end of the scale, country regions attractive to retirees still tended to report low incomes (especially low in Wide Bay and NSW Mid North Coast) and regions upset by the decline of manufacturing also reported low incomes (especially Sydney Mid-West).

Land boom, mining boom and after

During the land boom from 1994 to 2007 private income per capita grew by 3.1 per cent a year, a little faster than wages per capita. The highest rates of growth were reported from Darwin and Inner Perth, with rates of 4 per cent a year or more also reported from the Queensland coal-mining regions and from Inner Brisbane, as one would expect from the discussion of wage growth. Agriculture as an industry may not have benefited from the land boom, but private incomes per capita rose at the respectable rate of 4 per cent a year in WA Wheatbelt and Outer West Victoria. The two regions with the lowest rates of growth of private income per capita were Adelaide Ranges and Melbourne Outer South. It is likely that both were undergoing the opposite of gentrification as outer suburban housing replaced patrician estates. Per capita private income also grew slowly, at less than 2.4 per cent a year, in five Sydney metropolitan regions and also in the adjacent Sydney Highlands. In Sydney Central this was probably a market correction to the high incomes generated in the 1980s but in Western Sydney it reflected the poor performance of manufacturing industry.

As was true for its dominant wages component, private income per capita grew nationally at the reduced rate of 1.3 per cent a year during the mining boom. It raced ahead in the ACT and growth continued in WA, except for Gascoyne Goldfields which missed the mining boom because its particular mineral endowment was not in demand. Private income also kept on growing in Darwin (though not at the hectic rate established during the land boom) and in the gentrifying suburbs of Sydney (Inner East, SE) and Melbourne (Inner South, Inner North). Tasmania managed above-average growth and in SA about average, while in Queensland the highest rate was 1.9 per

cent (in the Outback) and the lowest zero (in Cairns). Except in the gentrifying suburbs, Victorian private incomes grew slowly during the mining boom, and likewise private incomes in inland Sydney, to the point where they declined by 2 per cent a year in the Mid-West. This highlighted western Sydney's difficulties in adjusting to the post-manufacturing world – the several western Sydney regions were too far from the prosperous city centre to gentrify, but too close to have reasonably-priced land which could have allowed a switch to logistics.

In the three fin de siècle years the rate of growth of private income per capita declined to 0.5 per cent a year. Reflecting the end of the mining boom, the decline was particularly serious for all WA regions except the Wheatbelt. Queensland was also affected, with average income declining in four of its 14 regions, though in five others (Cairns, Townsville, Mackay, Sunshine Coast and Brisbane Outer SE) income per capital continued to grow at around 1 per cent a year. In SA, NT and Tasmania income growth continued in all regions, albeit slowly. Parts of Victoria experienced something of a revival after their poor performance during the mining boom, but others notably Victoria Outer North – suffered declining incomes. The most rapidly growing of all the 67 regions, at a mere 2 per cent a year, was Sydney Inner East, with Newcastle close behind (and also the Far West, where depopulation raised per-capita incomes). Two poorly-performing NSW regions were the Mid-North coast and (one is tempted to say as usual) Sydney Mid-West. The ACT also underwent a corrective reduction in private income per capita.

5.3.5 Trends in private income receipts 1994-2019

Over the quarter century from 1994 to 2019, regional private income increased most rapidly in the following regions:

- the ACT;
- Darwin;
- Inner Perth; and
- WA Wheatbelt,

with significant increases also in Sydney Inner East, Inner Brisbane, Melbourne Inner South and Inner North, Queensland Outback and NSW Far West.

The lowest rates of growth occurred in:

- Parramatta;
- Outer SE Melbourne;
- Sydney Mid West; and
- Adelaide Ranges.

Growth in Melbourne Outer West, Sydney Outer South West, Sydney Central, Melbourne Central, Sydney Outer West and Cairns was also well below national average.

These geographic patterns of relative gain and loss may be summarised as follows.

Canberra and Darwin

The considerable relative gains in the ACT and Darwin were underpinned by Commonwealth policies such as generous pay for defence personnel. They were also, probably, affected by trends in executive pay. Senior Canberra public servants may not have commanded the executive pay packages awarded to the highest flyers in the private sector, but even so it seems that remuneration at the executive end of the public sector broke away from wage rates in general. Several further factors would have made for high reported earnings in the ACT, including full reportage of public sector pay, generous superannuation which raised imputed property incomes, the probable extension of high pay rates to middle management, contractors and lobbyists, and a general lack of low-paid minions which raised the average rate per hour. Though not as strongly, these factors helped to raise private incomes in Darwin which also capitalised on its position as the only city on Australia's north coast and hence as the nearest city to a range of mining developments.

Trends more generally

As regards the value of mine output, the mining boom was centred on Pilbara Kimberley, but private income per capita in this region actually fell relative to the national average due to the decline (from high levels) of wage rates in the mining industry coupled with the capture of highpaid jobs by fly-in fly-out personnel. Among the mining regions, Gascoyne Goldfields and NT Outback suffered similar relative falls, but the Queensland mining regions did not, perhaps because their economies were a bit more diversified. The regions which most obviously benefited from mining were Darwin and Inner Perth – not suburban Perth, but the inner suburbs which captured much of the income from services to mining. There was an echo of this in Inner Brisbane, where relative private income per capita also increased a little, though this would not have been due to mining alone but to Brisbane's role as capital of Queensland. In both Perth and Brisbane the suburban regions marked time, if anything gaining a little, but nothing like as much as their respective inner cities.

Though SA had its share of mines, the mining boom failed to raise its relative prosperity. Inner Adelaide and Adelaide North suffered from the eclipse of manufacturing which began in the 1980s and were joined by Adelaide Ranges, where relative private incomes declined substantially. Agriculture, mining and manufacturing all contributed to the economic base of Outer SA and various positive and negative effects combined to leave its private income per

capita unchanged in relation to the national average. With variations, this also happened in the more or less diversified agricultural regions of Tasmania, NSW and Victoria. The main exception was Victoria Outer North, where agriculture and its allied food manufacturing businesses were adversely affected by the high mining-boom exchange rate and perhaps also by increased water costs

During the quarter century, private income per capita fell relative to national trends in the Melbourne metropolitan area (including its peripheral regions) and even more in the Sydney metropolitan area and surrounding regions. This occurred despite the prosperity of the centralised service industries. It seems that, despite high housing costs, population growth outstripped the growth of the economic base – perhaps because Melbourne and Sydney were the cities in which immigrants first arrived, or perhaps because their bright lights and the chances of good education and good jobs attracted young people from all over the country and indeed the world.

Trends within Melbourne

Within and around metropolitan Melbourne:

- private income per capita fell, relative to the national average, in Central Melbourne, due in no small measure to the influx of students and also, perhaps, to the construction of blocks of flats whose residents, on the whole, would have received lower private incomes than the established residents of the region;
- it rose in two of the three inner urban regions South and North but not East. Presumably the East was already quite high-income and town planning restrictions prevented further gentrification, which was diverted to the two other inner regions;
- relative private income per capita fell in all the outer suburban regions, and particularly in the Outer South East and Outer West. Given its economic base, the fall in relative income in the Outer South East bore comparison with the similar falls in Western Sydney, but the fall in the Outer West was more surprising, given the growth in commuting from this region into Central Melbourne; and
- on the Melbourne fringe, Gippsland and Victoria Inner North marked time but Geelong and Inner West Victoria (centred on Ballarat) overcame their depleted manufacturing heritage and reported small gains in relative private incomes, which were supported by state investments in improved transport to the centre of Melbourne.

Trends within Sydney

Similar forces were at work in metropolitan Sydney.

- Private income per capita fell, relative to the national average, in Central Sydney, for much the same reasons as in Central Melbourne.
- It rose in the Inner East, which had room for gentrification (Maroubra, Botany, Marrickville). However, relative private income did not rise in the two other regions adjoining Central Sydney. The failure in the North was probably from similar causes to that in eastern Melbourne the region was already gentrified and had little room for more except on its distant fringes. However the equivalent failure in the Inner West is harder to explain. Maybe there simply weren't enough harbour views.
- Relative income per capita fell in the four western Sydney regions, with especially large falls in Parramatta and the Mid-West. The fall in the Mid-West plunged its average private income to among the lowest in the country (65 per cent of national average), while the fall in Parramatta was from 130 per cent to 110 per cent: not particularly alarming, but even so a reminder that Parramatta shares the fate of western Sydney. In his book *Ideas for Australian Cities*, published in 1970, Hugh Stretton predicted that the private market would divide Sydney into a rich city by the harbour and the beaches and a poor city inland, and this seems to be happening.
- On the Sydney fringe, relative incomes declined in Sydney Highlands (which is an extension of the western suburbs) and also in the Central Coast. A little further afield, Newcastle replicated some of the success of Geelong in diversifying its economic base, but was too far from Central Sydney in time-distance for commuting to be a factor in its positive performance. Wollongong was not quite so successful in diversifying but gained more from commuting.

5.4 Supplements to, and deductions from, private income

Several steps are required to get from private income to household disposable income. Governments deduct income tax and add back social security payments. Adjustments are usually also made for contractual obligations which households must meet, including interest payments and mandated superannuation contributions.

The National Accounts recognise two kinds of tax: direct and indirect. Indirect taxes like the GST are treated as the difference between two measures of GDP – GDP at market prices and GDP at factor cost. By taking GDP at factor cost, the *State of the Regions* reports effectively treat indirect taxes as a business cost, which means that, though they are included in the prices people pay when they spend their incomes, they are not included in either local income or corporate profits. On the other hand, direct taxes, the chief of which is income tax, are treated as deductions from gross private income – even though, in practice, most taxpayers never see the money due to pay-as-you-earn requirements. The regional incidence of income tax is well documented by the Commonwealth Tax Commissioner whose data underpin NIEIR's regional estimates.

Though income tax is the major deduction from private income, several other contractual obligations commonly intervene to reduce the cash flow available to spend at the discretion of recipient households. The major deductions covered in the *State of the Regions* reports are superannuation contributions and interest payments on mortgages and consumer debt (as distinct from repayments of principal). In the National Accounts the ABS provides estimates of several further deductions, including workers' compensation and insurance premiums and what are termed 'other transfers'.

Though the Commonwealth government imposes income tax, it returns much of the revenue so raised to the household sector in cash social security benefits. The regional incidence of these benefits is well documented by Centrelink and reported from this source in NIEIR's regional estimates. The ABS also estimates household receipts from workers compensation, non-life insurance claims and various other sources, but in the absence of data on their regional distribution they are not examined here.

5.4.1 Income tax

As its name implies, income tax is imposed on private income, though not on all of it. This is not the place to discuss the various differences of definition and deductions which differentiate taxable income from gross private income, though the differences are probably greater for business and property income than they are for wage income and very probably increase as private income increases.

In 1994 income tax absorbed 17.7 per cent of Australian private income, with an interregional range from 14 per cent to 20 per cent. By 2019 the 17.7 per cent had increased by 0.8 percentage points to 18.5 per cent and the interregional range had widened, from a new minimum of 13 per cent to a new maximum of 24 per cent.

As designed in the 20th century, Australia's income tax was progressive. The greater the income, the higher the proportion due in tax. However, neo-liberal economics as revived in the USA during the Cold War strongly defended free markets. It was but a small step to assuring the rich that they deserved every cent of income they gained from market activities, so giving them the ideological weapons with which to fight progressive taxation. As Thomas Picketty has documented, tax rates on high incomes have fallen in most if not all Western countries. Even so, in 2019 the Australian income tax remained at least nominally progressive.

With income taxes progressive, one would expect that the proportion of private income paid in income tax to be higher in high-income regions than in low, with deviations for such factors as regional differences in demography and in the composition of private income. This has indeed been the case. In 1994 a 10 per cent increase in regional average private income per capita was associated with an increase of 11.5 per cent in tax payments, and in 2019 with an increase of 12.7 per cent in tax payments. Combined with the increase in tax take, this increase in the regional progressivity of the income tax was somewhat contrary to the rhetoric favouring tax cuts for high-income taxpayers. It was, however, the outcome of broader changes than those to marginal tax rates, including rising labour force participation and the increase in part-time work.

In 1994 tax collections were greater than predicted from private income per capita in mining regions, typified by Central Queensland, where private incomes were derived largely from wages with relatively few opportunities for tax avoidance. Income tax payments were also reported high, in relation to income, in the two Tasmanian regions. They were low in the retirement regions, especially NSW Mid North Coast and Northern Rivers and also in NSW SE, Gold Coast and Sunshine Coast — all regions where private income included lashings of tax-exempt property income.

In 2019 these patterns could still be discerned, but there were major changes.

- The regions with the lowest levels of income tax, given their private incomes, were now the ACT, Darwin and the NT Outback. The implementation of the revised superannuation scheme for Commonwealth employees resulted in private income in these regions including high proportions of non-taxable (and generally imputed) superannuation incomes.
- Income tax payments were still below what would be expected from private income per capita in the retirement regions.
- Payments were still above expectation in the mining regions.
- However, the regions with the highest levels of income tax, given their incomes, were no longer mining regions but were the metropolitan centres of

Sydney and Melbourne, along with their high-income inner suburbs. The contrast with Canberra is acute. The metropolitan centres were high-income regions like the ACT, but their residents were less successful in diverting their income into tax-advantaged forms. This may have been related to their exposure to high housing costs – income required to service a mortgage cannot be diverted into a tax-advantaged superannuation scheme.

Payments in Tasmania were now a little below prediction, instead of above.

These changes were distributed across the quarter century as follows.

- During the land boom (1994 to 2007) income tax decreased as a percentage of private income by 0.7 per cent. The reductions were largest in the territories: the ACT and the two NT regions, due to surges in the superannuation element of private incomes, which received considerable tax concessions. Decreases in the average tax rate were also noticeable in WA and Queensland. Thanks to progressivity, the tax rate increased as taxable income rose in Central Sydney and its three neighbouring regions and also in Central Melbourne and Inner Adelaide.
- The mining boom (2007 to 2016) brought a small increase of 0.2 per cent in the ratio of income tax to private income. The major increases were in the mining-boom metropolitan regions Perth and SE Queensland but the rate also increased in Central Melbourne and Melbourne Inner South. The superannuation-related reductions in the ACT continued and there were also reductions in Tasmania, in Adelaide North and Adelaide Ranges and in parts of western Sydney.
- During the fin de siècle years the average tax rate increased by 1.3 per cent. The rate rose in all regions, with the largest increases in the WA Wheatbelt and in the remote regions of WA and Queensland – seasonal conditions may have had some influence over this. The rate grew relatively slowly in Gippsland and NSW Mid North Coast and also in Central Sydney.

5.4.2 Social security incomes

In the National Accounts social security payments are treated essentially as negative taxes — as non-market supplements to private income in much the same way as income taxes are non-market deductions. As such, they complement progressive taxation, and the political forces opposed to progressive taxation are likewise opposed to generosity in social security, particularly social security which is perceived to hinder the supply of low-cost labour

to business. In 1994 social security benefits constituted 13.7 per cent of private incomes and returned roughly three quarters of income tax revenue to households, but not generally the same households as paid the tax, with overall progressive effect. In 2019 the ratio of social security benefits to private income had declined to 11 per cent, returning around 60 per cent of income tax to households, with presumably reduced progressive effect. Though partly due to ideological opposition to redistribution, the reduction in social security payments also had demographic causes, with low birth-rates during the 1930s minimising the size of the cohort eligible for age pensions.

In relation to private income, the regions which were most heavily dependent on social security in 1994 were NSW Mid North Coast and Northern Rivers. In these regions social security added one-third to private incomes. The least dependent region was Sydney North, at four per cent. These patterns continued to apply in 2019, though at slightly lower levels due to the general cutback on social security entitlements.

To assess the changes over the quarter century it is important to realise that social security is not a single entitlement but comprises programs of various sizes targeted at different social groups. These programs fall, broadly, into three groups.

- Grants to families with children, which were included (as 'child endowment') in the system almost from its beginning and were gradually augmented by replacing tax deductions and rebates for dependent children with social security payments available to families whether they were taxpayers or not, though increasingly subject to income tests.
- Elderly residents, residents with disabilities and several other smaller categories of (generally middle aged) people are entitled to pensions, subject to a 'generous' means test and paid at rates which have been maintained close to, or above, the poverty line introduced by the Commission of Inquiry into Poverty in 1975.
- available to Australian residents of workforce age.

 These entitlements are of deep concern to neoliberals who believe that wage rates should be set by demand and supply, with particular concern for the supply of low-cost labour to business. As an expression of these concerns, social security entitlements for people of workforce age are available only at rates well below the pension rate and subject to strict conditions. According to the rhetoric, the strict conditions are intended to encourage workforce participation, but they include means tests which constitute a built-in disincentive to engaging in paid work, particularly part-time work.

To summarise, the social security system is relatively generous to old people (though the age at which one becomes old is gradually creeping upwards). It tries to be generous to families with children, but not when this would require increases in tax rates. It recognises that people of workforce age can find themselves in circumstances which warrant support, but insists that this support should be minimal.

Because social security eligibility is confined to groups which in general have low private incomes, and because eligibility is means-tested, at the regional level one would expect average per capita receipts to be inversely related to average private income. This was indeed the case in both 1994 and 2019, but only in a rough-and-ready way because the system discriminates strongly in favour of the elderly.

In 1994 social security receipts, in relation to private income per capita, were highest in NSW Mid-North Coast and Northern Rivers, both of which were replete with retirees, mostly from Sydney, who during the move had arranged their affairs so as to fall under the means test for the age pension at full rate. Social security receipts in relation to private income were lowest in two outback regions, those of the NT and Queensland, which had much younger populations, including Aboriginal people who at the time were supported on wage-like Commonwealth payments which were not included in the social security total. Other retirement regions included NSW SE (which covers the NSW south coast) and, in Queensland, the Sunshine Coast and (to a lesser extent) Wide Bay and the Gold Coast. The metropolitan suburbs and peripheries included a mixture of regions where social security receipts were high in relation to private income and regions where they were low. The high-receipt regains included regions with mixed populations combining high-income residents with low-income residents who were ageing in situ, such as Central Melbourne and Central Sydney. There were also regions where the economic reforms of the 1980s had precipitated middle-aged workers into unemployment which so debilitated them that they became eligible for disability pensions - these included Newcastle, Wollongong and Geelong. Regions with young populations, such as Sydney SE and Outer West and Melbourne Outer East, received little social security assistance. The low levels of social security assistance in Brisbane SW and Sydney Mid-West were more puzzling since these were regions which, like Newcastle, had been subject to industrial reorganisation.

During the quarter century from 1994 to 2019 social security support for families was initially increased, then cut back relative to average private income – this should have increased social security receipts in regions with young populations. However, as part of the more general policy of minimising wage costs for business, income support payments to people of working age were cut back. This involved both tightening eligibility conditions and (except for disability pensions) indexing rates of payment

by the consumer price index at a time when average real incomes were increasing. Changes in the age pension were, on balance, more generous and rates were, if anything, increased in relation to average private incomes. The age pension means test was also much gentler so that old people could receive part-pensions even when they had private incomes.

When National Superannuation was introduced it was predicted that it would replace the age pension for the majority of retirees. By 2019 the scheme had been in full operation for two decades, more or less, and as remarked above its effects were evident in the regional distribution of property income. However, they were not so visible in the regional pattern of social security receipts. The country's premier retirement region, NSW North Coast, still headed the list of regions with social security receipts in excess of those predicted by private income. Other established retirement regions were still on the list, in NSW including Northern Rivers, Central Coast and the SE, and in Queensland including Sunshine Coast and Wide Bay. (The Gold Coast was no longer a retirement region.) However, these retirement regions had been joined, in social security dependence, by most of the country agricultural regions with Victoria Outer North and Outer West and NSW Northern Inland in the lead. These were the regions where the poor performance of agriculture in employment generation led to the out-migration of young people and the ageing in situ of established residents, hence increased dependence on the age pension. This increased dependence on social security extended into the remote regions, where a greater proportion of the indigenous population gained eligibility, though here, due to generally youthful populations, social security incomes remained small in relation to private income.

Government efforts to reduce social security support for people of working age impacted strongly in the metropolitan areas. The cohort of deskilled workers who became disability pensioners in the 1980s became age pensioners in the 1990s and gradually faded from the scene. Similarly the proportion of ageing low-income pensioners in the populations of Central Melbourne and Central Sydney declined, replaced by students and other young people who were definitely not eligible for pensions though some of them may have received youth allowances at half the pension rate. The result was that the lowest levels of social security receipt, relative to private income, in 2019 were in Sydney Mid-West, followed by Melbourne Outer North, Melbourne Outer West, Sydney Outer South West and Melbourne Outer South East – all of them regions primarily dependent on local incomes from manufacturing and logistics and all of them with high recent-immigrant populations.

These changes were distributed across the quarter century as follows.

 During the land boom (1994-2007) social security payments per capita increased by 2.33 per cent a

- year. The most rapid increases were in the remote regions except Darwin and also in some of the rural regions. Payments decreased in the ACT and Darwin (presumably Commonwealth employee superannuation replaced some pension payments) and also in Perth South Coast, due to a fall in the proportion of retirees in the population.
- During the mining boom (2007-16) social security payments per capita increased by 1.33 per cent a year. The most rapid increases were in the high-status suburbs of Melbourne and Sydney, presumably due to regional population ageing coupled with increased uptake of part-pensions. Payments per capita fell in Pilbara Kimberley but not in the coal-mining regions, and also fell quite severely in working class suburbs particularly in Melbourne.
- In the fin de siècle years (2016-19) social security payments per capita fell at the rate of 1.33 per cent a year. Despite the general cutbacks, there were increases in the regions most affected by the end of the mining boom (most rapidly in Pilbara Kimberley, but also in four of the seven Queensland regions outside the South East). Payments were reduced most rapidly in the more prosperous suburbs of Sydney and Melbourne.

5.4.3 Superannuation contributions

Though they are technically household savings, superannuation contributions reduce current disposable incomes as surely as income taxes. In 1994 they skimmed 6.6 per cent off gross private income. In line with the implementation of National Superannuation, in 2019 the proportion had risen to 8.5 per cent.

Between 1994 and 2007 superannuation contributions per capita grew by 4.4 per cent a year. The rate of growth was most rapid in the ACT and Darwin, due to the implementation of Commonwealth superannuation, and was also high in the two Queensland coal-mining regions and in Inner and Outer Northern Perth. It was low in the industrial suburbs of Melbourne and Sydney and also in the eastern suburbs of Melbourne.

During the mining boom the rate of growth of superannuation contributions moderated to 3.0 per cent a year. It was still rapid in the ACT but no longer particularly so in Darwin. It perked up in some of the high-status inner suburbs such as Sydney Central and Melbourne Inner South, but subsided a little in Perth and Brisbane. As the boom in coal mining tailed off it fell considerably in the regions along the Queensland coast, and as manufacturing faltered it fell from the already low rates of growth in the factory suburbs to as low as 1.2 per cent a year in Sydney Mid-West.

During the fin de siècle years workers faced with stagnant real wages began to curtail their superannuation contributions and the per capita national total fell by 1.5 per cent a year. The reductions were most rapid in Victoria Outer North, Gippsland, Pilbara Kimberley, NSW Mid North Coast and the ACT, due to combinations of local employment circumstances and high outstanding balances ripe for harvesting.

These changes resulted, in 2019, in the ratio of superannuation contributions to gross private income ranging from 5 per cent in Queensland Outback to 15 per cent in the ACT, the latter as the counterpart of high superannuation earnings. The ratio was also relatively high in Newcastle, Wollongong and Sydney Mid-West, presumably because most of the wage incomes earned in these regions fell within the superannuation guarantee. The rate was relatively low in the mining regions of WA, Queensland and the NT, presumably because a greater proportion of earnings escaped the guarantee.

5.4.4 Interest payments

Interest payments by households include interest on mortgages, on consumer debt and on small business debts, but exclude repayments of principal. Unlike taxes and superannuation contributions, they are not imposed by governments. Apart from inherited debt, households can choose whether or not to borrow, but once committed their interest payments have prime call, after taxes, on their private incomes.

In 1994 interest payments claimed 4.7 per cent of private income. The percentage was highest in outer suburban Sydney and Melbourne – 7.2 per cent in Sydney Outer West and not much below this in Sydney Outer South West and Melbourne Outer South East. Thanks to the commitments of home buyers, interest commitments were generally high in outer suburbs and on the peripheries of the metropolitan areas. The percentage was around national average in the country regions and well below in the inner metropolitan regions and also in the remote regions.

During the land boom household interest obligations grew apace, at 8.7 per cent a year. The finance sector favoured lending in regions which were not heavily indebted in relation to their perceived prospects of capital gain, and accordingly interest payments per capita grew most rapidly in Inner Perth, with high rates of growth also in Inner Brisbane, Central Sydney and the three regions adjacent to Central Sydney, also in Darwin and NT Outback. Growth in interest obligations per capita was much lower in the indebted metropolitan outer suburbs and also in the ACT – the one metropolitan centre where the supply of housing kept up with demand and house prices remained reasonable in relation to incomes.

Reductions in interest rates following the financial crisis of 2007 fed through into interest obligations nationally. The reduced rates were countered by increased lending, but even so interest payments per capita fell by 2.8 per cent a year from 2007 to 2016, reducing the burden of interest though not necessarily the burden of total debt servicing, since outstanding debt continued to increase. The reductions in interest payments per capita were least in the metropolitan centres and inner suburbs of the eastern states – least of all in Melbourne Inner East. However they fell quite rapidly in Perth and such regions as Mackay and NSW Inland Hunter as lending declined in anticipation of the end of the mining boom.

During the fin de siècle years interest obligations per capita continued to fall, though not quite so rapidly. The reduction in interest rates continued as the Reserve Bank encouraged households to borrow and spend, but the response was dampened by large outstanding household debts. As a result, interest obligations per capita rose in a few regions, notably retirement regions on the NSW coast (the SE, Mid North Coast and Northern Rivers) and also in Victoria Inner West – improvements to the train service and highway seem to have created a small land boom in Ballarat. These increases were more than balanced by the combined effect of reduced interest rates and limited new borrowing in reducing the interest burden in a variety of regions, including all of the Sydney suburbs (especially Parramatta and the Mid-West), the inner Melbourne regions, Inner Brisbane and even Central Queensland and Townsville.

The result of these changes was that in 2019 interest obligations claimed 5.9 per cent of private income, with debt repayment additional. Interest obligations in relation to private income were particularly heavy in Mid-West and Outer South East Sydney, in Outer West Melbourne and in Sunshine Coast, spilling over into Wide Bay, but also in various other outer suburbs and urban peripheral regions. Thanks to low house prices, they were low in most of the remote regions, in some of the country regions and in the ACT.

5.4.5 Net deductions from private income

Governments and the finance sector modify the distribution of private income by adding social security payments and subtracting income tax, superannuation contributions and interest on household debt. This is not the complete list of legal entitlements and obligations which translate into more or less compulsory additions and subtractions, but covers the main ways in which governments and financial institutions modify private incomes, both by adding and (more commonly) by subtracting. The result in 1994 was a net deduction of 15.5 per cent. Due to increases in income tax and

superannuation contributions, coupled with cutbacks to social security, the net deduction rose to 21.8 per cent of private income in 2019.

In both years, regions with high average private income per capita yielded relatively high net deductions. In 1994 a region with average private income 20 per cent below national average could expect to lose 10 per cent of that income in net deductions while a region with average private income 20 per cent above national average could expect net deductions of 19 per cent. By 2019 net deductions had risen, so the low-income region had 15 per cent of its private income deducted and the high-income region 25 per cent. As deductions increased, the relativity between the regions was maintained, more or less. The system of income deductions and supplements was as progressive in 2019 as it had been in 1994, at least in relation to regional average incomes. However, thanks mainly to increased generosity towards the elderly and the hardening of hearts towards citizens of workforce age, young adults in particular, the relationship between private income before and after net deductions loosened. Technically, the R² of the relationship declined from 0.95 to 0.92. This can also be seen in changes in the geographic pattern of net deductions.

In 1994 net deductions were less than predicted from private income in two types of region.

- Retirement regions with pensioner populations, to the point where income supplements from social security exceeded total deductions in NSW Mid North Coast and Northern Rivers.
- Metropolitan centres where pensioners shared the region with high-income residents (Central Melbourne, Central Sydney).

Deductions were more than predicted from private income in two types of region.

- Outer suburbs with young populations, such as Sydney Outer West and Melbourne Outer East.
- Remote areas, again with young populations.

In 2019 the association of low net deductions with elderly populations was maintained, but with changes of pattern.

- Though the favourable treatment of retirement regions was still in place, it was less noticeable because the coastal retirement regions had been gradually diversifying their economic base and attracting younger residents. Even where the diversification emphasised low-income, tourism-related convivial occupations the effect was to reduce regional dependence on social security.
- Regions with pensioner populations living alongside relatively high-income residents still attracted high net deductions, but these regions were no longer the metropolitan centres. Instead, they were mostly country regions, where agriculture still generated

- reasonable incomes in good seasons, but not enough jobs to retain the young. As the farmers and townspeople aged in situ the pensioner proportion of the population had accordingly grown. A prime example was the WA Wheatbelt.
- Something similar seems to have happened to reduce net deductions in the remote regions. This would have included the transfer of Aboriginal people from wage-like income support to social security.
- The Commonwealth employee superannuation scheme so increased private income and reduced tax liabilities in regions where the federal government was a major employer that the ACT and Darwin became major outliers, with net deductions much less than predicted from private income.

Apart from Canberra, these changes resulted from the generally unfavourable economic trends outside the major cities, coupled with the increased prosperity of 'knowledge economy' centres. As a result, in 2019 the regions where net deductions were more than predicted from private income were nearly all metropolitan. In the city centres, old residents who paid no tax and received age pensions were replaced by students who paid tax on their part-time incomes and received little if any social security support. The buoyancy of commuter incomes, combined with the policy of minimal support for people of workforce age, increased net deductions in many suburbs - particularly working-class suburbs which failed to gentrify and were not well placed to gain high-paying city-centre work. Net deductions in relation to average income were particularly severe in Central Melbourne (students) and Mid-West Sydney (variously disadvantaged working-class residents eligible for no more than minimal social security support).

Despite these gains and losses, net deductions were mildly redistributive, at the regional level, in both 1994 and 2019.

5.5 Disposable income

Private income after supplementation from social security and the deduction of income taxes, superannuation contributions and interest payments approximates the common notion of disposable income - that which is available for spending. It is approximate for three main reasons, one of which makes for overestimation and two for over-estimation. The over-estimation arises, in part, from the failure to deduct depreciation on household business assets. The underestimation is partly due to the exclusion of cash rents received by landlords. More important, the underlying data, drawn as they are from tax and Centrelink sources, are of varying reliability and in all probability under-estimate income, particularly among groups with opportunities for tax avoidance. This said, this imperfect measure of disposable income, when divided by population, distinguishes regions where typical household

budgets include plenty of elbow-room from those where many residents are likely to suffer straitened budgets.

By this measure, in 1994 the richest region was Central Sydney, followed by Central Melbourne. A further 15 (out of the total of 67) regions were above the national average – these included the remaining metropolitan centres, a selection of high-status suburbs and the two WA remote mining regions. The remaining 40 regions were clustered just below the national average, with the probability of straitened household budgets highest in Wide Bay.

In 2007 the ACT and Central Sydney tied for the title of richest region, followed by 20 more regions above the national average. As before these included the other metropolitan centres plus Darwin and some high-status suburbs and several mining regions. Sydney Mid-West established itself as the poorest region and low disposable incomes were also reported from manufacturing-dependent suburbs.

At the end of the mining boom, in 2016, the ACT was firmly established as the region with the highest disposable income per capita, followed by Darwin. The number of additional regions with average disposable incomes above national average had increased to 24 and, as in 2007, included the other metropolitan centre regions, the high status suburbs of Sydney and Melbourne and a number of mining regions. The mining boom was particularly hectic in WA and seven of the eight regions in that state were included in the 24 – the exception was Perth SE, which was just below average. Several agricultural regions were also just above average, such as NSW SW. Sydney Mid-West was again the poorest region and other manufacturing-oriented outer suburbs of Sydney, Melbourne and Adelaide were also disadvantaged.

The three years to 2019 did little to alter the position. The richest regions were still the ACT and Darwin, followed by 23 others with disposable incomes above average. These again included the metropolitan centres, the high-status suburbs of Sydney and Melbourne, several mining regions and a few agricultural regions. Sydney Mid-West continued as the poorest region, accompanied by Sydney Outer South West, Melbourne Outer West, Outer North and Outer South East, Adelaide North and Wide Bay — which latter was the poorest non-metropolitan region. The end of the mining boom meant that the number of WA regions with above-average incomes fell from seven to five.

At this point it should be acknowledged that the National Accounts provide an alternative measure of disposable income, which differs from that just discussed in three main ways.

It includes income from dwelling ownership, measured as the cash rents received by landlords (after management expenses) plus the imputed incomes of home owners.

- It deducts 'consumption of fixed (household) capital'
 depreciation of dwellings and household business
- It adjusts for a number of other relatively minor income supplements and deductions.

Thanks mainly to the inclusion of income from dwelling ownership, this ABS measure has been consistently above the estimate of disposable income so far discussed. It was 21 per cent above in 1994 and rose with the land boom to 25 per cent above in 2007 and subsequent years. However, the regional distribution of both measures has been very similar – the ABS measure consistently around 30 per cent above in regions with high house prices in relation to private income (read Sydney, and particularly Sydney North) and consistently 18-20 per cent above in regions with relatively low house prices in relation to private income (generally the remote regions, but also the ACT thanks to its combination of high incomes and reasonable house prices).

The ABS indicator provides a salutary reminder of the significance of housing wealth, but on the other hand including imputed rent in disposable income seriously stretches the definition of what is disposable. A contribution to one's standard of living, emphatically yes, but a contribution to cash available to spend, definitely no. The measure which one adopts accordingly depends on the comparisons to be made. The broader ABS definition is probably the more relevant when one is considering generalised standards of living and the tighter definition used in this chapter when one is concerned about stringency in household budgets. It is, however, of considerable consolation that both indicators agree fairly closely on the ranking of regions by disposable income. Both indicators identify Sydney Central as the richest, and Wide Bay as the poorest, region in 1994, and likewise agree that in 2019 the richest region was the ACT and Sydney Mid-West the poorest.

The subject of riches and, even more, of poverty, raises an important question: how is income shared? Studies of poverty, in particular, emphasise that poverty is experienced on a household basis. Children, in particular, depend on their parents' (or, for some, parent's) income. Will Sydney Mid-West still emerge as the poorest Australian region if allowance is made for the distribution of income between households? To address this question it is necessary to cross-tabulate income with household attributes, which cannot be done using National Accounts data. However, as described in the following chapter, it can be done using Census data.

6. Income in the 2016 Census

Chapters 2 to 5 provide a detailed review of the value of production and the level of income by region, as estimated within a National Accounting framework and reconciled to National Accounts values at state level. The principal sources used to extend the National Accounts to the regional level include the Census (especially as regards demography and commuting), surveys of labour force activity and of household income and expenditure, and administrative sources including tax and Centrelink statistics.

Given that the Census includes an income question, why not rely on this to estimate differences in regional income: Why resort to cobbling data together from so many sources? There are three main reasons.

- The Census question provides no data on the components of income, as distinguished in the National Accounts.
- The Census is conducted every five years whereas the other data sources are more frequent.
- Data from tax and Centrelink files are widely regarded as more accurate than replies to the Census question.

However, the Census estimates have the advantage of being collected from all Australian households as answers to a uniform question and therefore provide a useful check for the National Accounts estimates.

A second reason for paying attention to the Census income question is that it describes income distributions at regional level. The usual sources of income distribution data, sample surveys, do not yield statistically significant findings at regional level, though their findings could be extended to regional level using microsimulation techniques. The advantage of the Census income question is that it provides direct observations which can be cross classified by region (down to small geographic areas) and the great variety of demographic variables collected at the Census.

Though the Census has included an income question for decades, this chapter will review the results for 2016 alone. NIEIR is well aware that a further Census has since been taken, but 2016 still deserves attention, if only because the 2021 results, when they appear, will be difficult to interpret due to the impact of lockdowns.

6.1 Personal income

To quote the Census form, 'information from this question provides an indication of living standards in different areas' - in other words, it helps to identify rich and poor regions. The 2016 Census income estimates derive from a single 'tick-a-box' question. Each Census respondent faced the choice of 15 boxes, ranging from negative income to income above \$3,000 a week, and was instructed not to deduct tax, superannuation, salary sacrifice or any other automatic deduction and to include wages and salary income (including regular overtime, commissions and bonuses), government pensions, benefits and allowances, profits or losses from unincorporated businesses, rents, superannuation, private pensions, child support, interest, dividends, workers' compensation and any other regular source. These instructions are precise enough, but respondents were left to their own devices to make the necessary estimates – there was no interviewer to harry them into producing wage slips and remembering supplementary incomes.

The Census income data was generated by millions of respondents, 91 per cent of whom managed to tick an income box. Single people living alone quite often failed to tick, followed by single people living in groups. Adults in families with children were the most likely to tick as required. In so far as single people tend to have lower incomes than people living in families this introduces a downward bias into the results. This apart, and in so far as people ticked the boxes accurately, the Census provides observations of income which are valid down to small geographic areas, not to speak of small demographic groups. In its review of Census data quality, the ABS observed that Census respondents sometimes forgot to report small, irregular income sources and also that some of them, contrary to the instruction on the Census form, failed to include government pensions or asset returns as income (ABS 2944.0). In other words, there was a downwards bias in the Census estimates, but it was not particularly serious and was likely to be so widespread that it would have little effect on regional relativities. As to data quality, Bruce Bradbury of the University of NSW has carefully compared the results of the Census question with survey data for working-age men and reports that, provided one is careful to align the definitions, the two sources yield very similar distributions (Bradbury 2016, 2018).

Because the Census income data were collected by ticking boxes, of which the bottom and the top boxes were openended, they do not identify very high incomes, but lump them together with moderately high incomes in the openended top box. This means that the Census has nothing to contribute to current arguments about whether or not the benefits of recent economic growth have been cornered by the very rich. A further drawback is that it is not possible to calculate the average income of any group of Census respondents, nor is it possible to calculate Gini coefficients. These are severe handicaps to those of us who are in the habit of using averages to compare groups and Gini coefficients to measure inequality. However, medians, deciles and inter-decile ranges are available.

When individuals are arrayed by personal income, in 2016 the first 10.4 per cent of all Australians aged 15 and over had negative or zero incomes. This means that the 10th percentile of the distribution occurred at zero income. One-third of these people with zero or negative incomes were aged 15-19 and presumably dependent on their parents. At the other end of the distribution, the 90th percentile occurred at an income of \$1,931 a week, which was approximately 23 per cent above the average weekly total earnings of full-time workers at the time of the Census and only 14 per cent above the average weekly total earnings of men who worked full time. This reinforces the point that the Census income data is not of much use to analysts interested in high-flyer incomes.

The median Census income in 2016 was \$662 a week, which as it happens was just under the then minimum wage of \$673 a week for an adult working full time. Though the Census estimate is likely to have a downward bias, the two may be taken as more-or-less equal, which implies that roughly half the population aged 15 and over received a weekly income at or above the minimum wage while the other half received less.

Most of the people with incomes less than the minimum wage did not have a paid job. Many of them, including a large number of age pensioners, received social security payments, while some were students and some were 'dependents' who relied on income received by other household members. Decades ago the typical dependent was a married housewife but nowadays dependents are more usually young people. In addition, many part-time workers had incomes less than the minimum wage, along with people who worked full-time but were paid at less than the minimum adult wage. These included those paid at junior wage rates, those who worked in unprofitable businesses and those who worked under employment arrangements which undercut the minimum wage.

People with incomes greater than the minimum wage included nearly all full-time employees, part-time workers working at wage rates high enough to compensate for their limited hours or with supplementary incomes from other sources, the proprietors of profitable businesses,

successful investors and retirees with above-average superannuation.

Taking the proportion of adults (the population aged 15 and over) with personal incomes greater than the minimum wage as the indicator of wealth, a familiar regional pattern emerged. Across Australia the median proportion of adults receiving personal income above the minimum wage was (by definition) 50 per cent. In 2016 the highest proportion was 68 per cent (in the Pilbara/Kimberley and also in Darwin), the lowest (in Wide Bay) was 36 per cent. Other regions where personal incomes were generally high included Central Sydney and its northern and eastern suburbs and also the ACT. Other regions where personal incomes were generally low were the NSW North coast regions, Northern Tasmania and the Mid-West of Sydney. At regional level the relationship between the proportion of adults with incomes over the minimum wage and average private income per capita was fairly close ($R^2 = 0.71$) but that with disposable income per capita not quite so close ($R^2 = 0.52$). In other words, regional analysis of the Census question on individual income broadly confirmed the distribution of average private income from the National Accounts approach.

Both analyses provide a basic understanding of how incomes varied by region but do not really address the question of relative living standards, primarily because income goes further when people club together to share expenses. We now take this into account, at least in a rough and ready way.

6.2 Household income

To quote the Census form again, 'information from this question provides an indication of living standards in different areas'. The living standard which can be extracted from any particular income depends on the number and needs of the people dependent on that income and on the prices which they face.

As regards regional variation in prices, there can be systematic regional variations in the prices of basic goods such as groceries due to transport costs and regional differences in the level of competition between grocery stores. More important, housing costs vary regionally, with corresponding differences in dwelling attributes. Higher prices near the metropolitan centres are associated with smaller dwellings, particularly smaller or non-existent gardens, coupled with much better accessibility to jobs and services than is possible in rural areas. These country/urban differences can be accentuated by differences in service availability and environmental quality, not all of which are in favour of the city, and further complicated by local differences in climate and social structure. Many of these differences are inevitable, though they can be ameliorated, for example by better transport, or (at the individual level) by migrating from one

region to another. Though the 2016 Census included a question on rental or mortgage repayments and it would be possible for the ABS to estimate household incomes after the deduction of these costs (but without allowance for other deductions such as income tax) this distribution was not available for the present report. Even if it were, it would be difficult to interpret due to the lack of explicit deductions for direct taxes or for housing costs other than rent and mortgage costs.

The question of the number of people dependent on particular incomes is more tractable. A given income yields a much higher standard of living when all of it goes to support the recipient's standard of living than when it has to be shared between the recipient and various dependents including children. The extent to which any given income is shared depends on the recipient – some recipients are generous, some are selfish - but there is a general expectation that those who share a household will share expenses. Switching the unit of observation from the individual to the household, the ABS has reclassified the Census income data to allow for the (presumed) sharing of income between the members of households. The reclassification invoked a practical definition of the term 'household', totalled the incomes of the individuals in each household and then adjusted for household size. Needless to say the process was full of assumptions, but the assumptions were defensible as yielding a better approximation of living standards than the distribution of individual incomes.

6.2.1 The household definition

Conceptually, a household is a group of people who share their ordinary living expenses – the traditional phrases are that they share the rent and eat out of a common pot. There is, of course, no guarantee that all household members benefit equally from this arrangement. The folklore is full of tales of husbands who drink or gamble their wages before the money gets home. Even so, a great deal of sharing takes place, particularly between parents and children. The assumption that incomes are shared within households comes closer to the mark than the assumption that standards of living depend on individual income.

In the practical Census definition, a household is a group of people who live in a private dwelling. In turn, the ABS states that a private dwelling is 'most often a house or a flat. It can also be a caravan, houseboat, tent or a house attached to an office or rooms above a shop.' (ABS 2901.0) By this definition, residents of non-private dwellings are not members of households. Non-private dwellings include hotels, guest houses, boarding houses, religious and charitable institutions, boarding schools, defence establishments, hospitals, prisons and any other kind of communal dwelling. People who on Census night were visiting the dwelling where they were enumerated and did

not have a home address were also excluded from household membership. In 2016 approximately 9 per cent of the population were not household members and were accordingly excluded from the assessment of income on a household basis. Such people formed a low proportion of the residents of established suburbs, a slightly higher proportion of the population of most country regions, a higher proportion again in the metropolitan centres and highest of all in the remote regions. One can only speculate as to their income: in the city centres they would have included low-income young people who lived in nonprivate accommodation and did not claim a home address elsewhere. In the suburbs and country towns they would have included low-income elderly people in hostels and the like, while in the remote areas they would have included average to high income workers living in construction camps who did not claim a home address somewhere else. In other words, in most regions their incomes would have been below average, but not necessarily so in the regions where they were relatively numerous.

The ABS estimates household income from the Census by adding the incomes of household members. These additions are approximate, since the individual incomes added are not precise but are tick-a-box ranges. The ABS addresses this problem by awarding each household member with the estimated median income for the box which he or she ticked.

In 2016 approximately 9 per cent of persons aged 15 and over failed to answer the income question. These non-respondents were distributed over the household and non-household population. The presence of one or more of these non-respondents in a household prevented the calculation of total household income, as did the temporary absence of a household member aged 15 or more. Missing observations deleted 10 per cent of households from the household-level income data set.

6.2.2 Household equivalised income

The concept of equivalised household income was first introduced to Australia by Professor R F Henderson in his work on poverty during the early 1970s. The Henderson poverty line has been updated and published ever since, in the process surviving considerable criticism. The poverty line implies answers to simple questions such as: How much does a couple economise on their costs of living when they move in together? How much does an extra child add to the expenditure required to maintain a constant standard of living? Henderson used a complex set of estimates derived from studies of household budgets, but over the years a simplified scale has come into general use, at least in wealthy countries. In this scale the cost of living is set at 1 for the first (or only) adult in the household (where an adult is a person aged 15 or more), increases by 50 per cent for each further adult in the household and

increases by a further 30 per cent for each child in the household (Azpitarte and Kalb, 2019). On this scale, a household consisting of a man, woman and two children aged under 15 requires 2.1 times the income of a single adult household to maintain the same standard of living. This scale is obviously simplified – it takes no account of housing costs, or of the costs of workforce participation or the costs of disabilities. It is also rough and ready – do children's needs really increase by forty per cent when they turn 15? However, it summarises a great deal of work carried out in a variety of high-income countries over the past five decades and has the official status of OECD recommendation.

At first sight, this OECD scale diverges from the Henderson scale by allowing greater relative costs for the second adult, but this occurs only because the Henderson scale makes separate allowance for the costs of participation in the paid workforce such as transport and appearance costs (child care costs were not covered). The Henderson relativities between a single-adult and two-adult household are similar to the OECD in two cases: that where both adults have paid work and that where neither have paid work. The divergence occurs only when the first adult is in the workforce and the second not. The male breadwinner and female housewife was still a common household type when Henderson conducted his poverty inquiry but is now relatively uncommon, which means that the OECD equivalence scale is as good as any, especially when applied to data (like the Census income data) which do not distinguish between people who go out to work and those who do not.

A practical difficulty arose in the interpretation of zero and negative incomes. The ABS found that some of these were households where everybody misread the question and answered that they had zero earned income, forgetting their pension. Others would have been households which suffered business losses. Many of these would have had assets to cushion the blow, perhaps because they were in a cyclical industry where losses are inevitable in bad years. The national average proportion of households with negative or zero incomes was exceeded in sixteen of the 67 regions of which 12 were within metropolitan Sydney and Melbourne and three more were the inner regions of Brisbane, Perth and Adelaide. The five Melbourne regions included the Centre and inner suburbs while the seven in Sydney included the Centre and the Mid-West but excluded the North. This distribution rather suggests that at least some zero to negative incomes were associated with property speculation. As with business losses, one expects that the speculators had other resources to draw on. Zero and negative income households have been excluded from most of the following analysis.

Equivalised income was calculated by dividing total household income by the equivalence rating of the household. The median equivalised income per household across Australia at the 2016 Census was \$894 per week, with the 10th percentile standing at \$366 per week and the

90th at \$2,074 per week. The relationship between personal incomes and equivalised income can be illustrated by taking a high-income example. A person receiving personal income at the 90th percentile of the personal income distribution and living alone had an equivalised income of \$1,931 a week, a little below the 90th percentile of equivalised income for all households. If that person was the sole earner of a couple without children, the couple's equivalised income was \$1,287 a week. Add two young children, and the household's equivalised income was \$920 a week – still in the top half of the distribution of equivalised incomes. Where a couple without children both received personal incomes at the 90th percentile of the personal income distribution, their household income was well over the 90th percentile of equivalised income. At the low end of the distribution, a person receiving personal income at the median of the personal income distribution and living alone had an equivalised income of \$662 a week, definitely in the bottom half of households by equivalised income. If that person was the sole earner of a couple without children and not eligible for any form of social security assistance, the couple's equivalised income was \$441 a week. Add two young children and the couple's equivalised income was \$498 a week, \$183 a week of which came from Family Tax Benefit Part A – which indicates that, at incomes around the minimum wage, Family Tax Benefit made an important contribution to the incomes of families with children. To the extent that such families forgot to include Family Tax Benefit when they ticked their Census income box the results are downwardly biased. However, the probability of such mistakes is likely to be similar from region to region, so that the errors do not vitiate interregional comparison.

In 2016, people living alone and receiving either the Age Pension or Disability Support Payment with no other income had personal incomes of \$438.50 a week. Since they were living as single-person households, their equivalised incomes were also \$438.50 a week. Couples with no other income and eligible for the Age or Disability Support pensions received personal incomes of \$330.60 a week each, yielding an equivalised income for the couple of \$440.80 a week – very similar to the equivalised income of a couple solely dependent on one full-time minimumwage job. All of these incomes were above the 10th percentile of equivalised income of \$366 a week.

If pensioners had incomes which placed them safely above the 10th percentile of equivalised income, what households fell into this bottom 10 per cent? These unfortunate households included recipients of the low-rate social security benefits (Newstart Allowance, Youth Allowance, Austudy, Farm Household Allowance, Sickness Allowance and several other Centrelink payments), households solely dependent on part-time work, particularly at low wage rates, proprietors of loss-making businesses, and households whose financial investments had gone sour. These would include wealthy households who considered their incomes negative due to capital losses from

investments in shares or property. There is also the possibility of understatement of income. As the ABS notes, some of the low incomes reported at the Census were due to the respondent's failure to count pension or asset income as income (ABS 2944.0). However, the standard of living of low-rate beneficiaries and low-rate part-time workers was undoubtedly low, as required by recent Commonwealth policies to remove hindrances to the downward flexibility of wages.

The Census is not a poverty survey any more than it is a wealth survey. Though the process of adjusting from personal incomes to equivalised household income is the same as the process of adjusting income to assess the incidence of poverty, the tick-a-box method of collection of income is too approximate to allow accurate estimation, especially for households where the poverty line hovers near the boundary of one or other of the tick-boxes. Even so, when using the Census data as an indicator of the geographic distribution of very low incomes it helpful to remember that, in 2016, when the 10^{th} percentile of household equivalised income stood at \$366 a week, the simplified Henderson poverty line (as updated by the Melbourne Institute of Applied Economic and Social Research) for a household comprising a single person not in the workforce and living alone was \$417 a week, for a couple was \$295 a week each, for a couple with two children was \$435 a week per adult household member and for a single parent with one child was \$564 a week. Except for a couple without children, these poverty lines were all well above the 10th percentile. Estimates of the number of households with Census equivalised incomes above zero but less than the 10th percentile accordingly underestimate the number with incomes less than the Henderson poverty line, especially for single people and single parents.

Though they apply poverty lines to household income, recent survey-based estimates of the incidence of poverty have been published in terms of numbers of individuals with household incomes below the poverty line rather than numbers of households. The Census-based estimate that, in 2016, 8.2 per cent of households received very low incomes (under the 10th percentile, excluding those with zero and negative incomes) is therefore not comparable with the survey-based estimate that approximately 8 per cent of individuals received incomes below the Henderson poverty line. Households with very low incomes tend to be smaller than households with incomes above poverty level. Adjusting the Census-based estimate for household size yields a very rough estimate that, in 2016, 5.7 per cent of the population lived in households with very low incomes. The 10th percentile thus amounts to a very austere poverty line, particularly for single people (the Age Pension, at single rate, was above the 10th percentile but below the Henderson poverty line).

6.3 Regional differences in household prosperity

The regional distribution of equivalised incomes is best described in two steps: first, the broad differences between metropolitan areas and the rest of the country and, second, differences within the several metropolitan areas. Table 6.1 introduces the first of these topics.

Metropolitan boundaries are sometimes contentious, particularly those delineating Sydney and Melbourne – it is easy to draw boundaries which make the one larger than the other, so raising questions of urban pride. This question was discussed in Chapter 2 where it was pointed out that Australia has five metropolitan cities with millionplus populations. Each metropolitan city centre has a hinterland which comprises a ring of inner suburbs, then a ring of outer suburbs, then an outer-urban periphery beyond which lies the rural hinterland and finally, where the hinterland extends into pastoral country, a remote hinterland. The outer-urban hinterlands include established provincial cities within easy day-return travel distance of the metropolitan centre and rural areas where land values are affected by demand emanating from the metropolitan area, whether for commuting, holiday housing or sheer speculation. In Chapter 2 regions were allocated to one of these four categories according to their preponderant character.

Four regions resisted this categorisation: the two Tasmanian regions, Darwin and the ACT. The Tasmanian regions both included long-established cities, none of which was large enough to constitute a metropolitan centre. However, these two regions had similar income distributions to the rural hinterland, country regions of the other states, and in Table 6.1 are included in this group. Darwin and the ACT were more distinctive. Both were small, high-income cities. In location they differ: Darwin qualified as remote whereas the ACT was within dayreturn driving distance of Sydney and was surrounded by the SE NSW region, which is classified as peri-urban, partly to Sydney and partly to the ACT itself. These two are accordingly treated separately in Table 6.1.

Both the ACT and Darwin stood out for their low incidence of very poor households and their high incidence of households with high equivalised incomes. In the ACT this reflected the employment policies of the Commonwealth government, coupled with the region's inability to diversify its economic base – which may, indeed, have been related to the nature of that economic base. Despite its abundance of well-qualified graduates, the ACT found it difficult to attract businesses serving commercial markets, as distinct from contractors to the Commonwealth. Darwin poses a more interesting question. It was more dependent than most cities on federal government employment, but this dependence was no greater than Townsville, which was not a high-income city. Nearly 10 per cent of Darwin

households identified as indigenous, and as will be discussed below such households tend not to have high incomes. Its economic base was more diversified than the ACT, which again should mean greater reliance on industries which generate lower incomes than the Commonwealth public service, though they include high-income employment in mining support. It is possible that wage rates were on the high side, perhaps to attract

personnel to a relatively isolated location and perhaps as an overhang from Darwin's days as a Commonwealth town. Whatever the reason, in 2016 the distribution of Darwin households by equivalised income was very similar to the ACT.

	Households	1 st decile	2 nd to 4 th decile	6 th to 9 th decile	10 th decile
Region	% National total	% Regional total	% Regional total	% Regional total	% Regional total
SYDNEY	16.9	9.2	32.7	42.3	15.8
Sydney periphery	7.4	9.7	43.7	39.1	7.4
Metro NSW	24.3	9.4	36.0	41.4	13.2
ACT	1.8	4.7	23.9	51.1	20.3
Metro NSW + ACT	26.1	8.6	35.2	42.0	14.3
MELBOURNE	18.5	9.7	37.1	42.0	11.1
Melbourne periphery	4.7	11.5	47.6	35.4	5.5
Metro Victoria	23.1	10.1	39.3	40.7	10.0
BRISBANE	8.9	8.3	37.6	43.7	10.4
Brisbane periphery	4.8	9.1	45.5	38.8	6.6
South East Queensland	13.7	8.6	40.4	42.0	9.1
ADELAIDE a martichama		44.0	44.0	27.6	
ADELAIDE + periphery	6.6	11.0	44.8	37.6	6.5
PERTH + periphery	9.0	8.9	35.6	43.1	12.3
NSW country	6.8	12.1	49.9	32.7	5.1
Country Vic, SA, WA	4.3	12.8	49.1	33.2	4.9
Queensland country	6.0	11.4	45.9	36.4	6.3
Tasmania	2.4	12.4	49.0	33.8	4.8
Country total	19.5	12.1	48.4	34.1	5.4
D .		42.2	22.2	40.5	
Remote	1.5	13.2	33.8	40.5	12.6
DARWIN	0.5	4.8	22.4	53.9	18.9
Remote with Darwin	2.0	11.3	30.8	43.4	14.

Notes: Sydney: Sydney Central, Inner E, Inner W, SE. Mid W, North, Parramatta, Outer W, Outer SW.

 $\label{thm:control} \textit{Sydney periphery: Sydney highlands, Central Coast., Newcastle, Wollongong, SE \, NSW.}$

ACT: ACT only.

Melbourne: Melbourne Central, inner E, Inner N, Inner S, Outer E, Outer N, Outer S, Outer SE, Outer W.

Melbourne periphery: Geelong, Gippsland, Vic Inner N, Vic Inner W. Brisbane: Brisbane Inner, Brisbane Outer SE, Outer SW, Outer N. Brisbane periphery: Gold Coast, Sunshine Coast, SEQ inland.

Adelaide + periphery: Adelaide Inner, North, Ranges.

Perth + periphery: Perth Inner, Outer North, Outer SE, South Coast, WA SW.

NSW Country: NSW Central West, SW, Inland Hunter, Mid North Coast, Northern Rivers, Northern Inland.

Country Vic, SA, WA: Vic outer north, outer west, SA outer, WA Wheatbelt.

Country Qld: Darling Downs, Wide Bay, Central Qld, Townsville, Cairns.

Tasmania: Tasmania South, north.

Remote: NSW Far W, Qld Outback, NT Outback, Pilbara Kimberley, Gascoyne Goldfields.

Darwin: Darwin.

Leaving the ACT and Darwin aside, within the hinterland of each metropolitan area the proportion of poor households was lowest in the city and suburbs, higher in the periphery, higher again in the country regions beyond the periphery and highest in the remote parts of the hinterland. This pattern was only partly mirrored by the proportion of rich households: this was highest in the city and suburbs, lower in the periphery and perhaps a little lower in the country regions, then kicked up in the remote hinterlands. It was characteristic of the remote regions that more than 10 per cent of their households were in the poor decile by equivalised income, and also more than 10 per cent were in the rich decile, meaning that their internal income distribution was more unequal, more polarised, than in Australia as a whole. In some regions this was expressed on the ground by the income-distance between indigenous communities with limited employment and mining settlements with residents drawing high wages.

If the proportion of households in the top decile was greater than 10 per cent, it was generally the case that the proportion in the 6th to 9th decile was greater than the national proportion of 40 per cent, and similarly if the proportion in the bottom decile was greater than 10 per cent, the proportion in the 2nd to 4th decile was greater than the national proportion of 40 per cent. In other words, the distributions were upwardly biased in some regions and downwardly in others. The exception, already mentioned, was the typical pattern in the remote regions, which had fewer households in the 2nd to 4th deciles than would be expected, given their complement of poor households. This would, in part, reflect a lack of age pensioners, whose incomes tend to fall into the 2nd and 3rd deciles.

By the broad definition of metropolitan area including the peripheral regions, in 2016 the incidence of poverty was least in South East Queensland, followed by metropolitan WA, metropolitan NSW, metropolitan Victoria (where the incidence was almost exactly 10 per cent, the same as in Australia as a whole) and finally metropolitan SA. The incidence of rich households was somewhat different: highest in metropolitan NSW (and even higher if the ACT were included), with metropolitan WA in second place, then metropolitan Victoria (again spot on the national average), then South East Queensland and finally metropolitan SA. It is noticeable that metropolitan NSW had more poverty than would be expected given its numerous rich households, and South East Queensland many fewer rich households than would be expected from its low poverty rate.

6.3.1 Regions with high standards of living

Insofar as high equivalent income supports a high standard of living, the proportion of a region's households with

equivalised incomes above the 90th percentile identifies prosperous regions. Within each metropolitan area, in 2016 the most prosperous region was the centre, followed by the adjacent high-status commuter suburbs, then grading down to the low-status fringe. The most prosperous of the 67 regions was Central Sydney, where 32.5 per cent of all households had equivalised incomes in the top decile. Commuting spread this peak of prosperity into the three adjacent regions, but not into the western suburbs. The peak in Melbourne Central was lower -25 per cent of households in the top group – but likewise spread into the inner suburbs south, east and even north, while the even lower peak in Central Perth (20 per cent) spread into the northern suburbs. The peak in Inner Brisbane was less again, at the 19 per cent mark, and that in Inner Adelaide was only 11 per cent. To put the ACT and Darwin in perspective, their proportion of rich households was similar to Inner Perth - one could, perhaps, think of them as inner suburbs without outer suburbs.

Outside the metropolitan areas, only one region, Pilbara/Kimberley, made it into the high income group. In the other resource-based regions the proportion of prosperous households was either close to national average or, as in Inland Hunter, significantly below. The resource sector may have generated high labour productivity, but the rewards of productivity did not in general accrue to the residents of the resource-rich regions. The region with the lowest proportion of prosperous households was Wide Bay, where only 3.1 per cent of households had equivalised income in the top decile. Other regions where high-income households were scarce included the ex-urban and retirement regions along the east coast and country regions which were undergoing structural change such as Tasmania North and Outer SA. Prosperous households were also rather scarce in Sydney Mid-West and Sydney Outer South West.

6.3.2 Regions with a high incidence of poverty

Turning to the low-income end of the distribution, very poor households can be identified as those with incomes below the 10th percentile excluding those with zero or negative incomes. Very poor households were more widespread than the rich – whereas the rich congregated among their own kind and were few and far between in many regions (they constituted only 3 per cent of households in Wide Bay) there was only one region where poor households constituted less than 7 per cent of the population (that region was Sydney North, at 5 per cent). Per contra, the regional concentration of very poor households nowhere rose above 18 per cent.

There were two major regional concentrations of very poor households. The first was notable for its high Aboriginal population – the NT Outback. The second very

poor region was the opposite of remote – the Mid-West of Sydney. Neither region was unique. Other remote regions had their poor Aboriginal communities, notably Queensland Outback and the NSW Far West, though in remote WA such poor communities were not as numerous as the wealthier mining camps and the regional proportion of very poor households was around the national average. Similarly the poverty of Sydney Mid-West spread into the Outer South West. There were also patches of poverty in the other metropolitan areas, though in size and depth of poverty the Sydney Mid-West had no interstate equivalents.

No ex-urban or lifestyle region stood out as very poor — as explained above, age pensioners had equivalised incomes above the $10^{\rm th}$ percentile. However, the proportion of very poor households was above national average in several rural regions, including some bordering on lifestyle such as North Tasmania and Wide Bay.

Regions with low proportions of very poor households included the ACT, Darwin, inner Brisbane and the inner suburbs of Sydney extending to the beaches and to the north. Just as it had no equivalent of Mid-West Sydney, Melbourne had no equivalent to Sydney's Northern suburbs; all its regions were close to national average in their proportions of very poor households. In Perth the proportions of poor households were a little below national average, in South East Queensland generally a little below, in Adelaide a little above, and a little above in rural regions generally. In the inner parts of all five major metropolitan areas there were pockets of very low income households comprising single people or group households of unrelated individuals, very likely with a preponderance of students.

6.3.3 The regional segregation of incomes in Sydney and the other metropolitan areas

It can be objected that this contrast between the social segregation of Sydney and the relative social integration of the other metropolitan areas depends on the regional boundaries adopted in the *State of the Regions* reports and would disappear if the regional boundaries were drawn differently. An alternative analysis was accordingly conducted at the Local Government Area (LGA) level. LGAs are generally smaller than SOR regions and this analysis asked whether there were significant groups of poor LGAs in the metropolitan areas which the SOR regions fail to identify. Metropolitan LGAs were classified as rich if less than 5 per cent of their households had very poor equivalised incomes, poor if more than 10 per cent of households reported very poor equivalised incomes and middle-income otherwise.

In the Sydney metropolitan area there were eight rich LGAs, of which five (Mosman, North Sydney, Ku Ring Gai, Northern Beaches and The Hills) were contiguous, two (Woollahra and Waverley) lay across the harbour from the north shore group and one (Camden) was isolated on the urban fringe. There were 10 middle-income LGAs and the four poor LGAs formed one contiguous group (Canterbury-Bankstown, Cumberland, Fairfield and Liverpool). Sydney Mid-West region includes most of Canterbury-Bankstown and all of Cumberland while Sydney Outer South West includes Fairfield and Liverpool along with Campbelltown. Though distanced from the metropolitan centre, this group of LGAs was well within the metropolitan boundary. As the regional boundaries are currently drawn, this expanse of poor suburbs was shared between two regions, both of which included a mix of very-poor and mildly prosperous suburbs. A revision of the SOR boundaries which modified the Mid-West to exclude the gentrifying east of Canterbury-Bankstown and include Fairfield and Liverpool would have created an even more distinctive region, marked by pervasive poverty.

In whatever way the regional boundaries are drawn, there were no such possibilities in the other metropolitan areas. **Melbourne**_had one rich LGA (Nillumbik, on the urban fringe), 27 middle-income LGAs and three poor LGAS (Hume, Greater Dandenong and Brimbank). These three were scattered to three points of the compass and were included in Melbourne Outer North, Melbourne Outer South East and Melbourne Outer West respectively.

Because LGAs in **South East Queensland** were larger than in the other metropolitan areas, less variety would be expected. The region had no rich LGAs, nine middle-income LGAs and one poor LGA (Somerset, on the semi-rural fringe and part of SEQ Inland).

In **Adelaide** the LGAs were smaller than in Sydney or Melbourne. The metropolitan area had no rich LGAs, 16 middle-income LGAs and four very poor LGAs, of which three (Playford, Port Adelaide-Enfield and Salisbury) formed a contiguous belt included in Adelaide North region. The fourth, the City of Adelaide (yes, the very centre of the metropolitan area) seems to have been poor due to its student population.

In **Perth** the LGAs were smaller again. The metropolitan area had five rich LGAs grouped together in the Western (beach-side) suburbs and hence parts of Inner Perth region (Cambridge, Claremont, Cottesloe, Nedlands and Peppermint Grove), 25 middle-income LGAs and no poor LGAs.

This analysis emphasises the point that only Sydney boasts large tracts of both rich and poor areas. The high level of economic segregation in Sydney has traditionally been blamed on topography – the harbour view effect (Stretton 1970) – but as documented in Table 6.1 Sydney had a more than average share of high income households, perhaps due to its booming finance sector. Melbourne also participated in the finance boom, but in a more restrained

way given its specialisation in superannuation and insurance. Brisbane, Adelaide and Perth, along with the country at large, missed out on the finance boom, but Perth seems to have captured significant income from the mining boom. These patterns help to explain the presence of high-income LGAs in Sydney, Perth and Melbourne and their absence in Brisbane and Adelaide. Of course, booms generally collapse. Indeed, the heady phase of the mining boom had passed well before 2016, but the resource rents generated in its aftermath were still buoying incomes in Perth. An income collapse is predicted when the finance bubble is finally pricked but if the collapse follows the pattern established in the USA in 2008 the losses will not undermine the relative prosperity of inner city residents (Brain and Manning 2017).

These comparisons confirm that Sydney Mid-West and Outer South West are unusual for their high incidence of poverty combined with substantial population (over a million residents). A major reason for their high level of poverty was the national failure to manage the downsizing of manufacturing by providing alternative employment. It is true that a great many of the workers whose skills were rendered redundant by the economic reforms of the 1980s and 1990s left the workforce and became social security clients, but that was over two decades ago, and most of these de-skilled workers would by 2016 have been receiving the Age Pension and hence not be accounted poor by the austere standards adopted here. However, de-skilling is still occurring and the current social security system is nastier to unemployed people than it was in the 1990s, hence de-skilling is more likely to result in poverty.

Yet why such a concentration in south-west Sydney? Not all of the manufacturing-dependent regions of the postwar period continue to register the high poverty levels of Sydney Mid-West. On the fringes of the Sydney metropolitan area, Newcastle and Wollongong were once dependent on manufacturing but in 2016 had noticeably less poverty than Sydney Mid-West, perhaps because lower land prices were more favourable to diversification (in Chapter 4 it was noted that many former manufacturing regions have diversified into logistics, but not Sydney Mid-West). Within the Sydney metropolitan area it was not at all surprising that commuting and gentrification suppressed poverty in the formerly manufacturing inner-western suburbs. There has been similar gentrification in the former inner industrial suburbs of the other metropolitan areas, its strength depending on the growth of city-centre employment, but Sydney Mid-West was perhaps too far out to gentrify – but then, what about The Hills and Sutherland? If the answer to this question is more attractive topography, we are back to the harbour-views explanation of Sydney's segregation.

It was also noticeable that the incidence of extreme poverty was relatively low in the outer suburbs developed from 1995 on, at a time when the finance sector was booming and with it high-income city-centre employment.

This could have been an effect of high land prices: only relatively high-income households could afford to move into the dream-home suburbs, leaving those less favoured crammed into the Mid-West. It should also be remembered that the Census equivalised income estimates make no allowance for housing and transport costs and it is likely that such allowance would increase the estimated incidence of outer-suburban poverty. This said, it is likely that factors additional to the decline of manufacturing were important in concentrating poverty in Sydney Mid-West and the Fairfield/Liverpool part of the Outer South West. These factors could be related to the availability of rental housing, the high proportion of recent migrants and the general ethnic mix along with the limitations of commuter transport between the southwestern suburbs and the major centres of job generation.

6.3.4 Social segregation outside the metropolitan areas

At the LGA level, if Canberra and Darwin are counted as metropolitan, only four non-metropolitan LGAs ranked as high-income in that at least 20 per cent of their households had equivalised incomes in the top 10 per cent of the national distribution. These four were small, remote shires involved with mining (Weipa, Qld and Ashburton, Perenjori and Port Hedland, WA). The surprising lack of high-income mining LGAs reflected the presence in these shires of households dependent on relatively low-income service occupations and the pre-emption of many of the high-income mining and construction jobs by fly-in fly-out workers and by temporary residents living in non-private dwellings. The first of these groups contributed to the high incomes in fly-in fly-out source areas while the latter group were excluded from the household population used in calculating equivalised incomes.

At the other end of the scale, really low-income LGAs could be identified as those with more than 15 per cent of very poor households. By this standard, there were 51 non-metropolitan LGAs with very low incomes (52 if one counts the single metropolitan LGA to meet this austere criterion, Fairfield NSW). The tally by state was as follows:

- none in Victoria;
- 2 in Tasmania (Break O'Day and West Coast, the latter a former mining area and the former in process of converting from fishing and smallholder farming to tourism and retirement);
- 5 in NSW (of which Kyogle and Tenterfield were former smallholder farming areas and the remaining three were inland, with significant Aboriginal populations);
- 7 in SA (Peterborough, which has not recovered from the rationalisation of the railways, three marginal farming areas, Cleve, Karoonda and Wudinna, and

3 remote areas with significant Aboriginal populations);

- 12 in WA (some of them marginal farming areas but most of them remote and with significant Aboriginal populations);
- 10 in the NT (all of which were remote shires with significant Aboriginal populations); and
- 15 in Queensland (all of which were indigenous LGAs).

With the possible exception of Peterborough, there is no LGA in this list equivalent to those metropolitan LGAs which are still struggling with the decline of manufacturing employment. Instead, these are LGAs affected by declines in mining and farming plus a large number with largely indigenous populations, all of them in regions where the natural resource base did not support the application of European technologies.

6.4 Income distribution by demographic group

These observations raise the question of the regional incidence of the factors which have been shown to drive the distribution of income at national level. People can be advantaged in many ways, including by education, by inherited social contacts and by inherited wealth – often with a geographic aspect. For example, children can find themselves born into the catchments of good or indifferent schools, or born into communities with strong or weak social support. Low income can also result from illness, disability, marital breakdown or loss of employment due to technological change and the rise and fall of industries, again with geographic effects, particularly those due to the association between industries and regions.

Concentrating on the low end of the distribution, in 1975 the Henderson Poverty Inquiry investigated the incidence of poverty across the life cycle (young people, old people and families, with particular concern for single-parent families), among people affected by unemployment or sickness and handicap and among the members of particular social groups including small farmers, recent immigrants and Aborigines. Most of these groups could be identified more or less satisfactorily from the Census and their equivalised incomes calculated, but only two were available for analysis here. These were indigenous households and single parent households.

6.4.1 Indigenous households

At the 2016 Census 3.1 per cent of all Australian households self-identified as indigenous. The proportion of

indigenous households in the population varied from well under 1 per cent in Melbourne Inner East and Inner South to a quarter of all households in Pilbara Kimberley and Queensland Outback and to more than a third of all households in NT Outback. There was a very strong inverse relationship between population density and the indigenous proportion of the population, arising because European and other settlers have been attracted to cities rather than to the bush, and outside the cities to regions with resources readily exploitable using European technologies rather than to regions where only the indigenous people knew how to live off the land.

The tomes which have been written on indigenous Australian deprivation point out that the correlation between money and social status which is such a feature of settler Australian society is missing from indigenous culture. It is argued that non-monetary measures of disadvantage, such as command over traditional land, are more important for many indigenous people. And yet the value systems are not totally incommensurate. There are indigenous people who are happy to accept high incomes, and in 2016, 4.3 per cent of indigenous households were in the national top 10 per cent by equivalised income. These high-income indigenous households were scattered across all regions, mostly in small numbers, but they comprised 10 per cent or more of all indigenous households in 13 of the 67 regions. Six of these regions were in inner Sydney and three in inner Melbourne. The remaining four were Darwin, Inner Perth, Inner Brisbane and the ACT – mostly but not all regions with low indigenous populations and all of them generally prosperous. Indeed, the distribution of prosperous indigenous households was very similar to that of prosperous households across Australia as a whole. The main difference was that the proportion of prosperous indigenous households was relatively low in the mining regions.

Despite this prosperous minority, the general tendency was for indigenous households to be poor. Their poverty bred poverty, not only in the generational sense but in its associated short life expectancy, which meant that relatively few indigenous people received the Age Pension with its guaranteed income just above the poverty line rather than below. In 2016 20.9 per cent of indigenous households were in the bottom decile of equivalised income so that, with 3 per cent of households nationally, they contributed 6 per cent of households in poverty. In 10 SOR regions - the two Outer Victorian regions, SA Outer, NSW Far West and Northern Inland, Qld Outback and Wide Bay, NT Outback and WA Wheatbelt, Gascoyne Goldfields and Pilbara Kimberley (by area more than half the country) at least a quarter and up to 42 per cent of all Aboriginal and Torres Strait Islander households suffered these very low equivalised incomes. In the farming regions they were often fringe-dwellers, while in the remote regions non-indigenous and indigenous people tended to live apart, the former in established homesteads or fleeting mining camps, the latter in 'communities' some of which were on the their residents' traditional lands but many of which were the sited as past government officials or missionaries had thought fit.

Many indigenous people feel a duty towards their ancestral land which obliges them to forgo cash incomes, prioritising their land-related duties and so staying put rather than moving in search of paid work. From the point of view of the capital-city business elite indigenous people should knuckle down and earn a living from whatever jobs the market provides, shifting location if necessary. To this end, and aligned with the niggardly treatment of unemployed people in general, the availability of social services in remote locations has been restricted, exacerbating poverty (Boyd and Venn, 2019). On the other hand, there are remote places where the Aborigines and others seem to be coming to a modus vivendi (Wright 2017, Martin 2019). Notably, these are places where, despite the obstacles to the development of small businesses in remote areas, indigenous enterprise has flourished.

At 3 per cent of all households, the number of indigenous households was not large enough to have much effect on the incidence of poverty in settled Australia, especially since the geographic incidence of indigenous poverty resembled that of households in general. However, in the country away from the coast and beyond the urban peripheries, and even more in the remote regions, poverty was highly indigenous. In Victoria Outer West (for example) indigenous households constituted 5 per cent of all very poor households, around 10 per cent in SA Outer and WA Wheatbelt, around a quarter in NSW Far West and Gascoyne Goldfields, around three-quarters in Pilbara Kimberley and an overwhelming 83 per cent in NT Outback.

6.4.2 Single parents

The incidence of income poverty among single parent households was very similar to that among indigenous households and the proportion of single parents with high equivalised incomes was much lower. In 2016 20.0 per cent of single parent households reported incomes in the bottom decile and a mere 2.7 per cent were in the top decile. Since single-parent households comprised 10.9 per cent of all households, single parents as a demographic group contributed 21 per cent of all poor households. Given the very limited social security entitlements of single parents it may be surprising that the poverty level was not higher, but some of them would have received alimony and declared it as income at the Census.

In 2016 single parent households were found in all regions, but were least common in the city centres (5 per cent of households in Central Melbourne and 6 per cent in Central Sydney). The proportion of single parents was also low in the high-rent inner suburbs but was around or above the

national average on the urban peripheries, in the country and in the remote regions. It was highest in low-status outer suburbs, peaking at 17 per cent in Outer South West Sydney. The low proportion of single parents in the high-rent inner suburbs might be due to the soothing effect of wealth on marital harmony, but it is more likely that marital splits in these suburbs sent the custodial partner scurrying into low-rent accommodation, possibly even in a low-rent country town.

In most regions the proportion of single parent households in the bottom decile of equivalised income was around double the proportion among households as a whole. It was therefore relatively low (11-15 per cent) in the generally high-status inner metropolitan regions where the overall incidence was low (5-8 per cent) and high (25-36 per cent) in the remote and country regions where the overall incidence was high (13-18 per cent). However, in the two remote WA mining regions the poverty rate among single parent households was three times the national rate (30 per cent compared with 10 per cent). In these regions there would have been considerable overlap between indigenous and single-parent poverty, with the high rate among single parent families perhaps due to lack of the mobility and skills required to undertake casual work in the mining industry.

The rule that the proportion of poor single parent households would be about double the proportion of households in general held in most metropolitan and metropolitan-periphery regions with several interesting exceptions. The most striking exception was Sydney Mid-West, where the poverty rate among single parent households was not much higher than for households as a whole (23 per cent compared to 17 per cent). The ratios in Sydney Outer SW and Inner Adelaide also tended in this direction. Though Sydney Mid-West suffers from high unemployment, it does at least have a modicum of jobs suited to single parents.

6.4.3 Other demographic groups

Distributions of equivalised income have been published for three household types which are not so strongly associated with low incomes. They will be mentioned briefly.

Non-family households comprise, in the main, single people living alone, but include group households in which unrelated people live together. In 2016 29 per cent of the households who completed the Census question on incomes were non-family. They comprised up to half of all households in the metropolitan centres and down to 10 per cent in the metropolitan outer suburbs, with middle suburbs, country and remote regions not far off average. Households which comprise single adults living alone do not have to share their incomes with other household, which makes for high equivalised incomes, but on the

other hand they tend to be either young or old, which makes for lower income receipts. In 2016 7.8 per cent of non-family households had incomes which placed them in the top 10 per cent by equivalised income. This proportion was replicated across the country and in most regions the proportion of non-family households in the top decile was around 80 per cent of the proportion for the population at large. Pilbara Kimberley was an exception: it was particularly favourable to single people seeking high incomes. At the poor end of the distribution, 13.9 per cent of non-family households had incomes which placed them in the bottom 10 per cent. This relativity was again maintained across most regions, though this time the NT Outback was an exception. Here the incidence of very low incomes was less among single people than among the population at large.

Couple households mostly comprise couples without children living in the same dwelling, though a few have additional members such as an elderly parent. Such households were as numerous as the non-family households – 29 per cent of the total, with little regional variation, though they were a bit more numerous in retirement regions and in those with rural populations ageing in situ (36 per cent in Wide Bay) and less numerous in growing outer suburbs (24 per cent in Sydney Outer West). Overall, in 2016 13.8 per cent of couple households were in the top decile by equivalised income. Taking this difference into account, the regional distribution of highincome couple households was similar to the overall distribution of such households. Per contra, 6.9 per cent of couple households had incomes which placed them in the bottom 10 per cent. In all regions the proportion of poor couple households was less than the proportion of poor households overall. The difference was least in the NT Outback, presumably because many couples were drawing social security benefits at unemployment-benefit rate rather than at the age-pension rate.

Finally, couple families with children comprised a further 31 per cent of all households. The proportion was well above average in the typical outer suburban region (42 per cent in Sydney Outer SW and Melbourne Outer West) and well below average in the metropolitan centres (14 per cent in Melbourne Central). It was also a little below average in retirement regions and in country regions such as Victoria Outer West where children tend to leave home early for education or adventure.

The inclusion of children in a household tends to reduce equivalised income, so the proportion of families with children in the top decile of equivalised incomes was less than the proportion of couples: 11 per cent. The pattern, however, was similar to that for couples and for the population as a whole. Though less likely than couples without children to find themselves in the top decile of equivalised incomes, at 5.7 per cent couples with families were also less likely to be in the bottom decile. That said, in NT Outback 18 per cent of such families were very poor, much the same as for the general population, indicating a

serious level of reliance on low-level social security benefits. Families in Sydney Mid-West were similarly afflicted, with 16.5 per cent on very low equivalised incomes.

6.5 The equivalised income distribution on an individual basis

As was pointed out at the beginning of this chapter, the data on equivalised incomes are presented with households as the unit of observation, rather than individuals. The data can be converted to an individual basis by multiplying each household type by its average membership, assuming that household membership is constant across the income range. The Census provides the information by which this could be done on a regional basis, but the topic can be introduced using all-Australia average household membership. It is not claimed that the results are accurate, but they are at least indicative.

It appears that households in the top decile of equivalised household incomes are of average size: the top 10 per cent of households by equivalised income contain 10.2 per cent of individuals by equivalised income. The typical high-income household was larger than average in the metropolitan centres and inner suburbs (particularly in Melbourne) and smaller in the remote mining regions. In the latter, at least, high-income households would include many single men receiving high wages.

In the bottom decile of household incomes it appears that households are smaller than average: the bottom 10 per cent of households contained the 8.8 per cent of the population. Low-income households were especially likely to be small (i.e. had a preponderance of single people) in the metropolitan centres and high-status suburbs. They tended to be larger in two groups of regions:

- remote regions, especially NT Outback with its large Aboriginal population; and
- low-status suburbs, typified by Sydney Mid-West.

These calculations broadly confirm that shifting from households to individuals as the unit of measurement of high and low equivalised income does not greatly change the regional pattern.

6.6 Equivalised household income and other indicators of regional prosperity

This chapter set out to identify measures of income inequality between regions, with an emphasis on

equivalised household income as the preferred indicator. This indicator is not ideal (it is arguable that equivalised disposable income after housing costs would be better) but is readily available from the census. As compared with estimates of average income based on National Accounts definitions, which cobble different sources together, it has the formidable advantages of being collected by a simple, direct question which is uniform across the country. It has the further advantage that it is adjusted for the sharing of income within households. Its major disadvantages are that it does not distinguish incomes by source and it is only available (so far) for the Census years 2011 and 2016.

In view of these limitations it will often be necessary to resort to alternative indicators of the regional incidence of affluence and poverty. We now consider the alternatives, including discussion of their relationship to household equivalised income.

6.6.1 Equivalised and personal incomes

The first proxy would be Census personal incomes, derived from the question asked at each Census since 1976. In 2016, despite the adjustments required to calculate equivalised income - adding personal incomes and adjusting for household size - the regional pattern of personal incomes was closely related to the regional distribution of household equivalised incomes. It is easier to generate a high household standard of living in regions where personal incomes are high. In 2016, across the regions, the proportion of households in the top 10 per cent by equivalised income correlated with the proportion of adults with personal incomes above the median (R² = 0.76). There was a matching negative correlation for households in the bottom 10 per cent ($R^2 = 0.58$.). It is not altogether surprising to find that personal incomes contributed more directly to high living standards than to poor living standards, the latter being more sensitive to household composition.

The regions where the proportion of personal incomes above the median under-predicted the proportion of households with high equivalised incomes fell into two groups. The inner regions of the Sydney, Melbourne and Perth metropolitan areas were even richer than would be expected from their high personal incomes, since their households were on average small and there were many high-flying incomes not captured by the proportion of personal incomes above the median. Outside the metropolitan areas the proportion of rich households was higher than expected in two regions with generally low personal incomes (NT Outback and Wide Bay) presumably again because of an upwards tail of high personal incomes, but also perhaps because adults with moderately high personal incomes tended to join together to form highincome couple, family or group households.

Not surprisingly, regions where the proportion of personal incomes over the median over-predicted the proportion of affluent households were mostly outer suburbs, particularly those in Brisbane, Sydney, Melbourne and Darwin. In outer suburbs personal incomes tend to be watered down by large household size.

Turning to the low end of the distribution, the regions where the proportion of personal incomes above the median under-predicted the proportion of households with poverty-level equivalent incomes again fell into two groups. They were the regions with high indigenous populations such as NT Outback and the Pilbara/Kimberley - regions in which low-income people tended to congregate to form low-income households. The other notably penurious region, Sydney Mid-West, did not have a high indigenous population, but once again seemed to have more than the usual share of large households depending on relatively few and/or relatively low personal incomes. As noted above, there is a certain commonality between the position of Aboriginal people and that of some of the recent immigrant groups resident in Mid-West Sydney.

In two groups of regions the proportion of personal incomes above the median severely over-predicted the proportion of households with poor household incomes. The first group comprised retirement areas such as the Sunshine Coast. Were the low-income line raised from the very low level used in this chapter to (say) the 20th percentile, the proportion of poor households in these regions would jump up. Not so in the other group of regions where the proportion of low personal incomes under-predicted household affluence. These were high-status suburbs such as Sydney North, where most of the residents who had low personal incomes would have been incorporated into otherwise high-income households.

6.6.2 Equivalised incomes and measures based on the National Accounts

The good news for those seeking a measure of trends in regional inequality is that the relationship between average resident local income per capita (as estimated by NIEIR) and the proportion of households in the top decile of equivalised income has been fairly close, in 2016 yielding a $\rm R^2$ of 0.72. The correlation between average local income and the proportion of households in the bottom decile of equivalised income was not so close, with a 2016 $\rm R^2$ of -0.53. As with the relationship between personal and equivalised incomes, the correspondence was closer for high incomes than for low, again due to the greater influence of household composition at low equivalised incomes and also, in this case, to the uneven regional distribution of niggardly and relatively generous social security entitlements.

The pattern of deviations was instructive. In 2016 there were two groups of regions where local income underpredicted the proportion of rich households. The archetype of the first group was NT Outback, but the group also included the Pilbara/Kimberley and SA Outer. In this group of regions local income under-predicted not only the proportion of rich households but also the proportion of very poor households. In other words, these regions, with their mix of rich miners and poor Aborigines, suffered considerable internal inequality.

The archetypes for the second group were Central Sydney and Central Melbourne. As in the remote areas there was evidence of internal equality, particularly in areas with student populations, and more generally the city centres and the gentrified inner suburbs had more rich residents than their local income would indicate (in technical terms, their distributions of equivalised income were skewed upwards, perhaps in association with small household size). The difference could also be traced back to labour force participation. In regions where labour force participation is high, such as the city centres, equivalised household incomes will tend to be high in relation to individual incomes.

Two other regions where equivalised incomes differed from those predicted by local income are worth noting. The first was Sydney Mid-West, where for reasons already discussed the proportion of very poor households was much higher than expected. The second was the ACT, where the proportion of rich households was less than expected. One possible explanation is that the public sector wage structure, though generally high, tends to plateau at the top. The difference could also have arisen from an understandable failure of ACT residents to include the imputed earnings of their superannuation funds when they ticked the Census income box.

6.7 Changes in the geography of inequality

The finding that poor and rich households are currently residentially segregated, particularly in Sydney and in the remote regions, raises the question as to whether segregation increased or reduced in response to the policy changes of the 1980s and 1990s. Strictly speaking, there are no data to answer this question, but the Poverty Inquiry income survey of 1973 yields data which permits a rough comparison over a rather longer time period.

Though the Poverty Inquiry's estimates of the incidence of poverty derived from a sample survey, the sample was large enough to yield estimates at the regional level with reasonable standard errors, provided the regions were defined to respect the sample selection processes used by the ABS – hence the regions in Table 6.2 do not replicate those in Table 6.1. Even then the 2016 estimates are

approximations due to changes in local government area boundaries. The table compares the regional distribution of the poorest 10 per cent of households, using Poverty Inquiry methodology in 1973 and ABS equivalisation methodology in 2016. Though differences in methodology have doubtless contributed to the differences between the two distributions, the basic income questions and equivalisation methodologies were similar. (The ABS 'household' is a little more inclusive than the Henderson income unit, so that single people who are members of group or three-generation households are less likely to be deemed poor. The effect of this on comparison over time will be limited – the proportion of group households has risen and that of three-generation households fallen. Again, as noted above, the 'simplified' Henderson equivalence scale as updated by the Melbourne IAESR diverges from the OECD scale used by the ABS, but that is true only for two-adult households with one paid worker. Now that two-adult households are mainly either two-paid or no-paid the difference has largely disappeared. It should also be noted that, for logistic reasons, the Poverty Inquiry survey did not extend to remote areas. An effort has been made to exclude these from the 2016 estimates.)

Table 6.2 Australian regions, per cent of households poor, 1973 and 2016									
Region	1973 Survey	2016 Census							
SYDNEY	8.8	9.1							
(Poorest region)	13.9	13.0							
(Least-poor region)	4.5	5.3							
MELBOURNE	7.3	9.7							
(Poorest region)	8.9	11.1							
(Least-poor region)	4.6	8.6							
BRISBANE	9.1	8.3							
ADELAIDE	10.2	11.2							
PERTH	10.1	8.6							
HOBART	9.6	11.2							
ACT	3.4	5.7							
OTHER CITIES	10.4	9.6							
RURAL	14.4	11.9							
AUSTRALIA	10.2	10.0							

Source:

I G Manning: 'The geographic distribution of poverty in Australia', *Australian Geographical Studies* 14, pp 144-147 (1976) and ABS Census 2016.

Despite these caveats, the data in Table 6.2 suggest that, between 1973 and 2016, the incidence of poverty, relative to national average, increased in Melbourne, Adelaide, Hobart and the ACT (though in the latter it was still very low), was roughly constant in Sydney, and decreased elsewhere, particularly in Perth and in rural regions. Within the two large metropolitan areas the differential in the incidence of poverty between the poorest and the least-poor regions probably diminished, though it is possible

that a different set of regional boundaries may have yielded a less happy result.

A major factor underlying these changes was the Commonwealth's decision to raise the age pension above the poverty line. Rural populations are generally older than metropolitan, especially in regions affected by retirement migration. The increase in the age pension rate was one of several Commonwealth policies which, by accident or by design, shifted the distribution of poverty from elderly people to people of workforce age. Policies which increased the incidence of poverty among people of workforce age centred on the abandonment of full employment as a meaningful policy target in the mid-1970s. To maintain wage rates at levels satisfactory to employers, a target unemployment rate of around 5 per cent was adopted and maintained by varying the immigration rate. This was accompanied by reductions in social security payment rates for most benefits available to people of working age. Poverty rates were increasingly determined by labour markets, as influenced not only by government policy but by other industry and technological developments. Labour markets were buoyant in Perth and South-East Queensland, where poverty incidence fell, and relatively depressed in Melbourne, Adelaide, Hobart and the ACT, where the incidence of poverty increased. In Sydney they balanced out near the national average.

Judging by the rank order of the regions within Melbourne and Sydney, the incidence of poverty fell in the inner suburbs and rose elsewhere (Table 6.3). The changes were particularly marked in Sydney, where poverty moved south-west out of the city centre and inner suburbs. Melbourne experienced a similar reduction in the poverty rate in the central region balanced by relatively small increases in the Outer North, South and West.

What about changes in the geography of affluence? As already noted, there is reason to ponder whether affluence is best measured by equivalised or by individual income. Table 6.4, which is limited to metropolitan Sydney, Melbourne and the ACT, switches back to the NIEIR regions and adopts a shorter but still relevant time comparison.

In it the regions are ranked by the proportion of highincome individuals in the adult population, a metric which, by comparison with the measure of affluence in Table 6.1, raises the rank of suburbs with high dependency ratios (generally outer suburbs) and reduces the estimate for the ACT relative to Sydney - the ACT has lots of rather highincome households but relatively few very high income individuals. Within both of the major metropolitan areas the Table confirms the considerable gaps between high and low status regions in Sydney, and the generally lower level of regional divergence in Melbourne. In both cities, over the three decades from 1986 to 2016, high-income individuals increasingly favoured the inner suburbs while the outer suburbs fell into relative disfavour. This trend even affected the outer North Shore in Sydney, where high-status was considered entrenched post-war.

Table 6.3 Regions in Sydney and Melbourne ranked by the incidence of poverty											
Region	1973 survey	2016 census	Change								
SYDNEY											
East and inner south	4	3	-1								
Inner north	5	2	-3								
CBD and inner west	7	4	-3								
Middle south	3	7	+4								
Outer north	2	1	-1								
Outer south	1	6	+5								
Outer west	6	5	-1								
MELBOURNE											
Central	6	3	-3								
Inner east	3	3	0								
Outer north	5	6	+1								
Outer east	1	1	0								
South	4	5	+1								
West	2	3	+1								

Source: See Table 6.2. The regions here replicate, as far as practicable, those used in the report on the 1973 survey.

Table 6.4	_	Regions in Sydney, Melbourne and the ACT ranked by high-income individuals as a percentage of residents aged 15 and over, Census 1984 and 2016									
Region		Rank 1986	Rank 2016	Per cent 2016	Region	Rank 1986	Rank 2016	Per cent 2016			
SYDNEY					MELBOURNE						
Central		2	1	10.5	City	3	3	4.8			
Inner East		3	3	9.1	Inner South	4	1	6.1			
Inner West		6	4	6.4	Inner East	1	2	5.6			
North		1	2	9.2	Inner North	7	4	3.7			
Parramatta		4	5	4.5	West	8	6	2.1			
South		5	6	3.6	Outer East	2	5	2.5			
Outer West		8	7	1.6	Outer South	5	7	1.7			
Outer SW		7	8	1.4	Outer North	6	8	1.5			
Mid-west		9	9	1.1	MELBOURNE total			3.4			
SYDNEY total				4.7	ACT			4.6			
Australia				3.1	Australia			3.1			

Source: ABS Censuses 1984 and 2016.

6.8 Patterns of change in income distribution

Back in 1973 the Poverty Inquiry noted a strong association between poverty and lack of employment. Since then policy has induced shift of poverty towards people of working age and so strengthened this relationship, but with complications. A legal minimum wage has been maintained and in 2016 a full-time job at the legal minimum wage was sufficient to keep a household of two adults and one child out of the bottom 10 per cent of households by equivalised income. However, part-time employment has become more common, associated with the disappearance of the working-age housewife. Though this has added to the income of many households, it means that households which can only find part-time employment are quite likely to end up poor - and jobs are harder to find, thanks to the abandonment of full employment. Among people aged between 15 and 67 the avoidance of income-poverty continues to depend on access to paid work, which in geographic terms depends on the employment opportunities offered by the labour catchment in which they live. As discussed in Chapter 5, outside the metropolitan areas the labour catchment for most residents lies within their region or residence, so that job prospects depend on the fortunes of their regions economic base industries. In most non-metropolitan regions job generation floundered due to the malaise of agriculture and manufacturing. As noted in Table 6.1 and discussed in Section 6.3, the upshot was an incidence of

poverty above national average but probably less than in the years prior to the increase in the age pension rate (Table 6.2 above).

The situation in the metropolitan areas is complicated by commuting, which mean that labour catchments are generally multi-regional. This directs attention to the distribution of employment in relation to residential areas. The following discussion will concentrate on the two major metropolitan areas, but similar considerations apply in the other three.

At the end of the Second World War both Sydney and Melbourne were centralised cities, in which the central region housed one-third of employed residents but provided around two-thirds of metropolitan jobs, divided more or less half and half between the CBD and the rest of the central region. The result was substantial inbound commuting. However, as the urban periphery expanded during the post-war period employment also decentralised, so that by 1971 the proportion of metropolitan residents living in the central region had fallen to less than 20 per cent and the proportion of metropolitan employment to a little over 40 per cent (Table 6.5). There was still inbound commuting, but it was not quite the tidal flow it had been. Some of this decentralisation of employment was due to local-demand jobs moving to the suburbs, but there was also a major outward movement of manufacturing and logistics liberated by the motor truck from the need to locate near the port and rail terminals, and by the motor car from the need to locate near public transport.

Table 6.5 Share of emplo	employment and employee residential locations (% of metropolitan total)								
		ney Census	Melbo MMBW	Census					
Employment									
CBD	1945	32	1951	28					
	1961	26	1961	23	23				
	1971	19	1971	15	15				
Central region	1945	59	1951	65					
	1961	52	1961	56	54				
	1971	42	1971		44				
Employed residents									
Central region	1945	34	1951	31					
	1961	22	1961	20	22				
	1971	16	1971		18				

Source: I G Manning, Beyond Walking Distance ANU Press 1984, Appendix. 1945 data originally derived from planning documents by the Cumberland County Council and 1950 from the Melbourne and Metropolitan Board of Works, hence using their planning regions. 1961 and 1971 data from ABS Census Journey to Work tables.

In the 1970s various observers thought that continuing motorisation would spread employment across the suburbs and relieve state governments of the obligation to provide public transport for tidal flows of commuters. A more nuanced view saw a continuing need for major activity centres and argued that town planning should ensure that all parts of the metropolitan area had ready access to at least one such centre, requiring the multiplication of centres. If planning failed, sheer inertia would ensure that each metropolitan areas remained single-centred, with the centre increasingly inaccessible from the outer fringe. The pro-market policies popular from the 1990s onwards were very critical of townplanning restrictions and the metropolitan areas accordingly remained single-centred. For Sydney and Melbourne Tables 6.6 to 6.8 cover the growth of population and employment from 1994 to 2019 by the four rings identified in Chapter 1 (Table 1.1).

Over the quarter century to 2019 the trend to metropolitan decentralisation which had been a major feature of the quarter century to 1970 was decisively reversed. In both Sydney and Melbourne the proportion of metropolitan jobs located in the central region increased. In Sydney this re-centralisation was at the expense of the suburbs generally and also of the metropolitan periphery. In Melbourne the proportion of employment in the central region expanded mainly at the expense of the inner suburbs (those developed before World War II).

In response to the continued vitality of the central regions of both cities, the proportion of the population living in the central region rose at the expense of the inner suburbs. In Sydney the proportion of the population living in the outer suburbs and on the periphery remained constant, but in Melbourne the outer suburban population expanded at the expense of both the inner suburbs and the periphery. Though town planning was ineffective in developing alternatives to the CBD, in Melbourne it prevented the expansion of the Eastern Outer suburbs into the upper Yarra valley.

The same trends are reflected in rates of growth. In both cities the rate of growth of employment was greater than the rate of growth of population, thanks mainly to an increase in jobholding by married women and the increase in part-time jobs. In both cities the rate of growth of both employment and the resident population was most rapid in the central region and least rapid in the inner suburbs.

Not only did the central metropolitan regions report high rates of employment and population growth, they also maintained their relatively high levels of local income generation per hour worked. Though in both cities and both years the highest local incomes per hour were in the central zone, they grew most strongly in the inner suburban ring, particularly on a residential basis. Growing high-income employment in the central regions put a premium on dwelling prices in residential areas within easy commuting time-distance of the centre. Though the proportion of the metropolitan population living in the inner ring of suburbs decreased, incomes increased as these suburbs gentrified. This helps to explain the redistribution of poverty towards the outer suburbs and affluence towards the inner.

Table 6.6	Workplace employment and resident population, number and percentage distribution by region, Sydney, 1994 and 2019 (per cent)										
	Jobs ('000)	Central	Inner suburbs	Outer suburbs	Periphery	Total					
1994	1846	22	22	41	14	100					
2019	3047	29	19	39	13	100					
	Residents ('000)										
1994	4062	6	26	49	19	100					
2040	F.C.74	0	2.4	40	10	100					

Source: NIEIR.

Table 6.7	Workplace employment and resident population, Melbourne regions, 1994 and 2019 (per cent)								
	Jobs ('000)	Periphery	Total						
1994	1747	21	28	34	16	100			
2019	3081	27	23 35 1		15	100			
	Residents ('000)								
1994	3981	6	32	42	22	100			
2019	5990	8	26	48	18	100			

Source: NIEIR.

Table 6.8 Rates of growth of jobs and resident population, Sydney and Melbourne regions, 1994 to 2019 (per cent a year) Central Inner suburbs **Outer suburbs** Periphery **Total** Sydney Jobs 3.1 1.3 1.8 1.8 2.0 2.4 1.3 Residents 1.0 1.4 1.3 Melbourne Jobs 3.3 1.5 2.4 1.8 2.3 2.9 0.9 1.1 1.6 Residents 2.2

Source: NIEIR.

Table 6.9	Local income per hour worked, by workplace and usual residence, Sydney and Melbourne, 1994 and 2019
	with rate of growth (per cent per annum) (income in 2018 dollars, calculated using the GDP deflator)

			Workplaces			Residents	
		1994	2019	Rate of growth (% p.a.)	1994	2019	Rate of growth (% p.a.)
Sydney	Central	46	66	1.43	49	69	1.36
	Inner	38	55	1.45	42	64	1.72
	Outer	36	50	1.41	35	50	1.43
	Peripheral	35	47	1.22	37	49	1.17
	Total	38	55	1.48	38	55	1.48
Melbourne	Central	38	56	1.58	40	69	1.46
	Inner	32	50	1.76	34	64	2.00
	Outer	32	45	1.45	32	50	1.42
	Peripheral	31	43	1.38	31	44	1.42
	Total	33	49	1.61	33	49	1.61

Source: NIEIR.

6.9 Policy and outer-suburban poverty

Did government policies contribute to the renewed centralisation of the cities?

Centralisation increased demands on the cities' radial transport systems. State governments supported it by building radial freeways, most of which had been planned during the early post-war period, and by resuming investment in radial public transport. However, these rather passive investment responses were not as important as policies which affected the economic base of cities and their suburbs.

A number of economic-base industries can readily be identified by ANZSIC code, including agriculture, mining, manufacturing and logistics (though within each there will be employers who serve local demands, for example quarries serving local construction.) There are also readily identifiable local-demand industries and intermediate industries which combine economic base and local demand functions. These largely office-based services provide the economic base of the metropolitan centres.

During both the post-war and the neo-liberal periods, the local-demand industries followed the population to the suburbs, along with the manufacturing and logistics employment which became the foundation of the suburban economic base. The automation of manufacturing and logistics proceeded, increasing productivity but limiting job generation. In the 1980s manufacturing employment also contracted, initially thanks to that centrepiece of neo-liberal policy, the withdrawal of protection. In the late 1990s manufacturing was further hit by the failure to maintain selective industry assistance programs such as those associated with the late Senator John Button, and during the mining boom it suffered from the Commonwealth's failure to protect trade-exposed industries from the surge in the exchange rate which lasted from 2005 to 2015. These government policies added to job losses and contributed to the continued low-income status of manufacturing and agriculture. Logistics was less exposed and incomes per hour increased.

Weak suburban job generation in these economic base industries can thus be attributed to automation coupled with the international events which caused the mining boom, intensified by government policies, particularly

towards manufacturing. Were the government policies which, mostly indirectly, discouraged suburban job creation balanced by policies which encouraged job creation in the city centres?

Whether or not they were favoured by government policy, the office industries, like the economic base industries, were economising on labour costs by automating. This seems to have affected primarily their local-demand operations, for example by underpinning the closure of bank branches and raising the prominence of central administration. Employers in industries including media, financial services, professional services, public administration continued to favour central urban locations and to pay relatively high wages, not only in the city centres but elsewhere. The concentration of these industries in the city centres generated high average income per hour worked, as noted in Table 6.9.

In the State of the Regions reports the re-centralisation of urban employment was explained as inherent in the rise of the knowledge economy, which meant that employers who wish to recruit talented workers from the whole of the metropolitan area will locate in the city centre, as the only universally-accessible spot. Further, these talented workers, once heaped together in the CBD, network with each other, enhancing their productivity. In addition, workers such as creative artists seeking select audiences and sporting stars seeking mass spectators also gravitate to the point of highest mass accessibility.

A more cynical view is that the accumulation of CBD employment is required to massage the fragile egos of the CEO's who control urban investment decisions. On this view, top bosses compete to look down on their peers from the highest possible executive suite, perched on top of the tallest possible CBD office block. Limits on the height of CBD buildings were relaxed in the 1950s (first in Melbourne, then in Sydney) unleashing a splurge of investments in high-rise offices, raising the problem of how to usefully occupy the many floors of office space below the boss. This was done partly by increasing floor space per worker but mainly by drafting clerical minions into the created desk-space. Increasing CBD employment was thus, at base, the product of executive status-seeking, coupled with executive control of investment.

It is far from easy to discriminate between these rival accounts. Those who believe that the labour market, by and large, generates fair hourly rewards favour the knowledge-economy theory. Those who believe that capitalism is rife with unearned incomes and economic rents favour the status argument. There is probably an element of truth in both.

Whether or not centralisation was due to the knowledge economy, it has certainly been associated with an increase in economic rents. The rapid increase in city-centre employment brought capital gains, not only to the owners of city-centre properties but to the owners of residential property within the city-centre labour catchment, primarily

in the inner suburbs. Neo-liberals valorised these gains and governments expressed their approval with tax concessions. Further government contributions to urban capital gains included the de-regulation of mortgage lending and support for falling interest rates, which together allowed the banks to support demand for housing, which raised urban land prices and hence housing costs in suburbs with high or even just moderate accessibility to the CBD. The resulting increase in housing costs has doubtless increased the incidence of urban poverty after housing costs. This places a strong caveat on the conclusion drawn from Table 6.2 above, the conclusion that, while the incidence of poverty shifted from the inner to the outer suburbs, the differential between poor and non-poor regions did not increase.

The package of neo-liberal policies which inflated land rents may also help to explain the large increase in the incidence of poverty in Mid-west Sydney. This region seems to have been too far out to benefit from gentrification, but suffered an increase in land prices which made it too expensive to benefit from such buoyancy as remained in suburban economic-base industries including manufacturing and logistics.

By comparison with the factors affecting the distribution of poverty (and affluence) in metropolitan areas, the factors operating in non-metropolitan regions are relatively easily traced. Though the increase in the age pension rate greatly benefited these regions and there were limited bright spots due to mining and in regions benefiting from retirement migration and tourism, the malaise of agriculture, compounded from high exchange rates and deficiencies in the management of the environment, limited income growth in rural areas. Failing agricultural incomes led to reduced local demand, and as the roads improved such demand as remained was concentrated in the provincial cities, impoverishing not only the one-pub townships, but many previously substantial towns.

6.10 Conclusion

Since the days of Professor Henderson's poverty inquiry in the 1970s, the preferred metric of income inequality has been disposable income adjusted for family or household size and for housing costs. Henderson concentrated on households with incomes below the poverty line, while subsequent analysts have used single-number summary measures such as Gini coefficients, or have followed Henderson by using the proportions of households with incomes above and below various lines, such as the deciles used in this chapter. Various national sample surveys have been conducted which allowed estimation of one or another approximation of this ideal, but unfortunately these cannot be directly used for studies of regional differences, since they do not yield statistically significant estimates at regional level. The two main sources of

income data valid at regional level are the Census income question and the various administrative sources which are cobbled together to yield National Accounts data.

The National Accounts data reported in Chapters 2 to 5 have the important attribute of connecting regional household incomes to regional economic development and output. They provide answers to such questions as "What does a new mine contribute to regional incomes?" However, they are not quite so good at answering questions related to social welfare, such as the incidence of low and high incomes. A better source here is the Census.

Since 2011 Census data have been available for the income of private households adjusted for household composition. The reference is to income before tax, including social security benefits but without adjustment for housing or other location-specific costs, so the data are not ideal. Nevertheless, they form an excellent starting point and prove conclusively that there are significant regional differences in income-based standards of living. As measured by equivalised income, the two regions with the highest proportions of very low income households seem to be poles apart. The NT Outback is remote and its largest urban centre has a population of 25,000 while the Mid-West of Sydney lies at the geographic centre of Australia's largest metropolis. In 2016, 85 per cent of the very low income households in the NT outside Darwin were indigenous, compared with a mere 1 per cent in Mid-West Sydney. Did they have anything in common, apart from lots of households with very low incomes? Yes, they did. They were both family-oriented and in both the proportion of very low income households which comprised families with children was well above the national average. NT Outback and Mid-West Sydney were two of the five regions in which couples with families comprised 28 per cent of more of bottom decile households – the others were Sydney Outer South West, Melbourne Outer North and Melbourne Outer West. Broadening the definition to include single-parent families and raising the bar to half of all households in the bottom decile, these five regions still qualified along with Melbourne Outer SE, Sydney Outer West, Brisbane Outer SW and Pilbara Kimberley. All of these regions included significant population groups outside the Anglo mainstream. Their poverty rate hints that they suffered discrimination by the wider society (or at least by the governing elite) and also hinted that at least some of their residents were unwilling to comply with the expectations of that elite.

In 2016 there were four regions in which around a quarter, or more, of households had high equivalised incomes: Central Sydney, Sydney Inner East, Central Melbourne and Pilbara Kimberley. There was a second rank formed by Inner Perth, Inner Brisbane, Darwin, the ACT and two more Sydney suburban regions. This list emphasises metropolitan centrality plus, in Pilbara Kimberley and also in Darwin and Perth, the effects of the mining boom. The prominence of centrality accords with the theories of the

knowledge economy but also the possibility that urban administrative and corporate high-flyers have over-rewarded themselves and over-centralised employment.

The policy significance of regional income differences are disputed. To political actors steeped in the American traditions now widely prevalent among Australia's business and media elite, differences in regional incomes are acceptable provided they are market-based, in which case they constitute incentives to the efficient distribution of labour and other resources. If they generate community dissatisfaction, so much the better – this indicates their strength as incentives to geographic and social mobility. However, these are extreme views. Outside the right-wing American tradition regional differences are more than just incentives to desirable migration.

On a broader view at least some regional differences are regional expressions of acceptable income differences. It is acceptable that there should be rewards for hard work and skill, and many Australians would perhaps add a role for inequalities due to small-scale gambling. However, from an economic point of view it is hard to accept inequality deriving from other than frictional unemployment of labour (in other words, wasted resources) or from the private capture of economic rents (but with differences of opinion as to what particular incomes are economic rents). One may add inequalities due to lapses from equality of opportunity and failures to provide minimum standards of living for all. The idea that regional inequalities constitute a desirable incentive to internal migration also has severe limitations – migration can be costly as housing and other capital assets are abandoned and rebuilt elsewhere (or on the same site, as when migration to the gentrifying suburbs requires demolition and rebuild) and is decidedly costly in terms of community disruption. Herein lies the case for regional development policies.

The difficulty in evaluating differences in regional incomes can be illustrated by the case of central Sydney. The high incomes received by residents of city centres, particularly in Sydney, may be rewards of the knowledge economy, in which case it behoves public policy to do all it can to reduce housing costs in areas with access to the city centre, to increase commuting capacity into the city centre, and to attempt to clone the city centre elsewhere, as in Parramatta. On the other hand, it may be that many city-centre high incomes constitute economic rents generated especially in the finance and mining sectors. The classical remedy here is progressive taxation with particular emphasis on incomes likely to be economic rents rather than rewards for work and innovation.

(In classical economics, a 'rent' is any payment to the owner of an input to production in excess of the costs of production of that input. Classical examples include monopoly profits, the rent of land and resource rents. Economic rents are problematic for those who defend capitalism on efficiency grounds. Obvious tax targets are

unimproved land values, mineral resource rends and short-term capital gains.)

Whatever the status of city centre incomes, there are two regions prompting particular concern. These are the Northern Territory Outback and the Mid-West of Sydney. At first glance the remote Territory and the old stomping grounds of Whitlam and Keating have little in common, but both have high proportions of households on very low incomes. There have been failures to ensure that suitable employment is available and failures to guarantee a minimum standard of living, especially for families. These failures can be traced back to American-inspired labour

market and social security policies such as the white-anting of Award wage rates and the insistence on low rates of social security benefit to maintain the incentive to work even at casual jobs paying low wage rates. These are regional effects of national policies, but it is likely that regional policies have also have contributed – for example, policies on the regional delivery of public services like education, policies on infrastructure investment and policies at industry level, both the easing of transitions out of declining industries and the fostering of new industries.

7. Trends in regional inequality

In the international literature, it is frequently asserted that income inequality within countries has increased noticeably over the past thirty years. Rich households have become richer and poor households have trod water or even become poorer. Does this imply an increase in inequality between regions? Not necessarily: if the increase in household inequality is replicated in each region, regional relativities will not be affected. Indeed, contrary trends are possible: increased inequality regionally may be combined with reduced inequality between regions. Something of this kind seems to have been happening internationally: the gap in income per capita between China and the USA has narrowed at the same time as inequality has increased within both those countries. On this analogy, it is possible that inequality between regions could fall at the same time as withinregion inequality is increasing.

7.1 Statistical indicators of trends in inequality

The indicators discussed at the regional level in this report allow comparisons of regional levels of prosperity. Table 7.1 summarises the major indicators. For each indicator the first three lines report all-Australia values, here taken for granted as determined by macroeconomic factors. They are provided to assist in the interpretation of the following four lines of indicators of regional inequality. The conventional statistical measure of the dispersion of a distribution of numbers is the standard deviation, here provided in lines five and six. For all measures the size of the standard deviation increased between 1994 and 2019, but this was at least partly because the whole distribution had moved upwards – economic growth had raised the average value per region. Accordingly the standard deviation divided by the average – the relative standard deviation - provides a better comparison of the level of inequality in 2019 compared to 1994.

If one simply takes the distribution of place-of-work GDP by region – the distribution of GRP's – there was an undoubted and considerable increase in regional inequality. The top regions raced away, so that the standard deviation increased till it was actually the same as the average, as is possible only in highly-skewed distributions with a few observations way above the average. However, some of this increase was due to an influx of workers into high-production regions. The influx was particularly pronounced into the metropolitan centres and supported much of their increase in production. After allowing for this, the relative standard deviation of the regional distribution of GRP per hour worked still increased

from 44 to 64 per cent – a substantial increase. As discussed in Chapter 4, this was largely due to a major increase in the value of output per hour worked in the mining-boom regions, coupled with a significant increase in the city centres.

Regional inequality of local or employment-related income, per hour worked, was much less than regional inequality of GRP per hour worked. The profit-related element of GRP is much more unequally distributed between regions than the employment-related element. This relates to the fact that production in the two industries with high ratios of gross operating profit to local income, mining and finance, was strongly concentrated in particular regions.

Not only was the regional inequality of local income per hour worked significantly less than that of GRP per hour worked, on a place-of-work basis it was virtually the same in 2019 as it had been in 1994. It seems that the two highly profitable industries controlled their employee costs. This result is compatible with an increase in dispersion of individual hourly wage rates which, to the extent that it occurred, cancelled out regionally, so that the inequality of regional averages remained constant.

Though the regional inequality of work-related incomes per hour worked did not increase by region of workplace, it did if assessed by region of residence. Regional inequality has been a little greater on a residential than on a workplace basis, and also increased a little between 1994 and 2019. Such were the effects of commuting in redistributing incomes — higher incomes to higher-status suburbs, lower incomes to lower-status.

The next column recognises that per-capita incomes are affected by the workforce participation rate. At given wage rates, the higher the level of hours worked per resident the higher the income per capita. Over the quarter century to 2019 national labour force participation rates increased, partly because the proportion of the population of working age reached an all-time high, with low proportions of children and the elderly, and partly because the transition of women of workforce age from housewives into paid workers (at least part-time) was completed. As can be seen from the relative standard deviations, the increase in workforce participation tended to increase regional inequality on a per-capita basis, but not by much.

The second-last column allows for the effect of workforce participation on incomes per resident and also, more importantly, for the addition of property incomes to work-related incomes. Property incomes include dividends, interest and the like, many of them reaching households through the superannuation funds. These property incomes were paid out of the profit share of GDP and

reflected highly unequal individual entitlements, which translated in this case into regional differences. Thus the inequality of regional private income (labour plus property income) was considerably greater than the inequality of local income. It also rose during the period.

Finally, private income is subject to various subtractions and a few additions, individual by individual. Income tax is deducted along with unavoidable superannuation contributions and mortgage interest. All three of these imposts tended to increase as a proportion of private income during the period. In part recompense, selected citizens could claim social security benefits, at low rates and subject to a severe means test if they were of workforce age or to a significantly more generous means test if they were elderly. The end result of these deductions and additions is given in the final column of

Table 7.1. The net effect was that disposable incomes per capita were less than private incomes. Regional inequality was also reduced compared to the inequality of average private incomes, but increased significantly during the quarter century.

The answer to the simple question of whether regional income inequality has increased and, if so, how much, turns out, as with many such questions, to depend on the measures chosen. Even if the measures are restricted to regional totals and per-hour-worked and per-capita estimates, National Accounts style, the answer can vary from no increase to a considerable increase. From a social welfare point of view, disposable income is probably the preferred estimate, and this gave a small but significant increase.

Table 7.1 Me	Table 7.1 Measures of the distribution of regional prosperity, Australia, 1994 and 2019											
Measure	GRP per region	GRP per hour worked	Local income per hour worked	Local income per hour worked	Hours worked per capita	Annual private income per capita	Annual disposable income per capita					
Basis	Production	Production	Production	Residence	Residence	Residence	Residence					
Units	\$m	\$/hour	\$/hr	\$hr	Hours/week	\$'000	\$'000					
Average 1994	11.0	53	33	33	15.9	29.7	25.1					
Average 2019	24.9	79	51	51	17.0	50.4	39.4					
Rate of growth	3.3% p a	1.6% p a	1.7% p a	1.7% p a	0.3% p a	2.1% p a	1.8% p a					
σ 1994	7.8	24	3.9	4.3	1.7	6.7	4.4					
σ 2019	25.6	51	6.0	7.2	1.8	13.7	8.0					
Relative σ 1994	71%	43%	12.1%	13.1%	10.7%	23.0%	17.8%					
Relative σ 2019	103%	63%	12.4%	14.6%	10.8%	27.4%	20.2%					

Note: σ = Standard deviation of regional estimates. Relative standard deviation calculated with reference to the arithmetic mean of regional estimates,

not the weighted mean given in lines 2 and 3.

Source: NIEIR.

Judging by the relative standard deviation of the regional distributions of both private income per capita and disposable income per capita, the increase in regional inequality took place during the decade from 2007 to 2016 (Table 7.2). This decade included the mining boom, which increased incomes in a minority of regions but depressed them, relatively speaking, in the majority of regions, if only through the effects of the high mining-boom exchange rate on income-generation in manufacturing and agriculture. Other factors may also have been at work, associated in particular with the reorganisation of the finance sector after the 2007 crisis and its increasing concentration in the metropolitan centres.

Table 7.2 also presents two alternative measures of regional inequality, derived from the 2016 Census. As is explained in detail in Chapter 6, the Census requires each respondent aged 15 and over to tick a box for their private income. These responses are necessarily approximate and

maybe a little subjective, but the answers have one great advantage over the sample surveys which collect more detailed income data: the responses can be tabulated by region without any statistical uncertainties arising from sampling fractions. In 2016 the responses have been published adjusted for household size, yielding regional estimates of the proportion of poor and affluent households, where poor households have very low incomes in relation to average household income (adjusted for household size) and affluent households have high incomes. 'Very low' and 'high' are relative terms, and in Table 7.2 poor households are those with adjusted incomes in the bottom 10 per cent of the national distribution while affluent households comprise the top 10 per cent. In 2016 both poor and affluent households were unevenly distributed by region, and the two distributions generally mirrored each other - a region with a high proportion of poor households was unlikely to have a high proportion of affluent households (though the NT Outback

and other remote regions where Aboriginal communities co-exist with mining camps approached this situation). However, judging by the relative standard deviation, poor households were spread across the regions much more equally than affluent. Indeed, regional inequality in the proportion of poor households was less than the inequality of private income per capita. On the other hand, affluent households were strongly concentrated in regions of high socio-economic status, reflecting the concentration of high-paying work in the metropolitan centres, the effects of commuting in further concentrating the income from these jobs in high-status suburbs, and the distribution of property income to wealthy households living in these same suburbs.

Unfortunately, as explained in Chapter 6, data are not available to construct time series for these measures of poverty and affluence, though limited inferences can be made. When interpreting average income data measured according to National Accounts definitions it is important to remember that affluence is more concentrated regionally than poverty.

Among the available statistical measures, none reported a decline in regional inequality and most reported an increase. The increase was associated with changes in geographic pattern, to which we now turn.

Table 7.2 Four measures of regional inequality – the relative standard deviation of:

- Private income per capita (residential)
- 2. The proportion of poor households (bottom 10 per cent of residents by equivalised income)
- 3. The proportion of affluent households (top 10 per cent of residents by equivalised income)
- 4. Disposable income per capita

(Per cent of the relevant average)

Year	Private income	Poor households	Affluent households	Disposable income
icui	meome	Households	Households	meome
1994	23.0			17.8
2007	23.2			17.0
2016	27.4	24.0	67.5	19.9
2019	27.4			20.2

Source: NIEIR and ABS Census 2016.

7.2 The effects of metropolitan proximity

However useful they may be in indicating national trends, summary measures of regional inequality give no indication of what kinds of region are prospering and what are not. An obvious approach to this question is to cluster the 67 regions into a more limited number of groups, according to their common characteristics. Given that finance and mining have prospered, it would be expected that people would tend to migrate to places where they have access to employment in these industries. Similarly, agriculture and manufacturing have been relatively depressed, and it would be expected that regions dependent on these industries will lose population. However, as documented in past State of the Regions reports, such movements of population are far from sufficient to equalise incomes. Strength or weakness in the economic base remains an important determinant of regional prosperity. Over the quarter century from 1994 to 2019 the prosperity of mining and finance, and the relative depression of agriculture and manufacturing, meant that prosperity was increasingly associated with access to employment in the metropolitan centres and (to a lesser extent) in the remote mining regions. It makes sense to group regions accordingly.

7.2.1 Gross Regional Product

Past State of the Regions reports grouped regions according to their economic base: resource-based regions, manufacturing regions and so on. In this report the grouping runs outwards from the five major metropolitan centres. It has often been observed that Australia is not only highly urbanised but that economic activity is concentrated in five million-plus metropolitan areas, with the addition of Canberra. In 2019 twenty per cent of national GDP was generated in the combined central regions of Sydney, Melbourne and Canberra. Adding the inner suburbs of these cities and the inner regions of Brisbane, Perth and Adelaide raised the proportion to 40 per cent, adding the outer suburbs increased it further to 64 per cent, and adding regions within easy driving distance of the metropolitan centres (the metropolitan peripheries) raised it further to over three-quarters of GDP. A further 16 per cent was generated in the arable hinterlands of the five metropolitan cities plus Tasmania, with the remaining 7.6 per cent generated in the pastoral/mining country remote from the metropolitan centres (Table 7.3).

Table 7.3	Australian	Australian GDP allocated to regions, 2019 (per cent)								
State	Centre	Centre + Inner	Inner suburb	Outer suburb	Metro periphery	Metro total	Country	Remote urban	Remote pastoral	Total
NSW	9.5	13.7	4.2	8.5	4.5	26.7	4.4		0.2	31.3
ACT		2.1				2.1				2.1
VIC	8.0	12.6	4.6	6.4	2.8	21.8	1.4			23.2
QLD		4.4		4.4	3.2	12.0	6.6		0.6	19.2
WA		4.5		3.8	0.8	9.1	1.0		5.5	15.6
SA		2.4		1.4	0.8	4.6	0.9			5.5
TAS							1.6			1.6
NT								0.9	0.4	1.3
AUS		39.7		24.5	12.1	76.3	15.9	0.9	6.7	100.0

Note: In Sydney and Melbourne the city centre region is distinguished from the inner suburbs, in the other four metropolitan cities the two are

NIEIR estimates. Source:

During the quarter century which ended in 2019 there were major shifts in the location of economic activity. The most pronounced shift was into the metropolitan centres. A whopping 5 per cent of national GDP shifted into the centres of Sydney and Melbourne, with a further 2 per cent or so shifting into the centres of Perth, Brisbane and Canberra (Table 7.4). This shift was associated with an increase in the salience of head offices in the economy, along with their support services. This increase was partly due to automation: in many industries the routine tasks carried out in dispersed operations were automated but not the tasks carried out in the metropolitan head offices. These head offices (which include the head offices of governments as well as the private sector) were supported by an array of specialist services including lawyers, media, scientific research, design, marketing and many more. This concatenation of head offices and their support services was sometimes labelled the knowledge economy. It was argued that the greater the mix of skills and experiences held by people who can easily meet in person, the greater the level of productivity and innovation, hence the growth of the major metropolitan centres. Yet questions were asked. Why did Adelaide miss out? Perhaps because it lost head offices. Indeed, perhaps the high levels of GRP in the metropolitan centres other than Adelaide resulted more from the centralisation of profits in quasi-monopolised industries than from knowledge-economic developments in 19th century language, that the city centres were garnering economic rents. The truth is probably somewhere in the middle: yes, the knowledge economy yields real benefits, but no, the city centres also abound in activities whose contribution to GDP would be reduced if they were priced at their economic cost.

The second significant shift in the location of economic activity noticeable in Table 7.4 is the shift of 2 per cent of GDP into remote WA, to which may be added the shift of 1 per cent into country Queensland. These shifts were generated by two highly-specific parts of the mining industry, iron ore and natural gas. In response to buoyant overseas demand, production of both of these commodities expanded during the mining boom. Even though prices subsided as the boom ended, the additional production underpinned a long-lasting increase in the share of GDP generated in regions generously endowed with iron-ore and natural gas. Not all of the mining regions were so favoured. The gradual exhaustion of oil and gas reserves in Bass Strait reduced Gippsland's share of national GDP, the working-out of long established ore bodies, coupled with the failure of the price-boom to extend to base metals, reduced the share of NSW Far West and there were also significant mine closures in the NT Outback.

Like iron ore and gas, the third major export mineral, coal, was produced in quantity in a select few regions. In Inland Hunter it maintained the region's share of GDP and in Mackay and Central Queensland it contributed to an increasing share.

The mining industry, which was mainly responsible for the increased share of GDP generated in remote WA, is capitalintensive, which means that it generates a very high share of corporate profits in relation to local incomes. (An alternative description of these same facts is that the industry is resource-intensive, and generates high resource rents in relation to wages paid.) Because of this capital/resource intensity, the increase in the share of GDP generated in remote WA was much greater than the share of aggregate national employment-related local income: the increase of 2.1 percentage points in the share of GDP generated in remote WA translated into an increase of 0.2 percentage points in the share of local income and similarly the increase of 1.1 percentage points in the share of Country Queensland generated an increase of 0.1 percentage points in local income.

In similar vein, money management, which was partly responsible for the increased share of GDP generated in the metropolitan centres, was also characterised by a high ratio of corporate profits to local income. Unlike mining,

where high profitability is associated with resource rents, high profitability is not guaranteed in money management and indeed the industry suffered major losses during the 1990 recession, but its profitability after recovery from the recession contributed, along with mining, to major changes in the regional pattern of GRP generation.

With the share of GDP generated in the metropolitan centres rising by around 7 per cent, and that generated in the mining-boom regions rising by around 2 per cent, where were the corresponding reductions? On a place-of-work basis, reductions occurred in two main groups of regions, the suburbs and peri-metropolitan areas of Sydney, Melbourne and Adelaide, and country regions other than those with mining developments.

The most severe reduction in share occurred in the Sydney suburbs and peripheral regions (including Newcastle and Wollongong), where the aggregate contribution to national GDP fell by 4.6 percentage points. The fall in Adelaide as a whole, though only 1.1 percentage points, was as severe in relation to the size of the metropolitan area as the fall in the Sydney suburbs. The fall in the Melbourne suburbs and periphery was not proportionately quite so severe at 2.7 percentage points, and some of this was due to declining oil/gas production from Bass Strait on the Melbourne periphery. The primary reason for these falls was the reduction in manufacturing activity. Australia's economic reformers had argued in the 1980s that tariff-protected manufacturing was a drag on the economy and that tariff cuts would face manufacturers with a simple choice: either become more competitive or close down and release resources for transfer to other industries. These expectations were only partially realised: during the 1980s many manufacturing businesses became more competitive while others closed down. However, much of the released labour was transferred to unemployment rather than to production in other industries. This process was more or less completed by the 1990 recession, after which it could be expected that the share of manufacturing in GDP would stabilise with productivity increasing. Why didn't this happen? The answer to this question is controversial, since it has implications for the money management sector

which was de-regulated as part of the same program as the tariff cuts.

The adverse consequences of financial deregulation for manufacturing, and indeed for trade-exposed industries in general, included a tendency to over-value the Australian dollar with the resulting balance-of-payments deficit met by bank borrowing. This over-valuation was particularly serious during the mining boom, when the Commonwealth government elected to give consumers access to low-cost imported goods and overseas holidays rather than intervene to rein in the rise in the exchange rate. The resulting squeeze on profits in trade-exposed industries other than mining dissuaded manufacturers from investing to improve their productivity. Financial de-regulation also allowed a surge in mortgage borrowing which contributed to increasing land prices and so raised manufacturers' costs. It is noteworthy that the share of GDP generated in the outer suburbs of Melbourne declined a lot less seriously than in the outer suburbs of Sydney, with Sydney land prices at least partly to blame.

Though the contribution to GDP of the suburbs and metropolitan peripheries of Sydney, Melbourne and Adelaide fell, this did not happen in the equivalent parts of Perth and Brisbane, whose aggregate contribution increased by 2.5 percentage points. Some of the increase around Perth was directly related to mining (including alumina smelting and mining support services) and some, in both Perth and Brisbane, served mining-industry demands, for example by fabrication of inputs to mine construction.

A second group of regions whose share of GDP fell comprised country regions other than those with increases in mining activity. Some of these regions, particularly in Tasmania and SA, were affected by the problems besetting manufacturing, but in the main their failure to keep up with national economic growth reflected the performance of their main economic base industry, agriculture. The reformers of the 1980s had confidently predicted that agriculture would benefit from tariff cuts and the associated de-regulations, so what went wrong?

Table 7.4	Change in the allocation of GDP among regions, 1994-2019 (per cent of total GDP)									
State	Centre	Centre + Inner	Inner suburb	Outer suburb	Metro periphery	Metro total	Country	Remote urban	Remote pastoral	Total
NSW	+2.4	+1.2	-1.2	-1.8	-1.5	-2.1	-1.5		-0.3	-3.9
ACT		+0.2				+0.2				+0.2
VIC	+2.6	+1.7	-0.9	-0.2	-1.6	-0.1	-1.2			-1.3
QLD		+0.7		+0.7	+0.8	+2.2	+1.1		-0.1	+3.1
WA		+1.1		+0.9	+0.1	+2.1	-0.2		+2.1	+4.0
SA		-0.4		-0.3	-0.4	-1.1	-1.0			-2.1
TAS							-0.5			-0.5
NT								+0.4	-0.2	+0.2
AUS		+4.5		-0.7	-2.6	+1.2	-3.4	+0.4	+1.5	0.0

Some of the problems were the same as beset manufacturing, for both manufacturing and agriculture are trade-exposed industries which have been penalised by generally over-valued exchange rates and the costs which derive from rising land prices. However, there were additional factors, mainly concerning sustainable resource use. What is the sustainable yield of irrigation water, and how can water be productively and equitably managed? What is the sustainable yield of rain-fed agriculture, both farming and pastoral? And what can be done to sustain these yields in the face of climate change?

In total, during the quarter century of economic growth which began with recovery from the 1990 recession and ended with the COVID-19 pandemic, there was a major shift of economic production into the centres of Sydney, Melbourne, Brisbane, Perth, Canberra and Darwin (Hobart and Adelaide missed out). The suburbs and metropolitan periphery regions of Brisbane and Perth also gained, as did several mining regions, notably Pilbara Kimberley, Mackay and Central Queensland. However, most of the gains in the mining regions were absorbed into corporate profits with the result that gains in local (work-related) income were concentrated in the city centres, overflowing from Brisbane into South East Queensland as a whole and from Perth into the suburbs and the south-west of WA. The corresponding reductions in the share of local income generated were spread across the rural regions generally and the suburbs and peri-urban regions of Sydney, Melbourne and Adelaide. These changes were related to changes in the regional distribution of the population, both as cause and as effect.

7.2.2 Gross Regional Product and regional population

Including their periphery regions and Canberra, in 2019 Sydney and Melbourne together accounted for a little over half of the Australian population, the same as their proportion of GRP (Tables 7.3 and 7.5). The other three metropolitan areas, combined with their peripheries, housed 29 per cent of the population and generated 26 per cent of GDP, the country regions housed 18 per cent of the population and generated 16 per cent of GDP and the remote regions, with 2 per cent of the population, generated 8 per cent of GDP. The stark imbalance between the share of GDP and population in the remote regions was due to the mining industry, with its very low rate of job generation per million dollars of value added.

Within the five metropolitan areas plus Canberra the central/inner regions housed 23 per cent of the Australian population but generated 40 per cent of GDP while the outer suburbs and peripheries housed 56 per cent of the national population while generating 37 per cent of GDP. Much of the GDP generated in the central and inner suburbs resulted in local incomes which were carried to the suburbs and peripheries by commuters. However, echoing remote regions, an above-average proportion fed into corporate profits.

The surge of local income generation in the metropolitan centres (other than Adelaide) increased the demand for housing with convenient access to the new jobs and contributed in no small way to the increase in the cost of metropolitan housing, particularly in the inner regions. Developers responded and the proportion of the national population living in the combined central regions of Sydney and Melbourne increased by one percentage point (Table 7.6), well short of the 5 percentage point increase in the proportion of GDP generated in these regions. The other four percentage points were split between corporate profits and additional commuter incomes.

Table 7.5	Distribution of the Australian population by region type, 2019 (per cent)										
State	Centre	Centre + Inner	Inner suburb	Outer suburb	Metro periphery	Metro total	Country	Remote urban	Remote pastoral	Total	
NSW	1.8	7.1	5.3	11.0	7.1	25.3	6.3		0.3	31.9	
ACT		1.7				1.7				1.7	
VIC	1.8	8.1	6.3	11.3	4.4	23.8	2.1			25.9	
QLD		2.2		6.9	4.8	14.0	5.7		0.4	20.1	
WA		2.1		6.1	0.8	9.0	0.7		0.7	10.4	
SA		1.8		2.1	1.9	5.9	1.1			6.9	
TAS							2.1			2.1	
NT								0.6	0.4	1.0	
AUS		23.0		37.4	19.0	79.6	18.0	0.6	1.8	100.0	

Source: ABS, allocated to regions by NIEIR.

Comparing the metropolitan areas including their peripheries, the following may be noted.

- Metropolitan Sydney's share of GDP fell by 2.1 percentage points and its share of population by 0.7 percentage points (Tables 7.4 and 7.6). Sydney's restricted site, hemmed in by scenic national parks, exacerbated the negative effects of the policies pursued jointly by the Commonwealth and the financial sector and pushed land prices up. Residents of Inner Sydney benefited from the prosperity of the financial sector but in Metropolitan Sydney as a whole (including Newcastle and Wollongong) these gains were outweighed by the decline of manufacturing.
- Metropolitan Adelaide's share of both GDP and national population fell by about a percentage point, again reflecting the decline of manufacturing.
- Metropolitan Melbourne's share of GDP was constant but its share of the national population rose by 1.3 percentage points. Outer Melbourne land prices were not such a disincentive to population growth as their equivalents in Sydney, but it looked as though Melbourne was pursuing population growth at the expense of falling average incomes.
- The obvious beneficiary of the mining boom was Metropolitan Perth, whose share of GDP increased by two percentage points. The city's share of the

- national population lagged this increase, rising by one percentage point. The high share of corporate profits in value added in mining was at least partly responsible for this lag.
- South East Queensland gained both GDP share and population share 2.2 percentage points for GDP and 2.8 percentage points for population. There was some similarity to Melbourne in that the increase in the population share was greater than the increase in the GDP share as in Melbourne, land prices in Brisbane were lower than in Sydney. Brisbane also benefited from dynamism on its periphery contrast the growth of services in Gold Coast and Sunshine Coast with the decline of manufacturing in Newcastle and Wollongong.
- Darwin (urban NT) did not yet rank as a major metropolitan area but was on the way thanks to mining. As in Perth, its share of GDP increased more than its share of population.

The loss of GDP share in the arable country regions beyond the urban peripheries was matched by a loss of population, with the most severe losses of both in the South-Eastern states. The share of GDP generated in the remote pastoral/mining regions rose but their share of the national population declined – the increase in mining activity generated relatively few jobs and many of these were taken by metropolitan-based fly-in fly-out workers.

Table 7.6	Change in	Change in the regional share of population 1974-2019 (per cent of total population)											
State	Centre	Centre + Inner	Inner suburb	Outer suburb	Metro periphery	Metro total	Country	Remote urban	Remote pastoral	Total			
NSW	+0.4	-0.2	-0.6	-0.2	-0.4	-0.7	-1.1		-0.2	-2.0			
ACT		0.0				0.0				0.0			
VIC	+0.6	-0.2	-0.8	+1.9	-0.3	+1.3	-0.7			+0.7			
QLD		0.2		+1.2	+1.5	+2.8	-0.2		-0.2	+2.4			
WA		-0.2		+1.2	+0.1	+1.1	-0.2		-0.1	+0.8			
SA		-0.4		-0.2	-0.3	-0.9	-0.5			-1.3			
TAS							-0.6			-0.6			
NT								+0.1	-0.1	0.0			
AUS		-0.8		+3.9	+0.6	+3.7	-3.3	+0.1	-0.6	0.0			

Source: ABS, allocated to regions by NIEIR.

7.2.3 Disposable income

After corporate gross profits are split off from GDP, they are further split into amounts retained by corporate business to re-invest in the business and amounts paid out to a variety of claimants including governments (taxation), creditors and shareholders. Most of this is managed by the finance sector, particularly through superannuation funds. Some interest and dividend payments go overseas, though

there are contra flows of interest and dividends from overseas. By these devious paths, in 2019 around one-third of corporate gross profits found their way to households as property income. This was an important source of income for the rich and some of the elderly. The regional effects of this were traced in Chapter 5.

A second addition to local income, discussed in Chapter 5, came from the Commonwealth in the form of cash social security payments. A further addition was dwelling rents – this addition was also discussed in Chapter 5.

Local employment-related income plus property income gives private income, as discussed in Chapter 5. Disposable income can then be calculated by adding social security benefits and deducting income and other direct taxes, compulsory superannuation contributions and interest payable on household debt. The concept of disposable income is a little fuzzy at the edges. It is arguable (for example) that cash rents received by landlords should be included (they aren't, because to do so would raise the question of the treatment of owner-occupied housing) or that contractual loan repayments should be deducted in addition to interest (they aren't, being considered capital transactions). Accepting these caveats, we are left with a rough estimate of the total amount which households can spend, per annum, without either borrowing or lending. Call it disposable income. Table 7.9 provides estimates of average disposable income per capita by broad class of region.

One estimate leaps out of the table: average disposable income in the ACT in 2019 was 80 per cent over national average. This high figure, and its changing relationship with other high-income regions, provides an insight into the effects of Commonwealth economic policies during a period when official rhetoric favoured small government. Was it perhaps that federal public servants were using the ideology of public sector cutbacks to feather their own nests? Or were they merely keeping up with their fellow executives in Sydney? A little history helps.

In 1994, judging by household disposable income per capita, the most prosperous of all Australian regions was Sydney Central (the CBD plus the inner North Shore), followed by Sydney North (the upper North Shore and the Northern Beaches), then Central Melbourne and then Sydney Inner East (where high harbourside incomes were averaged with lower incomes round Maroubra). The ACT was in fifth place. A quarter century later the ACT was firmly in top position, followed by Darwin (which displaced Central Melbourne from the top five) then Sydney Central and Sydney North with Sydney Inner East in fifth place. In both 1994 and 2019 the three most prosperous Sydney regions were included in the top five, as would be expected in an era when money management yielded high local incomes. It should be noted that this prosperity did not extend to Sydney as a whole, in which disposable incomes per capita were barely above national average. In 2019 the two regions with the lowest such incomes nationally were also in Sydney: the Mid-West and the Outer South West.

What explains the rise of the ACT from fifth to top place? The explanation must reside in its limited economic base: Commonwealth administration and defence. During the quarter century the Commonwealth government attempted to curb costs and in part succeeded – hours worked in the ACT grew by 1.4 per cent a year, well below the national average rate of 1.7 per cent. However, remuneration per hour worked seems to have grown rapidly, for several reasons.

In the ACT:

- the curbing of hours worked affected low-paid more than high-paid public servants;
- hours worked in contracted-out administrative (and lobbying) services increased and were highly remunerated;
- though executive-level public servants were paid less than their peers in money management, their salaries were maintained in relation to these peers; and
- much of the increase in income took the form of superannuation benefits.

A further effect was that housing prices in Canberra were much more reasonable than in Sydney, hence average disposable incomes were less depressed by interest payments, and demand for local services was therefore buoyant.

Darwin's reputation as a Commonwealth government town leads one to suspect that the increase in average disposable incomes there had the same causes as in Canberra, but the major cause seems to have been high activity in construction related to the mining boom. Activity from the mining boom also spread into Perth Central, but not quite enough to place it among the top five regions – in 2019 it came in sixth place.

The mining boom also brought prosperity to inner Brisbane. In inner Melbourne average disposable income per capita was around 15 per cent above national average, and in inner Adelaide just a little above. Noticeably, however, in both Sydney and Melbourne the rate of growth of disposable income in the central metropolitan region was slow, around 1 per cent a year, well below the national average of 1.7 per cent (Table 7.8). This was partly due to an influx of young people, students and others, willing to put up with cramped living conditions.

In all five metropolitan areas the average disposable income of residents on the metropolitan periphery was less than the average for the inner suburbs, and the average for the intervening outer suburbs was less again related to the decline of manufacturing. Overall, the average for country regions which were neither remote nor peri-metropolitan was about the same as for outer suburbs, though with interstate and regional variation – it was lower in regions which had attracted retirees and tourists, and higher in regions which had experienced good seasons and mining developments. Finally, average disposable incomes in the remote pastoral/mining regions of NSW, Queensland and WA were higher than in the relevant metropolitan area, and most had grown relatively rapidly. This was even true in the Far West of NSW, where total disposable income had grown despite a falling population.

The reforms of the 1980s were expected to benefit rural regions. Though the chief beneficiary regions turned out to be the city centres and gentry suburbs, the rural regions experiences (admittedly slight) relative gains. In 1994 the poorest regions, judged by disposable income per capita, were mainly rural, with Wide Bay reporting the lowest average, but in 2019 the poorest regions were mainly outer suburban.

Though the 1980s reformers did not loudly proclaim that they aimed to increase the inequality of regional incomes, their reforms certainly succeeded in doing so, or at the very least failed to counter an increase in regional inequality which occurred for other reasons. In the richest region average disposable income in 2019 was 1.57 times what it had been in 1994, in the poorest region it had risen much less, to 1.37 times what it had been. The reformers had promised an increase in national average disposable income, and that indeed took place – as recorded in the National Accounts, the average rose by around 56 per cent to reach \$39,000 per capita. However, in the process the

inequality of regional average disposable incomes increased.

Over the quarter century, for reasons already discussed, disposable income per capita grew most rapidly in the Darwin and the ACT (Table 7.8), and least rapidly in Central Melbourne and Central Sydney. In these two metropolitan areas the growth in local incomes generated in the city centre was syphoned off by commuters into the gentrifying inner suburbs, while the city centre itself experienced an influx of low-income residents including students and other young people. Overall, per capita incomes increased more rapidly in the country beyond the metropolitan peripheries than they did in the metropolitan areas and their peripheries. This was largely because low rates of income growth in the country were matched by even lower rates of population growth, plus additional factors including a social security system which increasingly favoured old people rather than those of workforce age and the rising burden of mortgage interest and superannuation contributions in the metropolitan areas.

Table 7.7	Average d	Average disposable income per capita, 2019 (\$'000 per annum)											
State	Centre	Centre + Inner	Inner suburb	Outer suburb	Metro periphery	Metro total	Country	Remote urban	Remote pastoral	Total			
NSW	58.9	55.3	54.1	34.1	38.2	41.2	36.9		43.5	40.4			
ACT		71.1				71.1				71.1			
VIC	45.8	44.1	43.6	32.5	35.6	37.0	37.5			37.0			
QLD		48.5		35.5	36.6	37.9	35.4		43.9	37.3			
WA		52.2		38.9	39.3	42.0	50.2		43.3	42.7			
SA		40.6		30.8	35.7	35.5	39.1			36.1			
TAS							37.1			37.1			
NT								59.5	37.1	50.5			
AUS		50.4		34.4	37.0	40.0	34.1	59.5	42.1	38.7			

Source: NIEIR.

Table 7.8	Rate of gr	Rate of growth of disposable income per capita, 1994-2019 (per cent per annum)										
State	Centre	Centre + Inner	Inner suburb	Outer suburb	Metro periphery	Metro total	Country	Remote urban	Remote pastoral	Total		
NSW	1.0	1.4	1.9	1.3	1.7	1.6	1.8		2.5	1.7		
ACT		3.3				3.3				3.3		
VIC	0.9	1.3	1.9	1.4	2.0	1.6	2.1			1.6		
QLD		2.0		1.9	1.8	1.9	1.9		2.7	1.9		
WA		2.6		2.0	2.1	2.1	3.2		1.7	2.2		
SA		1.5		1.5	1.4	1.5	2.1			1.6		
TAS							2.3			2.3		
NT								3.4	2.3	3.1		
AUS		2.0		1.6	1.8	1.7	2.0	3.4	2.2	1.8		

Source: NIEIR.

7.2.4 Poor and affluent households

The indicators presented in Tables 7.3 to 7.8 all relate to regional totals or averages. As briefly discussed when discussing Table 7.2 above, the 2016 Census provides rough indicators of the proportions of very low and rather high income households by region, where income is adjusted for household size using the OECD equivalence scale (the first adult in the household counts for 1, second and subsequent adults for 0.5 and children 0.3 each; hence the total income of a two-adult household is divided by 1.5 and of a two-adult, two-children household by 2.1). Affluent households are defined as those with adjusted, or equivalised, incomes in the top 10 per cent nationally and poor households as those with equivalised incomes in the bottom 10 per cent, excluding those with the zero or negative incomes which can arise due to business or speculative losses. The estimates apply to total personal incomes including social security receipts but do not allow for the deduction of income tax. Though, as one would expect, regions with high disposable incomes per capita

(Table 7.7) tended to have a high proportion of affluent households and a low proportion of poor households, these relationships were far from exact. For example, the very high disposable income per capita in the ACT translated into a proportion of affluent households which, while well above the national average, was very similar to the inner areas of the other metropolitan cities (Table 7.9). It did, however, translate into a very low proportion of poor households.

Sydney Central emerged from these data as the most affluent region in the country. The next most affluent regions were the centres and inner suburbs of the metropolitan areas other than Adelaide which all had well above the national average proportion of affluent households. The proportion of affluent households dipped below national average in the typical outer suburb, further below on the metropolitan periphery and further below again in the country regions. In the remote regions the proportion depended on the fortunes of the local mining industry.

Table 7.9	Proportio	Proportion of 'affluent' households, Census 2016 (per cent)										
State	Centre	Centre + Inner	Inner suburb	Outer suburb	Metro periphery	Metro total	Country	Remote urban	Remote pastoral	Total		
NSW	32.5	25.9	23.3	8.4	7.4	13.2	5.1		5.7	11.4		
ACT		19.8				19.8				19.8		
VIC	24.6	17.9	15.5	5.9	5.5	10.0	4.0			9.5		
QLD		19.1		7.5	6.6	9.1	6.3		10.0	8.3		
WA		20.1		9.9	8.0	12.3	7.5		19.5	12.3		
SA		10.9		4.0	4.9	6.5	4.7			6.2		
TAS							4.8			4.8		
NT								19.9	10.7	16.9		
AUS		20.0		7.5	6.5	11.0	5.5	19.9	12.6	10.0		

Source: ABS Census 2016, regional allocation by NIEIR. Affluent households = top 10 per cent by equivalised income.

At the other end of the scale, and as already remarked in relation to Table 7.2, poverty was more widely distributed than affluence. Among the groups of regions listed in Table 7.10, the incidence of poverty was highest in the remote pastoral/mining regions, thanks to the presence of Aboriginal communities and the low level of social security payments for people of workforce age (by and large the age pension yielded enough income to keep a household out of the bottom 10 per cent). The incidence was generally a little above national average in the country

regions. It was below national average in the inner suburban regions and averaged out around national average in the outer suburbs and on the metropolitan peripheries. The more detailed data provided in Chapter 6 show that these averages hid significant variation, and in fact the nationally highest incidence of poverty was in south-western Sydney.

Table 7.10	Proportio	Proportion of 'poor' households, Census 2016 (per cent)									
State	Centre	Centre + Inner	Inner suburb	Outer suburb	Metro periphery	Metro total	Country	Remote urban	Remote pastoral	Total	
NSW	7.0	6.7	6.6	11.1	9.7	9.4	12.1		14.3	10.0	
ACT		5.7				5.7				5.7	
VIC	9.2	9.2	9.2	10.1	11.5	10.0	12.5			9.5	
QLD		6.9		8.7	9.1	8.6	11.4		13.9	9.5	
WA		8.2		8.9	10.6	8.9	11.9		9.8	9.2	
SA		9.8		13.4	9.8	11.0	14.1			11.5	
TAS							12.4			12.4	
NT								5.7	18.1	9.7	
AUS		7.9		10.1	10.0	9.4	12.1	5.7	13.2	10.0	

Source: ABS Census 2016, regional allocation by NIEIR. Poor households = bottom 10 per cent by equivalised income, excluding households with zero or negative incomes.

7.3 What next?

The two data sets discussed in this chapter, one concentrating on indicators of regional average income and the other on regional distributions of income, yield relatively simple results: an increase in inequality and a surge to the metropolitan centres. The overall trend towards greater inequality and towards inner metropolitan prosperity has been consolidated by commuting and can be traced back to changes in patterns of income generation at workplaces. It has been associated with prosperity in banking, mining and the knowledge-economy services, and relative depression in the non-mining, tradeexposed industries including both agriculture and manufacturing. To this one might add automation, the straitened finances of the tax-financed area services and the equally straitened finances of households of workforce age who, for whatever reason, find themselves dependent on precarious work and niggardly social security.

In addition to the increase in inequality of incomes documented in this report there has, arguably, been an increase in wealth inequality. Much of this, as documented in the State of the Regions reports and also in the ABS National Balance Sheet, has been due to increases in property prices, supported by massive increases in household debt. The prosperity of 1994-2019 depended to a dangerous degree on demand created by debt accumulation. It will require a major re-orientation to shift from debt accumulation to more sustainable sources of demand – a shift which will very probably involve a reduction in the profits to which the money-managers have become accustomed. Business cannot continue as was usual from 1994 to 2019 – and that even apart from climate change and the threat of turmoil between nations. Competition has its merits, but is not of itself a virtue, hence its limitations as a guide to government policy and individual action. As Australia adjusts to global and national imperatives, it does so as an aggregation and interaction of regions and communities, and in doing so should be guided by the virtue of neighbourliness.

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Appendix A: Selected regional indicators

The principles on which Australia was divided into 67 regions are provided in Chapter 2, Section 2.1. In this appendix the following data are provided for each region.

- 1. A brief description of the region.
- 2. Estimated regional population in 1994 and 2019, with the annual average rate of growth between those two years.
- 3. Value added by industry in 1994 and 2019, with the percentage contribution of each industry to Gross Regional Product and the annual rate of growth between the two years. The industries are defined in Chapter 2.
- 4. Employment, as measured by hours worked, both by place-of-work and by usual residence of employed people.
- Gross local income (the total of compensation or employees and mixed incomes received from owner-operated businesses), again both by placeof-work and by usual residence of employed

- people. The concept of local income is introduced in Section 2.2 and further discussed in Section 4.1.2.
- 6. The incidence of poverty and affluence among household groups in 2016, as discussed in Chapter 6. NB: Non-family households are those comprising unrelated people, i.e. single person households plus group households. The number of households is not an estimate of the actual number living within the region, but is the number on which the estimates are based, i.e. households where all members aged 15 and over answered the Census income question.

The 67 regions are listed by state and territory. The ACT is grouped with NSW, since its peri-metropolitan area lies within its encircling state; otherwise the states and territories follow the established ABS order. Within each state, the inner metropolitan regions are listed first, followed by outer suburban regions, metropolitan periphery regions, country regions and remote regions.

SYDNEY CENTRAL

Sydney CBD, south to Kensington and Randwick, east to Kings Cross, west to Glebe and across the harbour to include the inner north shore as far as Chatswood.

Classified as central metropolitan. Wholly within the Sydney metropolitan area.

Population 1994 ('000)	255
Population 2019 ('000)	482
Rate of population growth 1994-2019 % a year	2.4

Household groups: Percentage poor and affluent, Census 2016										
Group	'000	Poor	Affluent							
Non-family	63	10	26							
Single parent	8	14	14							
Couple, children	26	3	40							
Couple only	45	4	42							
TOTAL 141 7 32										
Indigenous	2	21	17							

	Sydney Central: Gross value added											
		Place-of-work										
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)							
Agriculture	352	891	0.7	0.6	3.8							
Mining	704	609	1.3	0.4	-0.6							
Non-food manufacturing	1724	2082	3.3	1.3	0.8							
Logistics	2957	8289	5.6	5.3	4.2							
Office services	20237	64253	38.6	41.1	4.7							
Money management	14805	52323	28.2	33.5	5.2							
Construction	2259	6929	4.3	4.4	4.6							
Distribution	3316	6152	6.3	3.9	2.5							
Convivial services	2539	6447	4.8	4.1	3.8							
Area services	3564	8331	6.8	5.3	3.5							
TOTAL	52457	156307	100	100	4.5							

	Sydney Central: Hours worked									
		Pla	ice-of-wo	rk			Usua	l resider	ice	
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	4478	10387	0.6	0.7	3.4	2608	5878	1.1	1.2	3.3
Mining	1923	3435	0.3	0.2	2.3	668	787	0.3	0.2	0.7
Non-food manufacturing	36494	23420	5.0	1.5	-1.8	14334	14614	5.8	3.0	0.1
Logistics	53879	62233	7.5	4.1	0.6	21610	23723	8.7	4.8	0.4
Office services	272711	674013	37.7	43.9	3.7	80621	199218	32.5	40.5	3.7
Money management	124691	274830	17.3	17.9	3.2	27950	69287	11.3	14.1	3.7
Construction	20672	83070	2.9	5.4	5.7	6463	20936	2.6	4.3	4.8
Distribution	76696	120318	10.6	7.8	1.8	30358	42177	12.3	8.6	1.3
Convivial services	69694	142670	9.6	9.3	2.9	31998	52766	12.9	10.7	2.0
Area services	61444	141469	8.5	9.2	3.4	31100	62226	12.6	12.7	2.8
TOTAL	722683	1535845	100	100	3.1	247711	491612	100	100	2.8

	Sydney Central: Local income									
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	179	563	0.5	0.6	4.7	118	363	1.0	1.1	4.6
Mining	106	183	0.3	0.2	2.2	39	50	0.3	0.1	1.0
Non-food manufacturing	1192	998	3.6	1.0	-0.7	576	753	4.7	2.2	1.1
Logistics	2468	4780	7.4	4.7	2.7	1136	2168	9.3	6.3	2.6
Office services	16309	53900	48.8	53.1	4.9	5354	16915	43.6	49.5	4.7
Money management	5237	19160	15.7	18.9	5.3	1413	5380	11.5	15.7	5.5
Construction	894	3346	2.7	3.3	5.4	332	971	2.7	2.8	4.4
Distribution	2802	4534	8.4	4.5	1.9	1180	1749	9.6	5.1	1.6
Convivial services	1696	5872	5.1	5.8	5.1	873	2243	7.1	6.6	3.8
Area services	2504	8220	7.5	8.1	4.9	1248	3569	10.2	10.4	4.3
TOTAL	33387	101555	100	100	4.6	12270	34159	100	100	4.2

SYDNEY INNER EAST

Sydney suburbs east of Kings Cross, plus Randwick to La Perouse, Mascot, Botany and Marrickville.

Classified as inner metropolitan. Wholly within the Sydney metropolitan area.

Population 1994 ('000)	323
Population 2019 ('000)	396
Rate of population growth 1994-2019 % a year	0.8

Household groups: Percentage poor and affluent, Census 2016										
Group	'000	Poor	Affluent							
Non-family	41	12	19							
Single parent	10	14	9							
Couple, children	33	3	29							
Couple only	32	5	33							
TOTAL	116	7	25							
Indigenous	2	15	13							

	Sydney Inner East: Gross value added											
			Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)							
Agriculture	593	487	4.1	1.7	-0.8							
Mining	1	14	0.0	0.0	10.0							
Non-food manufacturing	1333	1062	9.2	3.7	-0.9							
Logistics	2591	6828	17.9	23.9	4.0							
Office services	2381	5170	16.5	18.1	3.1							
Money management	1590	3241	11.0	11.4	2.9							
Construction	1027	2864	7.1	10.0	4.2							
Distribution	1844	3103	12.7	10.9	2.1							
Convivial services	942	1762	6.5	6.2	2.5							
Area services	2168	4003	15.0	14.0	2.5							
TOTAL	14473	28533	100	100	2.8							

		9	Sydney	Inner E	ast: Hours wo	rked				
		Pla	ice-of-wo	rk			Usua	l resider	ice	
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	7638	6649	2.9	1.9	-0.6	5237	6075	1.8	1.6	0.6
Mining	9	140	0.0	0.0	11.7	352	520	0.1	0.1	1.6
Non-food manufacturing	31288	14565	11.8	4.2	-3.0	26000	13445	9.0	3.5	-2.6
Logistics	46776	49403	17.6	14.1	0.2	27754	23483	9.6	6.1	-0.7
Office services	33639	54619	12.7	15.6	2.0	69652	117875	24.0	30.8	2.1
Money management	10864	16322	4.1	4.7	1.6	25281	43962	8.7	11.5	2.2
Construction	13636	36064	5.1	10.3	4.0	12190	30414	4.2	7.9	3.7
Distribution	53639	63057	20.2	18.0	0.6	47113	41859	16.3	10.9	-0.5
Convivial services	28311	40987	10.7	11.7	1.5	33739	41774	11.6	10.9	0.9
Area services	39598	67714	14.9	19.4	2.2	42591	63682	14.7	16.6	1.6
TOTAL	265398	349521	100	100	1.1	289908	383089	100	100	1.1

	Sydney Inner East: Local income											
	Place-of-work							Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	296	342	3.0	1.7	0.6	198	352	1.7	1.4	2.3		
Mining	1	9	0.0	0.0	10.6	19	27	0.2	0.1	1.5		
Non-food manufacturing	952	646	9.8	3.3	-1.5	814	639	7.1	2.6	-1.0		
Logistics	2160	3499	22.2	17.8	1.9	1253	1815	10.9	7.4	1.5		
Office services	1720	4665	17.7	23.7	4.1	3929	9948	34.1	40.7	3.8		
Money management	455	1183	4.7	6.0	3.9	1052	3323	9.1	13.6	4.7		
Construction	582	1516	6.0	7.7	3.9	527	1330	4.6	5.4	3.8		
Distribution	1476	2248	15.1	11.4	1.7	1447	1579	12.5	6.5	0.3		
Convivial services	647	1675	6.6	8.5	3.9	790	1791	6.8	7.3	3.3		
Area services	1457	3915	15.0	19.9	4.0	1510	3645	13.1	14.9	3.6		
TOTAL	9745	19698	100	100	2.9	11538	24449	100	100	3.0		

SYDNEY INNER WEST

Sydney suburbs from Lane Cove to Meadowbank to the north side of the harbour and from Leichhardt to Strathfield to the south.

Classified as inner metropolitan. Wholly within the Sydney metropolitan area.

Population 1994 ('000)	327
Population 2019 ('000)	460
Rate of population growth 1994-2019 % a year	1.4

Household groups: Percentage poor and affluent, Census 2016										
Group	'000	Poor	Affluent							
Non-family	40	11	16							
Single parent	12	13	9							
Couple, children	43	4	28							
Couple only	38	6	27							
TOTAL	132	7	22							
Indigenous	1	14	12							

	Syd	Iney Inner West: (Gross value added								
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	413	496	3.4	2.3	0.7						
Mining	10	1	0.1	0.0	-9.6						
Non-food manufacturing	741	557	6.1	2.5	-1.1						
Logistics	990	2202	8.1	10.0	3.2						
Office services	2659	4574	21.8	20.9	2.2						
Money management	2187	3928	17.9	17.9	2.4						
Construction	783	2620	6.4	12.0	4.9						
Distribution	1737	2447	14.2	11.2	1.4						
Convivial services	604	1302	5.0	5.9	3.1						
Area services	2073	3797	17.0	17.3	2.4						
TOTAL	12198	21923	100	100	2.4						

Sydney Inner West: Hours worked											
		Pla	ce-of-wo	rk			Usua	l resider	ice		
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019	
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)	
Agriculture	5455	6349	2.6	2.2	0.6	5296	6289	1.8	1.4	0.7	
Mining	17	13	0.0	0.0	-1.0	329	481	0.1	0.1	1.5	
Non-food manufacturing	15840	7850	7.5	2.7	-2.8	28484	18099	9.9	4.1	-1.8	
Logistics	17207	18139	8.2	6.2	0.2	28457	27534	9.9	6.3	-0.1	
Office services	38052	52888	18.1	18.1	1.3	67664	127389	23.5	29.2	2.6	
Money management	14968	20186	7.1	6.9	1.2	25079	48862	8.7	11.2	2.7	
Construction	15324	37485	7.3	12.8	3.6	14175	31244	4.9	7.2	3.2	
Distribution	45076	50733	21.5	17.3	0.5	45739	49480	15.9	11.3	0.3	
Convivial services	18901	30901	9.0	10.6	2.0	26716	44618	9.3	10.2	2.1	
Area services	39022	68004	18.6	23.2	2.2	45501	82311	15.8	18.9	2.4	
TOTAL	209862	292549	100	100	1.3	287440	436306	100	100	1.7	

Sydney Inner West: Local income											
		Place-of-work						Usual resid	lence		
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019	
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	
Agriculture	217	342	2.7	2.2	1.8	214	365	1.8	1.3	2.2	
Mining	1	1	0.0	0.0	-1.3	18	37	0.2	0.1	3.0	
Non-food manufacturing	506	317	6.3	2.1	-1.9	932	877	8.0	3.2	-0.2	
Logistics	824	1357	10.2	8.8	2.0	1303	2308	11.2	8.3	2.3	
Office services	2111	3913	26.1	25.4	2.5	3881	10587	33.3	38.3	4.1	
Money management	592	1286	7.3	8.3	3.2	1019	3529	8.8	12.8	5.1	
Construction	643	1494	7.9	9.7	3.4	629	1370	5.4	5.0	3.2	
Distribution	1413	1761	17.4	11.4	0.9	1426	1882	12.2	6.8	1.1	
Convivial services	404	1259	5.0	8.2	4.6	618	1920	5.3	6.9	4.6	
Area services	1388	3705	17.1	24.0	4.0	1606	4793	13.8	17.3	4.5	
TOTAL	8099	15433	100	100	2.6	11645	27666	100	100	3.5	

SYDNEY NORTH

Sydney suburbs north of Manly and Lindfield to Broken Bay, including Macquarie University and Hornsby.

Classified as inner metropolitan. Wholly within the Sydney metropolitan area.

Population 1994 ('000)	391
Population 2019 ('000)	486
Rate of population growth 1994-2019 % a year	0.9

Household groups: Percentage poor and affluent, Census 2016										
Group	'000 Poor Affluent									
Non-family	31	10	14							
Single parent	11	11	9							
Couple, children	55	2	28							
Couple only	38	4	27							
TOTAL	136	5	23							
Indigenous	1	6	15							

Sydney North: Gross value added										
			Place-of-work							
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	293	382	2.1	1.8	1.1					
Mining	20	12	0.1	0.1	-1.9					
Non-food manufacturing	1255	1431	8.8	6.8	0.5					
Logistics	1330	2193	9.3	10.4	2.0					
Office services	2741	4347	19.2	20.6	1.9					
Money management	1965	2577	13.8	12.2	1.1					
Construction	1057	2173	7.4	10.3	2.9					
Distribution	2057	2292	14.4	10.8	0.4					
Convivial services	898	1345	6.3	6.4	1.6					
Area services	2645	4394	18.6	20.8	2.1					
TOTAL	14261	21145	100	100	1.6					

	Sydney North: Hours worked											
		Pla	ce-of-wo	rk			Usua	l residen	ce			
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	4294	4796	1.7	1.8	0.4	4954	6989	1.5	1.6	1.4		
Mining	154	132	0.1	0.0	-0.6	898	392	0.3	0.1	-3.3		
Non-food manufacturing	23139	16189	9.3	5.9	-1.4	29526	22455	8.7	5.0	-1.1		
Logistics	25273	15507	10.1	5.7	-1.9	35410	27002	10.4	6.0	-1.1		
Office services	38949	44472	15.6	16.3	0.5	80566	135835	23.6	30.4	2.1		
Money management	12345	12004	4.9	4.4	-0.1	33217	47038	9.7	10.5	1.4		
Construction	22721	26141	9.1	9.6	0.6	22923	33428	6.7	7.5	1.5		
Distribution	52033	44674	20.8	16.3	-0.6	54554	52846	16.0	11.8	-0.1		
Convivial services	24843	30319	9.9	11.1	0.8	27224	38257	8.0	8.6	1.4		
Area services	46361	79268	18.5	29.0	2.2	51632	82669	15.1	18.5	1.9		
TOTAL	250110	273502	100	100	0.4	340905	446912	100	100	1.1		

	Sydney North: Local income									
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	164	319	1.6	2.0	2.7	197	439	1.3	1.5	3.3
Mining	10	8	0.1	0.1	-0.9	51	62	0.3	0.2	0.8
Non-food manufacturing	837	830	8.3	5.3	0.0	1110	1156	7.3	4.0	0.2
Logistics	1153	1371	11.5	8.8	0.7	1667	2483	11.0	8.5	1.6
Office services	2247	3723	22.3	23.8	2.0	5029	11580	33.1	39.6	3.4
Money management	536	927	5.3	5.9	2.2	1502	3693	9.9	12.6	3.7
Construction	1061	1161	10.6	7.4	0.4	1095	1543	7.2	5.3	1.4
Distribution	1720	1710	17.1	10.9	0.0	1848	2045	12.1	7.0	0.4
Convivial services	610	1303	6.1	8.3	3.1	685	1681	4.5	5.8	3.7
Area services	1715	4281	17.1	27.4	3.7	2026	4541	13.3	15.5	3.3
TOTAL	10053	15633	100	100	1.8	15211	29223	100	100	2.6

SYDNEY SOUTH-EAST

Comprises St George and Sutherland Shire – i.e. Sydney suburbs from Wolli Creek to the fringe.

Classified as outer metropolitan. Nearly all within the Sydney metropolitan area.

Population 1994 ('000)	409
Population 2019 ('000)	524
Rate of population growth 1994-2019 % a year	1.3

Household groups: Percentage poor and affluent, Census 2016									
Group	'000	Poor	Affluent						
Non-family	37	13	9						
Single parent	15	14	5						
Couple, children	53	4	15						
Couple only	42	7	15						
TOTAL	147	8	12						
Indigenous	2	9	10						

	Sydney South-East: Gross value added										
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	258	235	2.2	1.3	-0.4						
Mining	35	14	0.3	0.1	-3.6						
Non-food manufacturing	2166	949	18.9	5.2	-3.2						
Logistics	937	2171	8.2	11.9	3.4						
Office services	1542	3137	13.4	17.2	2.9						
Money management	1932	2964	16.8	16.3	1.7						
Construction	915	1846	8.0	10.1	2.8						
Distribution	1387	2237	12.1	12.3	1.9						
Convivial services	587	1055	5.1	5.8	2.4						
Area services	1730	3582	15.1	19.7	3.0						
TOTAL	11488	18190	100	100	1.9						

	Sydney South-East: Hours worked									
		Pla	ce-of-wo	rk			Usua	l residen	ce	
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	3624	2951	1.8	1.2	-0.8	6600	5870	2.0	1.3	-0.5
Mining	80	223	0.0	0.1	4.2	341	1180	0.1	0.3	5.1
Non-food manufacturing	25128	11676	12.7	4.7	-3.0	43722	24784	13.6	5.3	-2.2
Logistics	20259	18601	10.2	7.4	-0.3	39184	39410	12.2	8.5	0.0
Office services	24112	33039	12.2	13.2	1.3	55930	100311	17.4	21.5	2.4
Money management	14522	14187	7.3	5.7	-0.1	26382	40201	8.2	8.6	1.7
Construction	16512	28852	8.3	11.5	2.3	22391	50520	7.0	10.8	3.3
Distribution	42296	47702	21.3	19.1	0.5	59152	72328	18.4	15.5	0.8
Convivial services	17461	25725	8.8	10.3	1.6	25407	45804	7.9	9.8	2.4
Area services	34331	66939	17.3	26.8	2.7	43029	85298	13.4	18.3	2.8
TOTAL	198325	249894	100	100	0.9	322139	465707	100	100	1.5

	Sydney South-East: Local income									
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	129	155	1.9	1.2	0.7	253	296	2.1	1.1	0.6
Mining	4	8	0.1	0.1	3.1	15	35	0.1	0.1	3.6
Non-food manufacturing	749	516	11.1	4.0	-1.5	1368	1088	11.4	4.2	-0.9
Logistics	821	1176	12.1	9.2	1.4	1719	2731	14.3	10.5	1.9
Office services	1123	2698	16.6	21.1	3.6	2905	7980	24.1	30.6	4.1
Money management	561	945	8.3	7.4	2.1	1007	2801	8.4	10.8	4.2
Construction	709	1189	10.5	9.3	2.1	962	2134	8.0	8.2	3.2
Distribution	1141	1601	16.9	12.5	1.4	1697	2494	14.1	9.6	1.6
Convivial services	401	1013	5.9	7.9	3.8	571	1822	4.7	7.0	4.8
Area services	1126	3508	16.6	27.4	4.7	1538	4665	12.8	17.9	4.5
TOTAL	6764	12809	100	100	2.6	12034	26046	100	100	3.1

SYDNEY MID-WEST

Sydney suburbs from Punchbowl and Padstow through Bankstown to Auburn, Merrylands and Greystanes (south of the Great Western Highway).

Classified as outer metropolitan. Wholly within the Sydney Metropolitan area.

Population 1994 ('000)	403
Population 2019 ('000)	552
Rate of population growth 1994-2019 % a year	1.3

Household groups: Percentage poor and affluent, Census 2016									
Group '000 Poor Affluent									
Non-family	30	20	4						
Single parent	18	23	2						
Couple, children	53	15	4						
Couple only	32	11	7						
TOTAL	132	16	4						
Indigenous	1	19	3						

	Sydney Mid-West: Gross value added										
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	869	714	5.7	3.1	-0.8						
Mining	23	109	0.2	0.5	6.4						
Non-food manufacturing	3900	3207	25.5	13.8	-0.8						
Logistics	2142	4509	14.0	19.3	3.0						
Office services	1706	2763	11.2	11.9	1.9						
Money management	937	1873	6.1	8.0	2.8						
Construction	1129	2417	7.4	10.4	3.1						
Distribution	2255	3415	14.7	14.6	1.7						
Convivial services	500	983	3.3	4.2	2.7						
Area services	1836	3321	12.0	14.2	2.4						
TOTAL	15297	23310	100	100	1.7						

Sydney Mid-West: Hours worked										
		Pla	ce-of-wo	rk			Usua	l resider	ice	
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	11646	10501	3.7	3.1	-0.4	8716	8240	3.0	2.2	-0.2
Mining	41	904	0.0	0.3	13.2	171	466	0.1	0.1	4.1
Non-food manufacturing	89944	48764	28.3	14.4	-2.4	53190	27292	18.4	7.1	-2.6
Logistics	42398	40118	13.3	11.8	-0.2	31352	30854	10.8	8.1	-0.1
Office services	25026	30766	7.9	9.1	0.8	39290	61634	13.6	16.1	1.8
Money management	8176	10874	2.6	3.2	1.1	18519	26889	6.4	7.0	1.5
Construction	19548	39498	6.1	11.6	2.9	18414	42773	6.4	11.2	3.4
Distribution	69133	73824	21.7	21.7	0.3	63225	77482	21.9	20.3	0.8
Convivial services	16504	24417	5.2	7.2	1.6	23187	42008	8.0	11.0	2.4
Area services	35824	59783	11.3	17.6	2.1	33013	64109	11.4	16.8	2.7
TOTAL	318239	339449	100	100	0.3	289078	381745	100	100	1.1

	Sydney Mid-West: Local income									
			Place-of-v	vork				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	430	472	4.1	2.9	0.4	278	354	3.2	2.0	1.0
Mining	1	29	0.0	0.2	12.8	5	19	0.1	0.1	5.2
Non-food manufacturing	2605	2007	24.6	12.3	-1.0	1355	1048	15.5	5.9	-1.0
Logistics	1822	2648	17.2	16.2	1.5	1195	1739	13.7	9.8	1.5
Office services	1206	2243	11.4	13.7	2.5	1686	4161	19.3	23.5	3.7
Money management	317	646	3.0	4.0	2.9	583	1479	6.7	8.3	3.8
Construction	772	1629	7.3	10.0	3.0	646	1610	7.4	9.1	3.7
Distribution	1864	2462	17.6	15.1	1.1	1542	2473	17.7	14.0	1.9
Convivial services	341	952	3.2	5.8	4.2	428	1551	4.9	8.8	5.3
Area services	1233	3233	11.6	19.8	3.9	1008	3285	11.6	18.5	4.8
TOTAL	10590	16321	100	100	1.7	8726	17720	100	100	2.9

PARRAMATTA

Sydney suburbs from Olympic Park through Parramatta and Westmead to Wentworthville, and north to the urban fringe including The Hills.

Classified as outer metropolitan. Wholly within the Sydney metropolitan area.

Population 1994 ('000)	344
Population 2019 ('000)	523
Rate of population growth 1994-2019 % a year	1.7

Household groups: Percentage poor and affluent, Census 2016									
Group '000 Poor Affluent									
Non-family	30	13	11						
Single parent	12	15	6						
Couple, children	59	5	16						
Couple only	38	6	18						
TOTAL	139	8	15						
Indigenous	1	14	11						

Parramatta: Gross value added											
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	827	905	3.6	1.8	0.4						
Mining	328	42	1.4	0.1	-7.9						
Non-food manufacturing	3096	3836	13.5	7.7	0.9						
Logistics	2560	5686	11.2	11.4	3.2						
Office services	4700	13251	20.5	26.6	4.2						
Money management	3613	8218	15.8	16.5	3.3						
Construction	1294	5608	5.7	11.3	6.0						
Distribution	2333	3570	10.2	7.2	1.7						
Convivial services	777	1646	3.4	3.3	3.1						
Area services	3370	6962	14.7	14.0	2.9						
TOTAL	22898	49725	100	100	3.2						

Parramatta: Hours worked										
		Pla	ice-of-wo	rk			Usua	l resider	ice	
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	11268	11847	2.9	2.0	0.2	7116	6933	2.4	1.5	-0.1
Mining	393	472	0.1	0.1	0.7	411	678	0.1	0.1	2.0
Non-food manufacturing	49422	47490	12.9	8.0	-0.2	35886	26675	12.1	5.8	-1.2
Logistics	51706	44203	13.5	7.4	-0.6	33807	35639	11.4	7.7	0.2
Office services	69384	142515	18.1	24.0	2.9	59776	117630	20.1	25.5	2.7
Money management	29961	46750	7.8	7.9	1.8	26279	45355	8.8	9.8	2.2
Construction	25951	69938	6.8	11.8	4.0	17070	45866	5.7	10.0	4.0
Distribution	61434	72856	16.0	12.3	0.7	50202	61507	16.9	13.4	0.8
Convivial services	23193	38235	6.1	6.4	2.0	20500	33236	6.9	7.2	2.0
Area services	60321	119528	15.7	20.1	2.8	45951	87141	15.5	18.9	2.6
TOTAL	383034	593834	100	100	1.8	296998	460659	100	100	1.8

Parramatta: Local income										
			Place-of-v	work			Usual residence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	423	587	2.7	1.8	1.3	276	369	2.3	1.4	1.2
Mining	18	23	0.1	0.1	1.1	19	34	0.2	0.1	2.3
Non-food manufacturing	1765	2268	11.4	6.8	1.0	1241	1293	10.3	4.9	0.2
Logistics	2211	3561	14.3	10.7	1.9	1525	2791	12.7	10.5	2.4
Office services	3995	10150	25.8	30.4	3.8	3437	8738	28.6	32.9	3.8
Money management	1168	2817	7.5	8.4	3.6	1080	2962	9.0	11.2	4.1
Construction	1118	2959	7.2	8.9	4.0	765	1969	6.4	7.4	3.9
Distribution	1914	2604	12.4	7.8	1.2	1555	2253	12.9	8.5	1.5
Convivial services	526	1580	3.4	4.7	4.5	476	1353	4.0	5.1	4.3
Area services	2357	6810	15.2	20.4	4.3	1645	4787	13.7	18.0	4.4
TOTAL	15493	33359	100	100	3.1	12019	26549	100	100	3.2

SYDNEY OUTER SOUTH WEST

Sydney suburbs from Fairfield through Cabramatta, Liverpool and Leppington to Campbelltown, but excluding Camden and Menangle.

Classified as outer metropolitan. Wholly within the Sydney metropolitan area.

Population 1994 ('000)	424
Population 2019 ('000)	583
Rate of population growth 1994-2019 % a year	1.3

Household groups: Percentage poor and affluent, Census 2016									
Group '000 Poor Affluent									
Non-family	26	19	4						
Single parent	23	22	2						
Couple, children	58	11	4						
Couple only	33	10	7						
TOTAL	140	14	4						
Indigenous	4	19	2						

Sydney Outer South West: Gross value added											
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	529	575	4.1	2.4	0.3						
Mining	35	25	0.3	0.1	-1.3						
Non-food manufacturing	2793	3275	21.5	13.6	0.6						
Logistics	1150	3708	8.9	15.4	4.8						
Office services	2570	3714	19.8	15.5	1.5						
Money management	1001	1509	7.7	6.3	1.7						
Construction	1154	2928	8.9	12.2	3.8						
Distribution	1462	3321	11.3	13.8	3.3						
Convivial services	462	1129	3.6	4.7	3.6						
Area services	1821	3836	14.0	16.0	3.0						
TOTAL	12976	24019	100	100	2.5						

Sydney Outer South West: Hours worked												
	Place-of-work								Usual residence			
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	7947	9176	3.4	2.5	0.6	11812	12969	3.8	3.0	0.4		
Mining	565	321	0.2	0.1	-2.2	402	1033	0.1	0.2	3.8		
Non-food manufacturing	54889	51148	23.2	13.9	-0.3	64230	44613	20.9	10.3	-1.4		
Logistics	21451	33524	9.1	9.1	1.8	29250	34909	9.5	8.1	0.7		
Office services	28993	41553	12.2	11.3	1.5	43296	63828	14.1	14.7	1.6		
Money management	7803	10351	3.3	2.8	1.1	19006	28416	6.2	6.6	1.6		
Construction	16411	44773	6.9	12.2	4.1	22898	57103	7.5	13.2	3.7		
Distribution	48272	73558	20.4	20.0	1.7	63412	82919	20.6	19.1	1.1		
Convivial services	14712	29762	6.2	8.1	2.9	19837	36269	6.5	8.4	2.4		
Area services	35834	73057	15.1	19.9	2.9	33033	71078	10.8	16.4	3.1		
TOTAL	236876	367222	100	100	1.8	307175	433136	100	100	1.4		

	Sydney Outer South West: Local income											
			Place-of-v	work		Usual residence						
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	279	406	3.5	2.4	1.5	398	510	3.8	2.6	1.0		
Mining	17	14	0.2	0.1	-0.8	13	32	0.1	0.2	3.5		
Non-food manufacturing	1616	2123	20.4	12.3	1.1	1799	1692	17.4	8.7	-0.2		
Logistics	957	2097	12.1	12.1	3.2	1235	1972	11.9	10.1	1.9		
Office services	1470	3037	18.5	17.6	2.9	2135	4258	20.6	21.8	2.8		
Money management	297	588	3.7	3.4	2.8	669	1430	6.5	7.3	3.1		
Construction	657	1803	8.3	10.4	4.1	886	2209	8.6	11.3	3.7		
Distribution	1191	2351	15.0	13.6	2.8	1671	2618	16.1	13.4	1.8		
Convivial services	318	1063	4.0	6.2	4.9	411	1300	4.0	6.6	4.7		
Area services	1124	3782	14.2	21.9	5.0	1134	3534	11.0	18.1	4.7		
TOTAL	7926	17265	100	100	3.2	10353	19556	100	100	2.6		

SYDNEY OUTER WEST

Sydney suburbs centres on Blacktown, Penrith and Richmond, bounded to the north and west by the Nepean River.

Classified as outer metropolitan. Nearly all within the Sydney metropolitan area.

Population 1994 ('000)	419
Population 2019 ('000)	615
Rate of population growth 1994-2019 % a year	1.6

Household groups: Percentage poor and affluent, Census 2016									
Group '000 Poor Affluent									
Non-family	31	15	5						
Single parent	23	18	2						
Couple, children	63	5	6						
Couple only	38	7	10						
TOTAL	155	9	6						
Indigenous	7	18	4						

Sydney Outer West: Gross value added											
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	721	815	5.0	2.8	0.5						
Mining	12	34	0.1	0.1	4.4						
Non-food manufacturing	2021	2582	14.0	9.0	1.0						
Logistics	1310	4923	9.1	17.1	5.4						
Office services	3431	4952	23.8	17.2	1.5						
Money management	1178	1742	8.2	6.1	1.6						
Construction	1312	3890	9.1	13.5	4.4						
Distribution	1910	4448	13.3	15.5	3.4						
Convivial services	600	1099	4.2	3.8	2.5						
Area services	1920	4270	13.3	14.9	3.2						
TOTAL	14414	28755	100	100	2.8						

	Sydney Outer West: Hours worked											
		Pla	ce-of-wo	rk			Usua	l resider	ice			
	1994 ('000	4 ('000 2019 ('000 1994 2019 1994-2019					2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	11767	12374	4.5	2.9	0.2	14002	12272	4.2	2.3	-0.5		
Mining	93	371	0.0	0.1	5.7	237	433	0.1	0.1	2.4		
Non-food manufacturing	43882	40441	16.9	9.6	-0.3	54761	46393	16.4	8.7	-0.7		
Logistics	23308	42573	9.0	10.1	2.4	35059	47118	10.5	8.8	1.2		
Office services	36904	50738	14.2	12.0	1.3	50036	89944	15.0	16.8	2.4		
Money management	8718	11918	3.4	2.8	1.3	21716	35449	6.5	6.6	2.0		
Construction	22684	60828	8.7	14.4	4.0	25982	70691	7.8	13.2	4.1		
Distribution	58341	96069	22.4	22.8	2.0	68573	102547	20.6	19.1	1.6		
Convivial services	18120	28590	7.0	6.8	1.8	22114	36412	6.6	6.8	2.0		
Area services	36313	78115	14.0	18.5	3.1	40714	94373	12.2	17.6	3.4		
TOTAL	260131	422017	100	100	2.0	333194	535632	100	100	1.9		

	Sydney Outer West: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	1994 2019 1994 2019 1994-2019					2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	402	564	4.4	2.8	1.4	468	538	3.9	2.1	0.6		
Mining	6	14	0.1	0.1	3.1	10	13	0.1	0.1	1.2		
Non-food manufacturing	1330	1782	14.4	8.7	1.2	1657	1879	13.9	7.3	0.5		
Logistics	1038	2623	11.2	12.9	3.8	1501	2788	12.6	10.9	2.5		
Office services	1997	3718	21.6	18.3	2.5	2549	6032	21.5	23.5	3.5		
Money management	353	708	3.8	3.5	2.8	812	1898	6.8	7.4	3.5		
Construction	897	2530	9.7	12.4	4.2	1010	2840	8.5	11.1	4.2		
Distribution	1554	3183	16.8	15.6	2.9	1911	3352	16.1	13.1	2.3		
Convivial services	415	1050	4.5	5.2	3.8	480	1334	4.0	5.2	4.2		
Area services	1236	4193	13.4	20.6	5.0	1480	4967	12.5	19.4	5.0		
TOTAL	9229	20365	100	100	3.2	11878	25641	100	100	3.1		

NSW CENTRAL COAST

Comprises the NSW coast north of Broken Bay and south of Lake Macquarie and Wyee, running inland to the Wollomi National Park.

Classified as peri-urban. 92 per cent of residents live in the Central Coast urban area.

Population 1994 ('000)	256
Population 2019 ('000)	343
Rate of population growth 1994-2019 % a year	1.2

Household groups: Percentage poor and affluent, Census 2016								
Group	'000	Poor	Affluent					
Non-family	32	14	4					
Single parent	14	18	1					
Couple, children	30	4	6					
Couple only	31	7	9					
TOTAL	107	10	6					
Indigenous	5	15	2					

	NS	W Central Coast: (Gross value added		
			Place-of-work		
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)
Agriculture	443	429	5.9	3.7	-0.1
Mining	51	109	0.7	0.9	3.1
Non-food manufacturing	647	642	8.6	5.6	0.0
Logistics	482	644	6.4	5.6	1.2
Office services	1285	2023	17.0	17.5	1.8
Money management	1000	1208	13.2	10.5	0.8
Construction	881	1335	11.7	11.6	1.7
Distribution	1072	1502	14.2	13.0	1.4
Convivial services	437	806	5.8	7.0	2.5
Area services	1259	2834	16.7	24.6	3.3
TOTAL	7557	11532	100	100	1.7

	NSW Central Coast: Hours worked											
		Pla	ce-of-wo	rk			Usua	l residen	ce			
	1994 ('000	994 ('000 2019 ('000 1994 2019 1994-2019					2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	7339	6368	5.5	3.3	-0.6	5101	5780	3.1	2.2	0.5		
Mining	809	1400	0.6	0.7	2.2	1032	1751	0.6	0.7	2.1		
Non-food manufacturing	12691	10693	9.4	5.6	-0.7	15781	13658	9.5	5.3	-0.6		
Logistics	8319	6103	6.2	3.2	-1.2	13702	12967	8.3	5.0	-0.2		
Office services	17729	24074	13.2	12.6	1.2	25879	40512	15.7	15.7	1.8		
Money management	7120	7455	5.3	3.9	0.2	10665	12782	6.5	4.9	0.7		
Construction	13476	25495	10.0	13.4	2.6	17179	38068	10.4	14.7	3.2		
Distribution	30324	34179	22.5	17.9	0.5	35264	44667	21.3	17.3	0.9		
Convivial services	12866	20664	9.6	10.8	1.9	13894	25672	8.4	9.9	2.5		
Area services	23876	54403	17.7	28.5	3.3	26751	62393	16.2	24.2	3.4		
TOTAL	134548	190833	100	100	1.4	165248	258251	100	100	1.8		

	NSW Central Coast: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	263	302	5.4	3.4	0.6	266	341	4.2	2.8	1.0		
Mining	25	57	0.5	0.6	3.3	35	91	0.6	0.7	3.8		
Non-food manufacturing	409	470	8.5	5.3	0.6	517	573	8.1	4.7	0.4		
Logistics	384	380	8.0	4.3	0.0	638	809	10.0	6.6	1.0		
Office services	875	1617	18.1	18.3	2.5	1352	2684	21.3	21.9	2.8		
Money management	275	418	5.7	4.7	1.7	409	701	6.4	5.7	2.2		
Construction	577	987	11.9	11.2	2.2	735	1459	11.6	11.9	2.8		
Distribution	876	1101	18.2	12.4	0.9	1060	1433	16.7	11.7	1.2		
Convivial services	302	760	6.3	8.6	3.8	327	941	5.1	7.7	4.3		
Area services	841	2750	17.4	31.1	4.9	1024	3211	16.1	26.2	4.7		
TOTAL	4826	8842	100	100	2.5	6364	12243	100	100	2.7		

NEWCASTLE

Includes the east and west shores of Lake Macquarie and the coast as far north as Newcastle Airport, including the City of Newcastle.

Classified as peri-metropolitan (with an established city). 80 per cent of residents live in the Newcastle urban area, the next largest urban area being Morisset with 5 per cent of the population.

Population 1994 ('000)	338
Population 2019 ('000)	412
Rate of population growth 1994-2019 % a year	0.8

Household groups: Percentage poor and affluent, Census 2016									
Group	'000	Poor	Affluent						
Non-family	23	16	5						
Single parent	8	25	1						
Couple, children	19	6	6						
Couple only	38	7	10						
TOTAL	131	10	7						
Indigenous	7	18	4						

	Newcastle: Gross value added									
			Place-of-work							
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	511	441	3.7	1.8	-0.6					
Mining	884	2181	6.4	8.9	3.7					
Non-food manufacturing	1566	1813	11.3	7.4	0.6					
Logistics	955	1868	6.9	7.6	2.7					
Office services	3416	5915	24.7	24.2	2.2					
Money management	1440	2100	10.4	8.6	1.5					
Construction	1151	2633	8.3	10.8	3.4					
Distribution	1467	2284	10.6	9.3	1.8					
Convivial services	605	1091	4.4	4.5	2.4					
Area services	1818	4115	13.2	16.8	3.3					
TOTAL	13813	24441	100	100	2.3					

			New	castle:	Hours worke	d				
		Pla	ce-of-wo	rk			Usua	l residen	ce	
	1994 ('000	94 ('000 2019 ('000 1994 2019 1994-2019					2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	8804	7316	3.6	2.2	-0.7	7723	5851	3.2	1.8	-1.1
Mining	5897	7836	2.4	2.3	1.1	6961	9283	2.9	2.8	1.2
Non-food manufacturing	35450	27214	14.4	8.1	-1.1	35415	23106	14.6	7.0	-1.7
Logistics	19234	16836	7.8	5.0	-0.5	18374	15250	7.6	4.6	-0.7
Office services	41204	61890	16.8	18.4	1.6	38458	64239	15.8	19.4	2.1
Money management	12489	15477	5.1	4.6	0.9	11291	14357	4.7	4.3	1.0
Construction	21709	42471	8.8	12.6	2.7	20962	40508	8.6	12.2	2.7
Distribution	44879	52021	18.3	15.4	0.6	45627	49291	18.8	14.9	0.3
Convivial services	18852	27702	7.7	8.2	1.6	18923	27155	7.8	8.2	1.5
Area services	37372	78374	15.2	23.2	3.0	38992	82080	16.1	24.8	3.0
TOTAL	245892	337137	100	100	1.3	242727	331120	100	100	1.2

	Newcastle: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	1994 2019 1994 2019 1994-2019				1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	306	330	3.5	1.9	0.3	270	256	3.2	1.5	-0.2		
Mining	191	409	2.2	2.4	3.1	230	500	2.7	3.0	3.1		
Non-food manufacturing	1024	1303	11.7	7.7	1.0	1027	1110	12.2	6.6	0.3		
Logistics	843	1144	9.6	6.7	1.2	787	1041	9.3	6.2	1.1		
Office services	2206	4596	25.2	27.0	3.0	2013	4768	23.8	28.4	3.5		
Money management	466	842	5.3	4.9	2.4	424	788	5.0	4.7	2.5		
Construction	889	1682	10.2	9.9	2.6	839	1591	9.9	9.5	2.6		
Distribution	1192	1648	13.6	9.7	1.3	1191	1556	14.1	9.3	1.1		
Convivial services	413	1043	4.7	6.1	3.8	409	1016	4.8	6.0	3.7		
Area services	1216	4020	13.9	23.6	4.9	1258	4187	14.9	24.9	4.9		
TOTAL	8745	17016	100	100	2.7	8449	16814	100	100	2.8		

NSW INLAND HUNTER

Runs from Maitland and Cessnock north-west to the Liverpool Range and west to Mudgee and Lithgow.

Classified as peri-metropolitan (with coal mining). The main urban areas (with percentage of the 2016 population) are Maitland, 32; Cessnock, 9; Singleton, 5 and Lithgow, 5.

Population 1994 ('000)	192
Population 2019 ('000)	253
Rate of population growth 1994-2019 % a year	1.1

Household groups: Percentage poor and affluent, Census 2016											
Group '000 Poor Affluent											
Non-family	21	16	6								
Single parent	Single parent 9 4										
Couple, children	23	5	7								
Couple only	22	8	0								
TOTAL	75	11	7								
Indigenous	5	19	4								

NSW Inland Hunter: Gross value added											
	Place-of-work										
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	599	672	7.9	4.1	0.5						
Mining	2287	6897	30.3	42.4	4.5						
Non-food manufacturing	525	525	7.0	3.2	0.0						
Logistics	214	456	2.8	2.8	3.1						
Office services	1264	2168	16.7	13.3	2.2						
Money management	435	579	5.8	3.6	1.2						
Construction	541	1445	7.2	8.9	4.0						
Distribution	635	1211	8.4	7.4	2.6						
Convivial services	290	528	3.8	3.3	2.4						
Area services	758	1770	10.0	10.9	3.4						
TOTAL	7546	16251	100	100	3.1						

	NSW Inland Hunter: Hours worked												
		Pla	ce-of-wo	rk			Usua	l resider	ice				
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019			
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)			
Agriculture	18305	13113	14.3	7.5	-1.3	21018	14960	14.7	7.5	-1.4			
Mining	16457	31042	12.8	17.7	2.6	16060	27283	11.2	13.7	2.1			
Non-food manufacturing	12102	7737	9.4	4.4	-1.8	14399	10600	10.1	5.3	-1.2			
Logistics	5385	4560	4.2	2.6	-0.7	7418	7295	5.2	3.7	-0.1			
Office services	15329	20967	11.9	11.9	1.3	17916	27912	12.5	14.1	1.8			
Money management	3801	4377	3.0	2.5	0.6	4382	6056	3.1	3.1	1.3			
Construction	9037	18555	7.0	10.6	2.9	9443	21036	6.6	10.6	3.3			
Distribution	22178	27864	17.3	15.9	0.9	24155	32211	16.9	16.2	1.2			
Convivial services	9838	13828	7.7	7.9	1.4	10065	15350	7.0	7.7	1.7			
Area services	16023	33456	12.5	19.1	3.0	17951	35735	12.6	18.0	2.8			
TOTAL	128456	175498	100	100	1.3	142806	198439	100	100	1.3			

	NSW Inland Hunter: Local income												
			Place-of-v	work				Usual resid	lence				
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019			
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)			
Agriculture	660	534	15.3	6.6	-0.8	517	609	12.1	6.7	0.7			
Mining	339	1329	7.9	16.4	5.6	426	1117	9.9	12.2	3.9			
Non-food manufacturing	509	395	11.8	4.9	-1.0	376	518	8.8	5.7	1.3			
Logistics	198	299	4.6	3.7	1.7	285	477	6.7	5.2	2.1			
Office services	714	1509	16.6	18.6	3.0	855	1947	20.0	21.3	3.3			
Money management	154	232	3.6	2.9	1.7	170	312	4.0	3.4	2.5			
Construction	528	716	12.3	8.8	1.2	329	818	7.7	8.9	3.7			
Distribution	511	877	11.9	10.8	2.2	565	1014	13.2	11.1	2.4			
Convivial services	199	478	4.6	5.9	3.6	201	527	4.7	5.8	3.9			
Area services	496	1727	11.5	21.3	5.1	557	1805	13.0	19.7	4.8			
TOTAL	4308	8096	100	100	2.6	4281	9144	100	100	3.1			

SYDNEY HIGHLANDS

Comprises an arc from Dural through Kurrajong and the Blue Mountains to Camden and on to Menangle, Moss Vale and Bundanoon.

Classified as peri-metropolitan, though 24 per cent of the population are included in the Sydney Metropolitan area (Camden, Lower Blue Mountains). Other urban areas (with percentage of the 2016 population) include Blue Mountains (Katoomba), 6 and Bowral, 4.

Population 1994 ('000)	234
Population 2019 ('000)	390
Rate of population growth 1994-2019 % a year	2.1

Household groups: Percentage poor and affluent, Census 2016											
Group '000 Poor Affluent											
Non-family	22	13	7								
Single parent	10	14	3								
Couple, children	40	3	11								
Couple only	31	6	15								
TOTAL 103 7 10											
Indigenous	3	9	7								

Sydney Highlands: Gross value added												
	Place-of-work											
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)							
Agriculture	569	757	8.0	5.5	1.2							
Mining	402	485	5.7	3.5	0.8							
Non-food manufacturing	582	777	8.2	5.6	1.2							
Logistics	413	1153	5.8	8.3	4.2							
Office services	1068	1863	15.0	13.5	2.2							
Money management	680	1097	9.6	7.9	1.9							
Construction	834	2820	11.7	20.4	5.0							
Distribution	938	1886	13.2	13.6	2.8							
Convivial services	473	864	6.7	6.2	2.4							
Area services	1149	2134	16.2	15.4	2.5							
TOTAL	7108	13836	100	100	2.7							

	Sydney Highlands: Hours worked												
		Pla	ice-of-wo	rk		Usual residence							
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019			
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)			
Agriculture	16625	14099	11.8	6.7	-0.7	13660	12152	7.2	3.4	-0.5			
Mining	4982	4858	3.5	2.3	-0.1	2337	2971	1.2	0.8	1.0			
Non-food manufacturing	11785	12655	8.3	6.0	0.3	21026	25859	11.1	7.3	0.8			
Logistics	8813	11023	6.2	5.2	0.9	14649	24227	7.7	6.8	2.0			
Office services	14185	21684	10.0	10.2	1.7	28420	58539	15.0	16.5	2.9			
Money management	4835	6589	3.4	3.1	1.2	9795	19703	5.2	5.6	2.8			
Construction	16760	37241	11.9	17.6	3.2	19292	49815	10.2	14.0	3.9			
Distribution	27101	41108	19.2	19.4	1.7	34108	63426	18.0	17.9	2.5			
Convivial services	14389	21732	10.2	10.3	1.7	15105	26186	8.0	7.4	2.2			
Area services	21830	41012	15.4	19.3	2.6	31470	71877	16.6	20.3	3.4			
TOTAL	141303	212000	100	100	1.6	189862	354753	100	100	2.5			

	Sydney Highlands: Local income												
			Place-of-v	work				Usual resid	lence				
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019			
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)			
Agriculture	462	628	9.7	6.4	1.2	422	558	5.7	3.0	1.1			
Mining	160	237	3.4	2.4	1.6	85	128	1.2	0.7	1.6			
Non-food manufacturing	371	568	7.8	5.8	1.7	724	1188	9.9	6.5	2.0			
Logistics	350	727	7.3	7.4	3.0	676	1703	9.2	9.3	3.8			
Office services	725	1547	15.2	15.7	3.1	1611	4221	21.9	23.0	3.9			
Money management	194	389	4.1	4.0	2.8	408	1211	5.6	6.6	4.4			
Construction	718	1479	15.1	15.0	2.9	871	2026	11.9	11.1	3.4			
Distribution	753	1383	15.8	14.1	2.5	1034	2188	14.1	11.9	3.0			
Convivial services	322	793	6.7	8.1	3.7	352	1000	4.8	5.5	4.3			
Area services	715	2083	15.0	21.2	4.4	1158	4104	15.8	22.4	5.2			
TOTAL	4770	9835	100	100	2.9	7341	18328	100	100	3.7			

WOLLONGONG

Comprises the NSW coast from Stanwell Park south to Jarvis Bay. The western boundary is the Illawarra scarp and its equivalent south of Nowra.

Classified as peri-metropolitan (with an established city). In 2016 76 per cent of the population lived in urban Wollongong. The other main urban areas (with percentage of 2016 population) were Nowra-Bomaderry, 9 and Kiama, 4.

Population 1994 ('000)	285
Population 2019 ('000)	360
Rate of population growth 1994-2019 % a year	0.9

Household groups: Percentage poor and affluent, Census 2016											
Group '000 Poor Affluent											
Non-family	31	17	5								
Single parent 13 20											
Couple, children	33	5	8								
Couple only	31	8	10								
TOTAL 108 11 7											
Indigenous	5	20	3								

Wollongong: Gross value added										
			Place-of-work							
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	191	217	1.9	1.4	0.5					
Mining	564	797	5.6	5.0	1.4					
Non-food manufacturing	1367	837	13.6	5.2	-1.9					
Logistics	480	981	4.8	6.2	2.9					
Office services	2259	3807	22.5	23.9	2.1					
Money management	1114	1477	11.1	9.3	1.1					
Construction	935	2007	9.3	12.6	3.1					
Distribution	1171	1841	11.7	11.5	1.8					
Convivial services	527	887	5.3	5.6	2.1					
Area services	1424	3105	14.2	19.5	3.2					
TOTAL	10032	15957	100	100	1.9					

	Wollongong: Hours worked											
		Pla	ce-of-wo	rk			Usua	l resider	ice			
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	4093	3923	2.2	1.7	-0.2	4642	3944	2.3	1.5	-0.6		
Mining	3611	3015	1.9	1.3	-0.7	6320	6002	3.1	2.2	-0.2		
Non-food manufacturing	35582	16875	19.2	7.2	-2.9	40547	20543	19.9	7.6	-2.7		
Logistics	9808	8774	5.3	3.8	-0.4	12835	13407	6.3	4.9	0.2		
Office services	28485	39504	15.4	16.9	1.3	30263	50880	14.9	18.8	2.1		
Money management	9306	9972	5.0	4.3	0.3	9868	13355	4.9	4.9	1.2		
Construction	16050	29167	8.7	12.5	2.4	16500	33462	8.1	12.3	2.9		
Distribution	34497	42249	18.6	18.1	0.8	35700	44918	17.6	16.6	0.9		
Convivial services	15968	22987	8.6	9.9	1.5	16597	25389	8.2	9.4	1.7		
Area services	28025	56657	15.1	24.3	2.9	30053	59114	14.8	21.8	2.7		
TOTAL	185425	233124	100	100	0.9	203325	271014	100	100	1.2		

	Wollongong: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	125	159	1.9	1.4	1.0	144	152	2.0	1.1	0.2		
Mining	114	156	1.8	1.3	1.3	194	300	2.7	2.2	1.8		
Non-food manufacturing	987	791	15.2	6.8	-0.9	1126	974	15.9	7.1	-0.6		
Logistics	424	582	6.5	5.0	1.3	560	900	7.9	6.5	1.9		
Office services	1544	3089	23.8	26.4	2.8	1605	3883	22.7	28.2	3.6		
Money management	386	565	6.0	4.8	1.5	410	752	5.8	5.5	2.5		
Construction	665	1156	10.2	9.9	2.2	672	1320	9.5	9.6	2.7		
Distribution	953	1336	14.7	11.4	1.4	977	1394	13.8	10.1	1.4		
Convivial services	361	827	5.6	7.1	3.4	369	899	5.2	6.5	3.6		
Area services	927	3027	14.3	25.9	4.8	1017	3184	14.4	23.1	4.7		
TOTAL	6486	11688	100	100	2.4	7074	13758	100	100	2.7		

NSW SOUTH EAST

Comprises the NSW south coast from Ulladulla to the Victorian border, and inland to the Kosciuszko National Par, the ACT and Yass.

Classified as peri-metropolitan (as much to Canberra as to Sydney). In 2016 its three largest urban areas (with percentage of the regional population) were Queanbeyan, 13; Goulburn, 8 and Ulladulla, 5.

Population 1994 ('000)	216
Population 2019 ('000)	287
Rate of population growth 1994-2019 % a year	1.2

Household groups: Percentage poor and affluent, Census 2016										
Group	'000	Poor	Affluent							
Non-family	30	15	5							
Single parent	9	22	2							
Couple, children	23	6	8							
Couple only	32	8	10							
TOTAL	93	11	7							
Indigenous	4	19	3							

NSW South East: Gross value added										
			Place-of-work							
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	670	1240	11.5	13.0	2.5					
Mining	29	53	0.5	0.6	2.5					
Non-food manufacturing	312	380	5.4	4.0	0.8					
Logistics	268	407	4.6	4.3	1.7					
Office services	1047	1784	18.0	18.8	2.2					
Money management	569	645	9.8	6.8	0.5					
Construction	794	1251	13.6	13.2	1.8					
Distribution	770	1088	13.2	11.4	1.4					
Convivial services	492	843	8.4	8.9	2.2					
Area services	877	1816	15.0	19.1	3.0					
TOTAL	5829	9506	100	100	2.0					

	NSW South East: Hours worked											
		Pla	ce-of-wo	rk			Usua	l residen	ice			
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	24776	21412	19.3	13.5	-0.6	25286	22068	16.4	10.0	-0.5		
Mining	248	373	0.2	0.2	1.6	307	882	0.2	0.4	4.3		
Non-food manufacturing	7374	7980	5.7	5.0	0.3	8446	9321	5.5	4.2	0.4		
Logistics	6045	4125	4.7	2.6	-1.5	8507	5961	5.5	2.7	-1.4		
Office services	14160	18817	11.0	11.9	1.1	24930	45207	16.1	20.5	2.4		
Money management	4531	4063	3.5	2.6	-0.4	5558	5194	3.6	2.4	-0.3		
Construction	12994	22455	10.1	14.2	2.2	13922	27808	9.0	12.6	2.8		
Distribution	24596	25221	19.1	15.9	0.1	29380	33622	19.0	15.2	0.5		
Convivial services	15816	21973	12.3	13.9	1.3	16714	26136	10.8	11.8	1.8		
Area services	17915	31953	13.9	20.2	2.3	21538	44561	13.9	20.2	3.0		
TOTAL	128455	158371	100	100	0.8	154588	220760	100	100	1.4		

			NSW	South Ea	st: Local inco	me				
	Place-of-work							Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	564	992	14.7	13.5	2.3	577	1031	11.8	9.5	2.4
Mining	14	18	0.4	0.2	0.8	18	38	0.4	0.4	3.1
Non-food manufacturing	183	333	4.8	4.6	2.4	234	402	4.8	3.7	2.2
Logistics	222	241	5.8	3.3	0.3	330	370	6.7	3.4	0.5
Office services	651	1360	17.0	18.6	3.0	1141	3229	23.3	29.6	4.3
Money management	164	223	4.3	3.0	1.2	204	289	4.2	2.6	1.4
Construction	476	854	12.4	11.7	2.4	532	1028	10.9	9.4	2.7
Distribution	620	784	16.2	10.7	0.9	762	1061	15.6	9.7	1.3
Convivial services	344	763	9.0	10.4	3.2	364	936	7.4	8.6	3.9
Area services	591	1757	15.4	24.0	4.5	735	2522	15.0	23.1	5.1
TOTAL	3830	7325	100	100	2.6	4896	10906	100	100	3.3

AUSTRALIAN CAPITAL TERRITORY

Comprises the ACT as defined by law.

Classified as central/inner metropolitan. Nearly all its population live in urban Canberra.

Population 1994 ('000)	301
Population 2019 ('000)	424
Rate of population growth 1994-2019 % a year	1.4

Household groups: Percentage poor and affluent, Census 2016										
Group	Group '000 Poor Affluent									
Non-family	39	9	16							
Single parent	12	4	6							
Couple, children	41	2	22							
Couple only	37	2	27							
TOTAL	129	6	20							
Indigenous	3	11	10							

	Australian Capital Territory: Gross value added											
			Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)							
Agriculture	60	62	0.4	0.2	0.1							
Mining	11	21	0.1	0.1	2.7							
Non-food manufacturing	412	366	2.9	1.0	-0.5							
Logistics	450	944	3.2	2.7	3.0							
Office services	6589	18964	46.8	54.1	4.3							
Money management	1166	2201	8.3	6.3	2.6							
Construction	1018	2843	7.2	8.1	4.2							
Distribution	1127	2127	8.0	6.1	2.6							
Convivial services	1085	1550	7.7	4.4	1.4							
Area services	2173	5991	15.4	17.1	4.1							
TOTAL	14090	35069	100	100	3.7							

	Australian Capital Territory: Hours worked											
		Pla	ice-of-wo	rk			Usua	l residen	ice			
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	3204	2766	1.1	0.7	-0.6	3307	2998	1.3	0.8	-0.4		
Mining	259	166	0.1	0.0	-1.8	407	153	0.2	0.0	-3.8		
Non-food manufacturing	7160	8308	2.5	2.1	0.6	6852	8247	2.6	2.3	0.7		
Logistics	12142	11572	4.3	2.9	-0.2	10794	10236	4.1	2.8	-0.2		
Office services	125222	187375	43.9	46.5	1.6	113664	167254	43.3	45.7	1.6		
Money management	13128	11913	4.6	3.0	-0.4	12191	10484	4.6	2.9	-0.6		
Construction	16903	30568	5.9	7.6	2.4	16983	30587	6.5	8.4	2.4		
Distribution	40772	42212	14.3	10.5	0.1	36689	38594	14.0	10.6	0.2		
Convivial services	26312	33007	9.2	8.2	0.9	24546	30120	9.4	8.2	0.8		
Area services	40297	75000	14.1	18.6	2.5	36992	67111	14.1	18.3	2.4		
TOTAL	285400	402886	100	100	1.4	262425	365784	100	100	1.3		

	Australian Capital Territory: Local income									
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	57	81	0.5	0.3	1.4	52	78	0.5	0.3	1.6
Mining	6	10	0.0	0.0	2.1	9	8	0.1	0.0	-0.7
Non-food manufacturing	129	284	1.1	0.9	3.2	108	279	1.0	1.0	3.9
Logistics	400	763	3.4	2.5	2.6	331	668	3.1	2.4	2.8
Office services	6493	17493	55.6	57.8	4.0	5976	16350	55.6	57.9	4.1
Money management	389	839	3.3	2.8	3.1	358	756	3.3	2.7	3.0
Construction	571	1649	4.9	5.5	4.3	572	1650	5.3	5.8	4.3
Distribution	1183	1633	10.1	5.4	1.3	1073	1523	10.0	5.4	1.4
Convivial services	747	1317	6.4	4.4	2.3	705	1206	6.6	4.3	2.2
Area services	1707	6180	14.6	20.4	5.3	1561	5735	14.5	20.3	5.3
TOTAL	11681	30248	100	100	3.9	10746	28252	100	100	3.9

NSW MID-NORTH COAST

Comprises the NSW north coast from Port Stephens to Coffs Harbour. Includes the Manning but not the Hunter valley, and further north extends inland to the edge of the New England plateau.

Classified as country (semi-urban). In 2016 its main urban areas (with percentage of regional population were Coffs Harbour, 20; Port Macquarie, 13 and Taree, 5.

Population 1994 ('000)	263
Population 2019 ('000)	352
Rate of population growth 1994-2019 % a year	1.2

Household groups: Percentage poor and affluent, Census 2016									
Group '000 Poor Affluent									
Non-family	37	17	3						
Single parent	13	24	1						
Couple, children	25	7	4						
Couple only	40	9	5						
TOTAL	115	13	4						
Indigenous	7	22	2						

	NSW	Mid-North Coast:	Gross value adde	ed						
		Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	568	792	8.6	6.9	1.3					
Mining	69	129	1.0	1.1	2.6					
Non-food manufacturing	516	346	7.8	3.0	-1.6					
Logistics	292	440	4.4	3.9	1.6					
Office services	1064	2058	16.1	18.0	2.7					
Money management	841	971	12.7	8.5	0.6					
Construction	825	1725	12.5	15.1	3.0					
Distribution	899	1457	13.6	12.8	1.9					
Convivial services	487	827	7.4	7.2	2.1					
Area services	1047	2669	15.8	23.4	3.8					
TOTAL	6607	11413	100	100	2.2					

NSW Mid-North Coast: Hours worked										
		Pla		Usual residence						
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	18615	14525	13.4	7.4	-1.0	19475	14125	12.8	6.3	-1.3
Mining	294	929	0.2	0.5	4.7	474	2105	0.3	0.9	6.1
Non-food manufacturing	11137	7154	8.0	3.6	-1.8	12786	9126	8.4	4.1	-1.3
Logistics	6865	4736	4.9	2.4	-1.5	8001	6199	5.3	2.8	-1.0
Office services	15686	25218	11.3	12.8	1.9	18355	31981	12.1	14.3	2.2
Money management	6428	6542	4.6	3.3	0.1	6725	7538	4.4	3.4	0.5
Construction	12733	28965	9.1	14.7	3.3	14402	31705	9.5	14.2	3.2
Distribution	29338	36304	21.1	18.4	0.9	32044	41690	21.1	18.7	1.1
Convivial services	15771	21955	11.3	11.1	1.3	16441	24161	10.8	10.8	1.6
Area services	22490	50632	16.1	25.7	3.3	23382	54834	15.4	24.5	3.5
TOTAL	139357	196960	100	100	1.4	152084	223465	100	100	1.6

	NSW Mid-North Coast: Local income											
		Place-of-work						Usual residence				
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	461	570	10.9	6.7	0.9	490	550	10.3	5.6	0.5		
Mining	16	30	0.4	0.4	2.7	25	74	0.5	0.8	4.5		
Non-food manufacturing	296	265	7.0	3.1	-0.4	351	359	7.4	3.6	0.1		
Logistics	263	262	6.2	3.1	0.0	313	360	6.6	3.6	0.6		
Office services	722	1577	17.1	18.6	3.2	891	2015	18.7	20.4	3.3		
Money management	222	324	5.3	3.8	1.5	240	382	5.0	3.9	1.9		
Construction	488	1061	11.6	12.5	3.2	563	1182	11.8	12.0	3.0		
Distribution	742	1060	17.5	12.5	1.4	825	1231	17.3	12.5	1.6		
Convivial services	336	754	8.0	8.9	3.3	355	843	7.5	8.6	3.5		
Area services	680	2584	16.1	30.4	5.5	712	2865	14.9	29.0	5.7		
TOTAL	4225	8487	100	100	2.8	4764	9861	100	100	3.0		

NSW NORTHERN RIVERS

Includes the Clarence and Richmond basins. Extends north to the Queensland border and inland to the edge of the New England plateau.

Classified as country (semi-urban). In 2016 its main urban areas (with percentage of regional population were Tweed Heads, 20; Lismore, 9 and Grafton, 6.

Population 1994 ('000)	235
Population 2019 ('000)	303
Rate of population growth 1994-2019 % a year	1.0

Household groups: Percentage poor and affluent, Census 2016									
Group '000 Poor Affluent									
Non-family	33	16	3						
Single parent	12	22	1						
Couple, children	22	7	5						
Couple only	31	8	6						
TOTAL	98	12	4						
Indigenous	5	20	2						

NSW Northern Rivers: Gross value added										
	Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	742	976	11.8	9.0	1.1					
Mining	14	35	0.2	0.3	3.8					
Non-food manufacturing	342	325	5.5	3.0	-0.2					
Logistics	276	450	4.4	4.1	2.0					
Office services	1075	1845	17.1	17.0	2.2					
Money management	714	1050	11.4	9.6	1.6					
Construction	826	1465	13.2	13.5	2.3					
Distribution	821	1496	13.1	13.7	2.4					
Convivial services	427	807	6.8	7.4	2.6					
Area services	1033	2432	16.5	22.4	3.5					
TOTAL	6269	10883	100	100	2.2					

	NSW Northern Rivers: Hours worked									
		Pla	ce-of-wo	rk		Usual residence				
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	22153	17539	16.5	9.6	-0.9	23341	18301	16.3	8.8	-1.0
Mining	61	349	0.0	0.2	7.2	84	2918	0.1	1.4	15.3
Non-food manufacturing	7649	7317	5.7	4.0	-0.2	8706	8244	6.1	4.0	-0.2
Logistics	6380	5275	4.8	2.9	-0.8	7155	7555	5.0	3.6	0.2
Office services	16785	24601	12.5	13.4	1.5	17612	30241	12.3	14.5	2.2
Money management	5642	6572	4.2	3.6	0.6	6044	8634	4.2	4.2	1.4
Construction	12404	22177	9.3	12.1	2.4	13269	25109	9.2	12.1	2.6
Distribution	27176	34721	20.3	18.9	1.0	29252	37422	20.4	18.0	1.0
Convivial services	13706	20059	10.2	10.9	1.5	14754	23073	10.3	11.1	1.8
Area services	21979	44959	16.4	24.5	2.9	23360	46394	16.3	22.3	2.8
TOTAL	133937	183569	100	100	1.3	143576	207890	100	100	1.5

	NSW Northern Rivers: Local income									
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	555	728	13.5	8.9	1.1	587	754	13.3	8.2	1.0
Mining	4	10	0.1	0.1	3.3	4	75	0.1	0.8	12.3
Non-food manufacturing	204	249	5.0	3.0	0.8	235	288	5.3	3.1	0.8
Logistics	250	282	6.1	3.4	0.5	281	409	6.4	4.4	1.5
Office services	764	1557	18.6	19.0	2.9	815	1883	18.5	20.4	3.4
Money management	195	349	4.8	4.3	2.3	211	465	4.8	5.0	3.2
Construction	487	830	11.9	10.1	2.2	517	903	11.7	9.8	2.3
Distribution	678	1087	16.6	13.3	1.9	738	1170	16.7	12.7	1.9
Convivial services	293	725	7.1	8.9	3.7	320	828	7.2	9.0	3.9
Area services	668	2364	16.3	28.9	5.2	705	2445	16.0	26.5	5.1
TOTAL	4098	8179	100	100	2.8	4413	9221	100	100	3.0

NSW NORTHERN INLAND

Includes New England, Tamworth and the Liverpool Plains. Bounded to the north by the Queensland border, to the west by the transition to pastoral country and to the south adjoins NSW Inland Hunter.

Classified as country (rural). In 2016its main urban areas (with percentage of the regional population) were Tamworth, 18; Armidale, 11; Gunnedah, 4 and Moree, 4.

Population 1994 ('000)	182
Population 2019 ('000)	187
Rate of population growth 1994-2019 % a year	0.1

Household groups: Percentage poor and affluent, Census 2016							
Group	'000	Poor	Affluent				
Non-family	19	17	4				
Single parent	7	27	1				
Couple, children	14	7	5				
Couple only	18	8	8				
TOTAL	58	13	5				
Indigenous	6	25	2				

	NSW	Northern Inland:	Gross value adde	d	
			Place-of-work		
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)
Agriculture	1572	1612	23.7	18.3	0.1
Mining	86	801	1.3	9.1	9.3
Non-food manufacturing	273	208	4.1	2.4	-1.1
Logistics	348	454	5.2	5.2	1.1
Office services	1358	1604	20.4	18.2	0.7
Money management	556	575	8.4	6.5	0.1
Construction	520	589	7.8	6.7	0.5
Distribution	722	1011	10.9	11.5	1.4
Convivial services	307	344	4.6	3.9	0.5
Area services	904	1595	13.6	18.1	2.3
TOTAL	6645	8794	100	100	1.1

NSW Northern Inland: Hours worked										
		Pla	ce-of-wo	rk		Usual residence				
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	39567	29788	29.9	21.5	-1.1	40656	32537	29.1	21.9	-0.9
Mining	633	3883	0.5	2.8	7.5	798	4178	0.6	2.8	6.8
Non-food manufacturing	5351	3546	4.0	2.6	-1.6	5718	3329	4.1	2.2	-2.1
Logistics	7299	5061	5.5	3.7	-1.5	8052	6284	5.8	4.2	-1.0
Office services	18177	19306	13.7	13.9	0.2	18787	22340	13.5	15.0	0.7
Money management	4428	3164	3.3	2.3	-1.3	4409	3222	3.2	2.2	-1.2
Construction	7095	11338	5.4	8.2	1.9	7480	11501	5.4	7.7	1.7
Distribution	22476	23040	17.0	16.6	0.1	24499	25695	17.5	17.3	0.2
Convivial services	9253	9797	7.0	7.1	0.2	9702	9621	6.9	6.5	0.0
Area services	17984	29515	13.6	21.3	2.0	19537	30043	14.0	20.2	1.7
TOTAL	132263	138437	100	100	0.2	139638	148749	100	100	0.3

	NSW Northern Inland: Local income										
			Place-of-v	vork		Usual residence					
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019	
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	
Agriculture	1027	1150	23.8	18.5	0.5	1054	1271	23.2	18.9	0.8	
Mining	28	152	0.6	2.4	7.0	33	161	0.7	2.4	6.6	
Non-food manufacturing	160	140	3.7	2.2	-0.5	171	134	3.8	2.0	-1.0	
Logistics	310	286	7.2	4.6	-0.3	338	352	7.4	5.2	0.2	
Office services	959	1286	22.2	20.7	1.2	988	1476	21.8	22.0	1.6	
Money management	177	178	4.1	2.9	0.0	176	178	3.9	2.7	0.1	
Construction	277	444	6.4	7.2	1.9	288	453	6.4	6.7	1.8	
Distribution	605	709	14.0	11.4	0.6	657	806	14.5	12.0	0.8	
Convivial services	208	316	4.8	5.1	1.7	218	302	4.8	4.5	1.3	
Area services	571	1553	13.2	25.0	4.1	618	1579	13.6	23.5	3.8	
TOTAL	4321	6215	100	100	1.5	4541	6712	100	100	1.6	

NSW CENTRAL WEST

Lies inland of the Great Divide from Bathurst to Dubbo, extending to the transition to pastoral country west of Coonamble, Nyngan and Condobolin. Stretches south to include West Wyalong and Cowra.

Classified as country (rural). Its three largest urban areas (with percentage of the 2016 regional population are Orange, 16; Bathurst, 15 and Dubbo, 15.

Population 1994 ('000)	213
Population 2019 ('000)	238
Rate of population growth 1994-2019 % a year	0.4

Household groups: Percentage poor and affluent, Census 2016							
Group	'000	Poor	Affluent				
Non-family	23	16	5				
Single parent	8	25	1				
Couple, children	19	6	6				
Couple only	22	8	9				
TOTAL	72	12	6				
Indigenous	7	22	2				

NSW Central West: Gross value added									
	Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)				
Agriculture	1579	1688	20.9	15.2	0.3				
Mining	249	700	3.3	6.3	4.2				
Non-food manufacturing	439	346	5.8	3.1	-0.9				
Logistics	423	478	5.6	4.3	0.5				
Office services	1296	1869	17.2	16.8	1.5				
Money management	614	688	8.1	6.2	0.5				
Construction	603	1071	8.0	9.6	2.3				
Distribution	809	1271	10.7	11.4	1.8				
Convivial services	370	545	4.9	4.9	1.6				
Area services	1157	2456	15.4	22.1	3.1				
TOTAL	7537	11113	100	100	1.6				

NSW Central West: Hours worked										
		Pla	ce-of-wo	rk		Usual residence				
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	42242	29088	27.1	16.0	-1.5	42069	29637	26.0	15.3	-1.4
Mining	1895	7141	1.2	3.9	5.5	1012	7255	0.6	3.7	8.2
Non-food manufacturing	9554	7174	6.1	4.0	-1.1	10065	7179	6.2	3.7	-1.3
Logistics	8887	5294	5.7	2.9	-2.1	9511	6459	5.9	3.3	-1.5
Office services	18352	24250	11.8	13.4	1.1	19123	28692	11.8	14.8	1.6
Money management	5009	4364	3.2	2.4	-0.5	5112	4771	3.2	2.5	-0.3
Construction	9393	16991	6.0	9.4	2.4	9607	17405	5.9	9.0	2.4
Distribution	26203	30037	16.8	16.5	0.5	28330	33518	17.5	17.3	0.7
Convivial services	11333	13608	7.3	7.5	0.7	11788	14907	7.3	7.7	0.9
Area services	23188	43595	14.9	24.0	2.6	24947	43767	15.4	22.6	2.3
TOTAL	156057	181542	100	100	0.6	161564	193589	100	100	0.7

	NSW Central West: Local income										
			Place-of-v	vork		Usual residence					
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019	
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	
Agriculture	1072	1233	21.5	14.8	0.6	1067	1263	20.9	14.2	0.7	
Mining	136	244	2.7	2.9	2.4	64	250	1.2	2.8	5.6	
Non-food manufacturing	280	285	5.6	3.4	0.1	299	280	5.9	3.1	-0.3	
Logistics	378	288	7.6	3.5	-1.1	395	348	7.7	3.9	-0.5	
Office services	905	1532	18.2	18.4	2.1	941	1775	18.4	20.0	2.6	
Money management	184	249	3.7	3.0	1.2	190	274	3.7	3.1	1.5	
Construction	359	683	7.2	8.2	2.6	371	701	7.2	7.9	2.6	
Distribution	675	911	13.5	10.9	1.2	730	1015	14.3	11.4	1.3	
Convivial services	251	495	5.0	5.9	2.8	262	541	5.1	6.1	2.9	
Area services	743	2407	14.9	28.9	4.8	798	2431	15.6	27.4	4.6	
TOTAL	4985	8327	100	100	2.1	5117	8878	100	100	2.2	

NSW SOUTH WEST

Stretches from the Victorian border north to Temora and the Murrumbidgee Irrigation Area. To the east the region includes the Tumut valley but excludes the Monaro and abuts the ACT. It extends to the edge of the pastoral country west of Finley and Griffith.

Classified as country (rural). Its three largest urban areas (with percentage of 2016 population) are Wagga Wagga, 20; Albury, 20 and Griffith, 8.

Population 1994 ('000)	224
Population 2019 ('000)	248
Rate of population growth 1994-2019 % a year	0.4

Household groups: Percentage poor and affluent, Census 2016							
Group	'000	Poor	Affluent				
Non-family	25	15	4				
Single parent	8	25	1				
Couple, children	21	6	5				
Couple only	23	7	8				
TOTAL	77	11	5				
Indigenous	4	23	2				

NSW South West: Gross value added											
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	2009	2548	22.9	20.7	1.0						
Mining	54	52	0.6	0.4	-0.1						
Non-food manufacturing	565	682	6.5	5.5	0.8						
Logistics	459	688	5.2	5.6	1.6						
Office services	2002	2329	22.9	18.9	0.6						
Money management	687	744	7.9	6.0	0.3						
Construction	593	1073	6.8	8.7	2.4						
Distribution	880	1462	10.1	11.8	2.1						
Convivial services	424	596	4.8	4.8	1.4						
Area services	1081	2167	12.4	17.6	2.8						
TOTAL	8754	12340	100	100	1.4						

	NSW South West: Hours worked											
		Pla	ce-of-wo	rk		Usual residence						
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	44984	37583	26.7	18.9	-0.7	45566	35805	26.0	17.0	-1.0		
Mining	57	296	0.0	0.1	6.8	150	335	0.1	0.2	3.3		
Non-food manufacturing	11886	11237	7.1	5.6	-0.2	11921	11091	6.8	5.3	-0.3		
Logistics	9875	7007	5.9	3.5	-1.4	10877	8836	6.2	4.2	-0.8		
Office services	23975	28211	14.2	14.2	0.7	24889	30093	14.2	14.3	0.8		
Money management	5640	5044	3.3	2.5	-0.4	5501	5146	3.1	2.5	-0.3		
Construction	8549	19715	5.1	9.9	3.4	8972	20973	5.1	10.0	3.5		
Distribution	28629	34431	17.0	17.3	0.7	30975	38278	17.7	18.2	0.9		
Convivial services	13386	15956	7.9	8.0	0.7	13419	16344	7.6	7.8	0.8		
Area services	21424	39684	12.7	19.9	2.5	23144	43118	13.2	20.5	2.5		
TOTAL	168404	199166	100	100	0.7	175414	210021	100	100	0.7		

	NSW South West: Local income										
			Place-of-v	work				Usual resid	lence		
	1994	2019	1994	2019	1994-2019	1994	94 2019 1994 2019 1994				
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	
Agriculture	1268	1602	23.1	18.0	0.9	1303	1593	22.7	17.0	0.8	
Mining	3	24	0.0	0.3	9.1	9	24	0.2	0.3	3.9	
Non-food manufacturing	336	472	6.1	5.3	1.4	335	473	5.8	5.0	1.4	
Logistics	411	414	7.5	4.6	0.0	454	517	7.9	5.5	0.5	
Office services	1207	1728	22.0	19.4	1.4	1250	1778	21.8	18.9	1.4	
Money management	211	253	3.9	2.8	0.7	210	263	3.7	2.8	0.9	
Construction	333	697	6.1	7.8	3.0	351	732	6.1	7.8	3.0	
Distribution	727	1048	13.3	11.8	1.5	794	1168	13.8	12.4	1.6	
Convivial services	291	549	5.3	6.2	2.6	294	573	5.1	6.1	2.7	
Area services	692	2113	12.6	23.7	4.6	735	2272	12.8	24.2	4.6	
TOTAL	5479	8899	100	100	2.0	5735	9394	100	100	2.0	

NSW FAR WEST

Comprises the pastoral inland of NSW, west of Walgett, Nyngan, Condobolin and Deniliquin, bordered to the south by Victoria, to the west by South Australia and to the north by Queensland.

Classified as remote. Its two largest urban areas (with percentage of 2016 regional population) are Broken Hill, 9 and Cobar, 2. Other historic centres include Wentworth, Hay and Bourke.

Population 1994 ('000)	93
Population 2019 ('000)	77
Rate of population growth 1994-2019 % a year	-0.8

Household groups: Percentage poor and affluent, Census 2016										
Group	Group '000 Poor Affluent									
Non-family	9	18	5							
Single parent	3	28	1							
Couple, children	5	9	6							
Couple only	8	9	8							
TOTAL	25	14	6							
Indigenous	3	28	2							

NSW Far West: Gross value added										
		Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	1080	1012	31.0	27.5	-0.3					
Mining	359	508	10.3	13.8	1.4					
Non-food manufacturing	105	54	3.0	1.5	-2.6					
Logistics	123	124	3.5	3.4	0.0					
Office services	482	425	13.8	11.5	-0.5					
Money management	186	96	5.4	2.6	-2.6					
Construction	216	325	6.2	8.8	1.6					
Distribution	282	335	8.1	9.1	0.7					
Convivial services	211	188	6.1	5.1	-0.5					
Area services	437	621	12.5	16.8	1.4					
TOTAL	3480	3687	100	100	0.2					

	NSW Far West: Hours worked											
		Pla	ce-of-wo	rk		Usual residence						
	1994 ('000	994 ('000 2019 ('000 1994 2019 1994-2019 1					2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	25258	17131	36.7	28.2	-1.5	24090	16615	34.3	26.0	-1.5		
Mining	3535	5079	5.1	8.4	1.5	3873	3715	5.5	5.8	-0.2		
Non-food manufacturing	1852	1060	2.7	1.7	-2.2	1879	986	2.7	1.5	-2.5		
Logistics	2863	1413	4.2	2.3	-2.8	2970	1695	4.2	2.7	-2.2		
Office services	6559	5987	9.5	9.9	-0.4	7000	7050	10.0	11.0	0.0		
Money management	1554	648	2.3	1.1	-3.4	1682	787	2.4	1.2	-3.0		
Construction	3233	4821	4.7	7.9	1.6	3436	5352	4.9	8.4	1.8		
Distribution	9071	8013	13.2	13.2	-0.5	9895	9826	14.1	15.4	0.0		
Convivial services	6147	5310	8.9	8.8	-0.6	5936	5439	8.4	8.5	-0.3		
Area services	8687	11215	12.6	18.5	1.0	9509	12462	13.5	19.5	1.1		
TOTAL	68757	60677	100	100	-0.5	70269	63928	100	100	-0.4		

	NSW Far West: Local income										
			Place-of-v	work				Usual resid	lence		
	1994	1994 2019 1994 2019 1994-201					2019	1994	2019	1994-2019	
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	
Agriculture	710	693	32.4	27.3	-0.1	678	679	29.7	25.2	0.0	
Mining	211	162	9.6	6.4	-1.1	235	115	10.3	4.3	-2.8	
Non-food manufacturing	55	46	2.5	1.8	-0.7	56	49	2.5	1.8	-0.6	
Logistics	110	78	5.0	3.1	-1.4	119	98	5.2	3.6	-0.8	
Office services	291	311	13.3	12.3	0.3	316	361	13.9	13.4	0.5	
Money management	65	33	2.9	1.3	-2.6	72	41	3.1	1.5	-2.2	
Construction	110	197	5.0	7.8	2.4	116	212	5.1	7.9	2.4	
Distribution	224	246	10.2	9.7	0.4	254	301	11.1	11.2	0.7	
Convivial services	146	165	6.7	6.5	0.5	137	175	6.0	6.5	1.0	
Area services	272	605	12.4	23.9	3.3	298	663	13.1	24.6	3.3	
TOTAL	2194	2537	100	100	0.6	2281	2693	100	100	0.7	

MELBOURNE CENTRAL

Comprises the Melbourne CBD plus Carlton, Collingwood, Richmond, Prahran, St Kilda, South Melbourne and Port Melbourne.

Classified as central metropolitan. Lies wholly within the Melbourne Metropolitan Area.

Population 1994 ('000)	220
Population 2019 ('000)	454
Rate of population growth 1994-2019 % a year	2.9

Household groups: Percentage poor and affluent, Census 2016										
Group	Group '000 Poor Affluent									
Non-family	70	12	18							
Single parent	7	23	9							
Couple, children	19	5	33							
Couple only	43	5	34							
TOTAL	139	9	25							
Indigenous	1	10	12							

	Me	lbourne Central:	Gross value added		
			Place-of-work		
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)
Agriculture	1377	1296	3.4	1.0	-0.2
Mining	563	717	1.4	0.5	1.0
Non-food manufacturing	1698	2244	4.2	1.7	1.1
Logistics	2471	6824	6.1	5.1	4.1
Office services	13665	51504	33.9	38.4	5.5
Money management	10577	37286	26.2	27.8	5.2
Construction	1406	10964	3.5	8.2	8.6
Distribution	3034	5945	7.5	4.4	2.7
Convivial services	1624	5669	4.0	4.2	5.1
Area services	3878	11540	9.6	8.6	4.5
TOTAL	40295	133989	100	100	4.9

	Melbourne Central: Hours worked											
		Pla	ce-of-wo	rk			Usua	l resider	ice			
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	8583	16182	1.3	1.1	2.6	3359	6947	1.6	1.5	2.9		
Mining	2467	8079	0.4	0.6	4.9	757	2147	0.4	0.5	4.3		
Non-food manufacturing	40649	29536	6.1	2.0	-1.3	18285	12636	8.9	2.7	-1.5		
Logistics	50849	56286	7.6	3.8	0.4	15886	19538	7.8	4.2	0.8		
Office services	227403	598315	33.9	40.8	3.9	59836	180434	29.3	38.7	4.5		
Money management	106397	198932	15.9	13.6	2.5	17718	47266	8.7	10.1	4.0		
Construction	17522	113049	2.6	7.7	7.7	4347	25279	2.1	5.4	7.3		
Distribution	79448	127940	11.8	8.7	1.9	26619	43566	13.0	9.3	2.0		
Convivial services	64156	143634	9.6	9.8	3.3	26093	60864	12.8	13.0	3.4		
Area services	73723	175896	11.0	12.0	3.5	31608	67821	15.5	14.5	3.1		
TOTAL	671197	1467848	100	100	3.2	204508	466497	100	100	3.4		

	Melbourne Central: Local income										
			Place-of-v	work				Usual resid	lence		
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019	
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	
Agriculture	316	773	1.2	0.9	3.7	145	392	1.7	1.4	4.1	
Mining	490	494	1.9	0.6	0.0	171	126	2.0	0.5	-1.2	
Non-food manufacturing	1242	1244	4.8	1.5	0.0	638	605	7.6	2.2	-0.2	
Logistics	1821	4287	7.0	5.1	3.5	621	1765	7.4	6.4	4.3	
Office services	10402	40402	40.2	48.4	5.6	3106	12784	37.2	46.6	5.8	
Money management	3981	11760	15.4	14.1	4.4	788	3018	9.4	11.0	5.5	
Construction	658	4663	2.5	5.6	8.2	193	1166	2.3	4.2	7.5	
Distribution	2271	4317	8.8	5.2	2.6	805	1631	9.6	5.9	2.9	
Convivial services	1406	4515	5.4	5.4	4.8	605	1954	7.2	7.1	4.8	
Area services	3266	11090	12.6	13.3	5.0	1282	4014	15.3	14.6	4.7	
TOTAL	25854	83545	100	100	4.8	8354	27454	100	100	4.9	

MELBOURNE INNER SOUTH

Comprises the bayside Melbourne suburbs from Elsternwick to Beaumaris and the suburbs inland to Malvern and Clayton as far as the Monash freeway.

Classified as inner metropolitan. Lies wholly within metropolitan Melbourne.

Population 1994 ('000)	332
Population 2019 ('000)	440
Rate of population growth 1994-2019 % a year	1.1

Household groups: Percentage poor and affluent, Census 2016											
Group '000 Poor Affluent											
Non-family	40	13	10								
Single parent	11	15	7								
Couple, children	43	3	24								
Couple only	34	6	22								
TOTAL	127	8	18								
Indigenous	1	12	13								

Melbourne Inner South: Gross value added												
	Place-of-work											
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)							
Agriculture	1032	549	8.0	2.2	-2.5							
Mining	56	19	0.4	0.1	-4.2							
Non-food manufacturing	1768	1496	13.6	5.9	-0.7							
Logistics	1019	2535	7.9	10.1	3.7							
Office services	2887	6322	22.3	25.1	3.2							
Money management	1254	2525	9.7	10.0	2.8							
Construction	699	2654	5.4	10.6	5.5							
Distribution	1614	2824	12.4	11.2	2.3							
Convivial services	494	1198	3.8	4.8	3.6							
Area services	2145	5028	16.5	20.0	3.5							
TOTAL	12967	25150	100	100	2.7							

Melbourne Inner South: Hours worked													
		Pla	ice-of-wo	rk			Usua	l resider	ice				
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019			
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)			
Agriculture	6241	7390	2.4	2.1	0.7	5456	7099	2.0	1.8	1.1			
Mining	266	236	0.1	0.1	-0.5	680	1349	0.3	0.4	2.8			
Non-food manufacturing	44255	24157	16.9	6.7	-2.4	33233	17386	12.4	4.5	-2.6			
Logistics	23190	20103	8.8	5.6	-0.6	24526	21727	9.1	5.7	-0.5			
Office services	44716	73603	17.0	20.5	2.0	59960	112590	22.4	29.3	2.6			
Money management	10094	15021	3.8	4.2	1.6	22385	36098	8.3	9.4	1.9			
Construction	14470	39515	5.5	11.0	4.1	12710	33111	4.7	8.6	3.9			
Distribution	54518	62438	20.8	17.4	0.5	45471	45593	17.0	11.9	0.0			
Convivial services	19338	30890	7.4	8.6	1.9	21434	34920	8.0	9.1	2.0			
Area services	45203	86351	17.2	24.0	2.6	42237	73853	15.8	19.2	2.3			
TOTAL	262290	359703	100	100	1.3	268091	383725	100	100	1.4			

Melbourne Inner South: Local income												
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	226	325	2.5	1.7	1.5	213	390	2.1	1.7	2.4		
Mining	57	15	0.6	0.1	-5.2	147	101	1.5	0.4	-1.5		
Non-food manufacturing	1306	925	14.5	4.9	-1.4	1072	780	10.7	3.4	-1.3		
Logistics	760	1689	8.4	8.9	3.2	878	2044	8.7	8.9	3.4		
Office services	2297	5455	25.5	28.9	3.5	2954	8442	29.4	36.9	4.3		
Money management	384	950	4.3	5.0	3.7	889	2500	8.9	10.9	4.2		
Construction	580	1695	6.4	9.0	4.4	534	1494	5.3	6.5	4.2		
Distribution	1288	2013	14.3	10.7	1.8	1189	1648	11.8	7.2	1.3		
Convivial services	429	1005	4.8	5.3	3.5	500	1175	5.0	5.1	3.5		
Area services	1676	4821	18.6	25.5	4.3	1663	4330	16.6	18.9	3.9		
TOTAL	9003	18894	100	100	3.0	10038	22905	100	100	3.4		

MELBOURNE INNER EAST

Comprises the suburbs located between the Monash Freeway (to the south) and the Yarra River (to the north). To the east, the region includes Doncaster, Mitcham and Mulgrave.

Classified as inner metropolitan. Lies wholly within the Melbourne metropolitan area.

Population 1994 ('000)	486
Population 2019 ('000)	580
Rate of population growth 1994-2019 % a year	0.7

Household groups: Percentage poor and affluent, Census 2016											
Group '000 Poor Affluent											
Non-family	44	13	10								
Single parent 15 17											
Couple, children	59	5	20								
Couple only	46	8	18								
TOTAL	165	9	16								
Indigenous	1	11	10								

Melbourne Inner East: Gross value added													
	Place-of-work												
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)								
Agriculture	237	275	1.6	1.0	0.6								
Mining	52	21	0.3	0.1	-3.6								
Non-food manufacturing	1216	779	8.0	2.7	-1.8								
Logistics	1054	2592	6.9	9.1	3.7								
Office services	4072	7878	26.7	27.7	2.7								
Money management	2217	3787	14.6	13.3	2.2								
Construction	858	2647	5.6	9.3	4.6								
Distribution	1929	2947	12.7	10.4	1.7								
Convivial services	623	1479	4.1	5.2	3.5								
Area services	2970	6068	19.5	21.3	2.9								
TOTAL	15228	28472	100	100	2.5								

	Melbourne Inner East: Hours worked												
		Pla	ce-of-wo	rk		Usual residence							
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019			
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)			
Agriculture	3796	4122	1.2	1.0	0.3	7078	8239	1.8	1.7	0.6			
Mining	202	190	0.1	0.0	-0.2	1217	920	0.3	0.2	-1.1			
Non-food manufacturing	27501	13491	8.7	3.4	-2.8	46354	23457	11.5	4.9	-2.7			
Logistics	25349	19946	8.0	5.0	-1.0	35772	26510	8.9	5.6	-1.2			
Office services	67984	92548	21.6	23.1	1.2	89993	136996	22.3	28.7	1.7			
Money management	20204	22848	6.4	5.7	0.5	34783	44184	8.6	9.3	1.0			
Construction	18872	38926	6.0	9.7	2.9	19075	30718	4.7	6.4	1.9			
Distribution	63617	65579	20.2	16.4	0.1	68213	65303	16.9	13.7	-0.2			
Convivial services	26286	37349	8.3	9.3	1.4	31542	41424	7.8	8.7	1.1			
Area services	61454	105284	19.5	26.3	2.2	69128	99471	17.1	20.8	1.5			
TOTAL	315264	400281	100	100	1.0	403154	477221	100	100	0.7			

Melbourne Inner East: Local income												
			Place-of-v	vork		Usual residence						
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	141	200	1.3	1.0	1.4	265	438	1.8	1.6	2.0		
Mining	51	17	0.5	0.1	-4.3	250	83	1.7	0.3	-4.3		
Non-food manufacturing	807	503	7.6	2.4	-1.9	1427	1101	9.8	4.0	-1.0		
Logistics	814	1687	7.6	8.0	3.0	1215	2379	8.3	8.6	2.7		
Office services	3084	6507	29.0	31.0	3.0	4335	9945	29.7	35.9	3.4		
Money management	736	1374	6.9	6.6	2.5	1337	2844	9.2	10.3	3.1		
Construction	736	1602	6.9	7.6	3.2	755	1395	5.2	5.0	2.5		
Distribution	1494	2084	14.0	9.9	1.3	1720	2290	11.8	8.3	1.2		
Convivial services	511	1254	4.8	6.0	3.7	674	1417	4.6	5.1	3.0		
Area services	2278	5738	21.4	27.4	3.8	2611	5843	17.9	21.1	3.3		
TOTAL	10651	20967	100	100	2.7	14587	27734	100	100	2.6		

MELBOURNE INNER NORTH

Comprises suburbs located between Melbourne Central and the northern/western ring road, hence stretching in an arc from Heidelberg to Williamstown by way of Preston, Coburg and Footscray. (NB: inner north for short, but the region includes the inner west.)

Location: inner metropolitan. Lies wholly within metropolitan Melbourne.

Population 1994 ('000)	436
Population 2019 ('000)	572
Rate of population growth 1994-2019 % a year	1.1

Household groups: Percentage poor and affluent, Census 2016											
Group '000 Poor Affluent											
Non-family	59	14	9								
Single parent 16 19											
Couple, children	49	6	17								
Couple only	45	7	20								
TOTAL	169	10	14								
Indigenous	1	18	7								

	Melbourne Inner North: Gross value added											
			Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)							
Agriculture	464	521	3.6	2.1	0.5							
Mining	32	23	0.2	0.1	-1.4							
Non-food manufacturing	2694	1906	21.0	7.7	-1.4							
Logistics	1098	2581	8.6	10.5	3.5							
Office services	2058	5046	16.1	20.5	3.7							
Money management	1052	1829	8.2	7.4	2.2							
Construction	881	2339	6.9	9.5	4.0							
Distribution	1601	3053	12.5	12.4	2.6							
Convivial services	477	1385	3.7	5.6	4.4							
Area services	2446	5941	19.1	24.1	3.6							
TOTAL	12803	24623	100	100	2.7							

	Melbourne Inner North: Hours worked											
		Pla	ice-of-wo	rk			Usua	l residen	ice			
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	7081	8191	2.4	2.1	0.6	8458	10978	2.6	2.1	1.0		
Mining	169	264	0.1	0.1	1.8	532	1484	0.2	0.3	4.2		
Non-food manufacturing	62419	28368	21.6	7.4	-3.1	58270	26279	17.6	5.1	-3.1		
Logistics	23078	22246	8.0	5.8	-0.1	29770	29811	9.0	5.8	0.0		
Office services	36880	61389	12.8	16.1	2.1	65246	147938	19.7	28.7	3.3		
Money management	8744	11407	3.0	3.0	1.1	21215	35664	6.4	6.9	2.1		
Construction	15018	35687	5.2	9.3	3.5	13306	35219	4.0	6.8	4.0		
Distribution	60463	71697	20.9	18.8	0.7	56089	67909	17.0	13.2	0.8		
Convivial services	20737	37198	7.2	9.7	2.4	27507	53571	8.3	10.4	2.7		
Area services	54620	105667	18.9	27.7	2.7	50397	105928	15.2	20.6	3.0		
TOTAL	289209	382114	100	100	1.1	330790	514781	100	100	1.8		

	Melbourne Inner North: Local income											
			Place-of-v	vork				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	252	363	2.9	2.0	1.5	284	493	2.8	1.8	2.2		
Mining	27	15	0.3	0.1	-2.3	93	99	0.9	0.4	0.2		
Non-food manufacturing	1752	1140	19.9	6.2	-1.7	1569	1098	15.4	3.9	-1.4		
Logistics	779	1617	8.8	8.8	3.0	947	2190	9.3	7.9	3.4		
Office services	1538	4129	17.5	22.4	4.0	2660	10316	26.2	37.1	5.6		
Money management	310	642	3.5	3.5	3.0	717	2082	7.1	7.5	4.4		
Construction	564	1547	6.4	8.4	4.1	467	1596	4.6	5.7	5.0		
Distribution	1263	2161	14.3	11.7	2.2	1235	2182	12.2	7.8	2.3		
Convivial services	405	1157	4.6	6.3	4.3	524	1720	5.2	6.2	4.9		
Area services	1919	5678	21.8	30.8	4.4	1661	6041	16.4	21.7	5.3		
TOTAL	8809	18449	100	100	3.0	10156	27816	100	100	4.1		

MELBOURNE OUTER SOUTH

Comprises the shore of Port Phillip Bay from Mordialloc southwards and the whole of the Mornington Peninsula.

Classified as outer metropolitan. Nearly all within the Melbourne metropolitan area.

Population 1994 ('000)	343
Population 2019 ('000)	469
Rate of population growth 1994-2019 % a year	1.3

Household groups: Percentage poor and affluent, Census 2016											
Group '000 Poor Affluent											
Non-family	39	14	4								
Single parent	16	18	2								
Couple, children	43	5	7								
Couple only	39	7	10								
TOTAL	138	10	6								
Indigenous	1	15	5								

	Melbourne Outer South: Gross value added											
			Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)							
Agriculture	699	904	7.6	5.4	1.0							
Mining	55	51	0.6	0.3	-0.3							
Non-food manufacturing	1606	1797	17.4	10.7	0.5							
Logistics	701	1953	7.6	11.6	4.2							
Office services	1653	2636	17.9	15.7	1.9							
Money management	844	1234	9.1	7.3	1.5							
Construction	696	1924	7.5	11.4	4.2							
Distribution	1257	2293	13.6	13.6	2.4							
Convivial services	375	949	4.1	5.6	3.8							
Area services	1348	3100	14.6	18.4	3.4							
TOTAL	9234	16841	100	100	2.4							

	Melbourne Outer South: Hours worked											
		Pla	ce-of-wo	rk		Usual residence						
	1994 ('000 2019 ('000 1994 2019 1994-2019					1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	10676	15006	5.6	5.4	1.4	11358	13598	4.5	3.6	0.7		
Mining	200	649	0.1	0.2	4.8	333	829	0.1	0.2	3.7		
Non-food manufacturing	39106	31224	20.5	11.2	-0.9	49138	39438	19.4	10.3	-0.9		
Logistics	15853	16994	8.3	6.1	0.3	22276	21405	8.8	5.6	-0.2		
Office services	20263	29071	10.6	10.4	1.5	36208	61715	14.3	16.1	2.2		
Money management	6676	7754	3.5	2.8	0.6	14295	19515	5.6	5.1	1.3		
Construction	16413	42013	8.6	15.1	3.8	18371	54430	7.3	14.2	4.4		
Distribution	40116	53674	21.0	19.3	1.2	50809	68556	20.1	17.9	1.2		
Convivial services	13987	25793	7.3	9.3	2.5	17579	31166	6.9	8.2	2.3		
Area services	27449	56493	14.4	20.3	2.9	32761	71716	12.9	18.8	3.2		
TOTAL	190740	278672	100	100	1.5	253128	382368	100	100	1.7		

	Melbourne Outer South: Local income											
			Place-of-v	work			Usual resid	lence				
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	384	649	6.0	5.1	2.1	386	564	4.7	3.1	1.5		
Mining	40	33	0.6	0.3	-0.7	63	44	0.8	0.2	-1.4		
Non-food manufacturing	1180	1185	18.5	9.2	0.0	1382	1456	16.7	8.1	0.2		
Logistics	522	1292	8.2	10.1	3.7	712	1532	8.6	8.5	3.1		
Office services	1015	2043	15.9	15.9	2.8	1646	4146	19.9	23.1	3.8		
Money management	255	438	4.0	3.4	2.2	499	1060	6.0	5.9	3.1		
Construction	670	1803	10.5	14.0	4.0	730	2275	8.8	12.7	4.6		
Distribution	964	1689	15.1	13.1	2.3	1163	2080	14.1	11.6	2.4		
Convivial services	337	770	5.3	6.0	3.4	403	920	4.9	5.1	3.4		
Area services	1030	2950	16.1	23.0	4.3	1275	3851	15.4	21.5	4.5		
TOTAL	6397	12852	100	100	2.8	8259	17926	100	100	3.1		

MELBOURNE OUTER SOUTH EAST

Comprises Dandenong, Cranbourne, Pakenham and adjacent suburbs.

Classified as outer metropolitan. Nearly all within the Melbourne metropolitan area.

Population 1994 ('000)	249
Population 2019 ('000)	548
Rate of population growth 1994-2019 % a year	3.2

Household groups: Percentage poor and affluent, Census 2016											
Group	Group '000 Poor Affluent										
Non-family	27	13	4								
Single parent	16	20	1								
Couple, children	55	8	4								
Couple only	34	8	7								
TOTAL	132	11	4								
Indigenous	1	14	2								

	Melbourne Outer South East: Gross value added												
			Place-of-work										
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)								
Agriculture	534	966	5.0	3.7	2.4								
Mining	12	18	0.1	0.1	1.7								
Non-food manufacturing	2580	3909	24.0	14.9	1.7								
Logistics	1365	4246	12.7	16.2	4.6								
Office services	1333	3799	12.4	14.5	4.3								
Money management	912	1890	8.5	7.2	3.0								
Construction	808	2818	7.5	10.7	5.1								
Distribution	1680	3863	15.6	14.7	3.4								
Convivial services	288	922	2.7	3.5	4.8								
Area services	1248	3788	11.6	14.4	4.5								
TOTAL	10760	26220	100	100	3.6								

	Melbourne Outer South East: Hours worked												
		Pla	ce-of-wo	rk		Usual residence							
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019			
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)			
Agriculture	10558	17275	4.5	4.2	2.0	9321	19639	4.7	4.4	3.0			
Mining	73	396	0.0	0.1	7.0	162	978	0.1	0.2	7.4			
Non-food manufacturing	55477	61291	23.8	15.0	0.4	43831	55289	22.3	12.5	0.9			
Logistics	28700	36755	12.3	9.0	1.0	19565	32368	9.9	7.3	2.0			
Office services	21282	43388	9.1	10.6	2.9	23407	61531	11.9	13.9	3.9			
Money management	8994	14206	3.9	3.5	1.8	10532	21400	5.3	4.8	2.9			
Construction	19465	49868	8.4	12.2	3.8	17618	53489	8.9	12.1	4.5			
Distribution	51626	89674	22.2	22.0	2.2	41832	91045	21.2	20.6	3.2			
Convivial services	11165	25778	4.8	6.3	3.4	11026	31598	5.6	7.2	4.3			
Area services	25321	69551	10.9	17.0	4.1	19671	74448	10.0	16.9	5.5			
TOTAL	232660	408181	100	100	2.3	196965	441784	100	100	3.3			

Melbourne Outer South East: Local income													
	Place-of-work							Usual residence					
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019			
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)			
Agriculture	382	710	5.1	3.8	2.5	340	740	5.2	3.8	3.2			
Mining	17	14	0.2	0.1	-0.8	31	41	0.5	0.2	1.1			
Non-food manufacturing	1677	2458	22.4	13.0	1.5	1296	1992	20.0	10.3	1.7			
Logistics	985	2736	13.2	14.5	4.2	677	2188	10.5	11.3	4.8			
Office services	872	2964	11.7	15.7	5.0	1006	3740	15.6	19.4	5.4			
Money management	327	756	4.4	4.0	3.4	383	1028	5.9	5.3	4.0			
Construction	781	2124	10.4	11.2	4.1	738	2204	11.4	11.4	4.5			
Distribution	1272	2759	17.0	14.6	3.1	967	2688	15.0	13.9	4.2			
Convivial services	258	770	3.4	4.1	4.5	242	889	3.7	4.6	5.3			
Area services	913	3610	12.2	19.1	5.7	789	3791	12.2	19.6	6.5			
TOTAL	7485	18902	100	100	3.8	6469	19302	100	100	4.5			

MELBOURNE OUTER EAST

Stretches from Greensborough and Eltham across the Yarra to Lilydale, south through Ringwood and Knox City to Rowville and east to Emerald. Does not include the upper Yarra valley.

Classified as outer metropolitan. Nearly all within the Melbourne metropolitan area.

Population 1994 ('000)	495
Population 2019 ('000)	578
Rate of population growth 1994-2019 % a year	0.7

Household groups: Percentage poor and affluent, Census 2016										
Group	'000	Poor	Affluent							
Non-family	39	12	6							
Single parent	18	15	3							
Couple, children	64	4	9							
Couple only	47	6	12							
TOTAL	168	7	9							
Indigenous	1	12	4							

Melbourne Outer East: Gross value added									
	Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)				
Agriculture	706	641	5.8	3.2	-0.4				
Mining	44	55	0.4	0.3	0.9				
Non-food manufacturing	2285	2469	18.8	12.4	0.3				
Logistics	1055	2738	8.7	13.8	3.9				
Office services	1666	2910	13.7	14.7	2.3				
Money management	1255	1604	10.3	8.1	1.0				
Construction	941	1775	7.7	8.9	2.6				
Distribution	1717	2700	14.1	13.6	1.8				
Convivial services	462	1056	3.8	5.3	3.4				
Area services	2014	3889	16.6	19.6	2.7				
TOTAL	12145	19836	100	100	2.0				

Melbourne Outer East: Hours worked										
		Pla		Usual residence						
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	10497	10380	3.9	3.2	0.0	11429	12121	2.8	2.3	0.2
Mining	211	691	0.1	0.2	4.9	609	1855	0.1	0.4	4.6
Non-food manufacturing	52331	38813	19.3	11.9	-1.2	62563	41949	15.4	8.1	-1.6
Logistics	24665	22330	9.1	6.8	-0.4	38161	32087	9.4	6.2	-0.7
Office services	26787	35292	9.9	10.8	1.1	67147	97082	16.5	18.7	1.5
Money management	10657	9702	3.9	3.0	-0.4	27253	29154	6.7	5.6	0.3
Construction	26158	44670	9.6	13.7	2.2	35051	70373	8.6	13.6	2.8
Distribution	58866	63770	21.7	19.5	0.3	78812	85779	19.3	16.5	0.3
Convivial services	18954	29595	7.0	9.1	1.8	24144	37586	5.9	7.3	1.8
Area services	42456	71368	15.6	21.9	2.1	62191	110332	15.3	21.3	2.3
TOTAL	271581	326611	100	100	0.7	407360	518317	100	100	1.0

Melbourne Outer East: Local income											
	Place-of-work						Usual residence				
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019	
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	
Agriculture	373	451	4.3	3.0	0.8	404	530	2.9	2.0	1.1	
Mining	45	39	0.5	0.3	-0.5	116	111	0.8	0.4	-0.2	
Non-food manufacturing	1565	1490	18.2	9.8	-0.2	1868	1684	13.6	6.4	-0.4	
Logistics	796	1821	9.3	12.0	3.4	1252	2580	9.1	9.9	2.9	
Office services	1167	2404	13.6	15.8	2.9	2968	6568	21.6	25.1	3.2	
Money management	389	541	4.5	3.6	1.3	979	1654	7.1	6.3	2.1	
Construction	1033	2003	12.0	13.1	2.7	1367	3126	10.0	12.0	3.4	
Distribution	1355	1921	15.8	12.6	1.4	1888	2622	13.7	10.0	1.3	
Convivial services	400	880	4.7	5.8	3.2	518	1156	3.8	4.4	3.3	
Area services	1472	3681	17.1	24.2	3.7	2377	6086	17.3	23.3	3.8	
TOTAL	8594	15230	100	100	2.3	13737	26116	100	100	2.6	

MELBOURNE OUTER NORTH

Located north of the ring road, from Bundoora to Sunbury and stretching north to Wallan. Lies west of the Nillumbik hills and east of the Calder highway.

Classified as outer metropolitan. In 2016 87 per cent of its residents were located within the Melbourne metropolitan area with a further 6 per cent in Sunbury.

Population 1994 ('000)	332
Population 2019 ('000)	627
Rate of population growth 1994-2019 % a year	2.6

Household groups: Percentage poor and affluent, Census 2016												
Group '000 Poor Affluent												
Non-family	35	15	4									
Single parent	20	20	1									
Couple, children	61	10	4									
Couple only	40	9	8									
TOTAL	156	12	5									
Indigenous	2	17	3									

Melbourne Outer North: Gross value added											
	Place-of-work										
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	460	839	5.0	3.6	2.4						
Mining	67	28	0.7	0.1	-3.4						
Non-food manufacturing	2309	3024	25.2	13.0	1.1						
Logistics	1340	4853	14.6	20.9	5.3						
Office services	1362	3229	14.8	13.9	3.5						
Money management	464	1164	5.1	5.0	3.7						
Construction	669	2595	7.3	11.2	5.6						
Distribution	970	2860	10.6	12.3	4.4						
Convivial services	242	799	2.6	3.4	4.9						
Area services	1296	3860	14.1	16.6	4.5						
TOTAL	9179	23252	100	100	3.8						

Melbourne Outer North: Hours worked												
		Pla	ce-of-wo	rk		Usual residence						
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	7794	15156	3.8	4.2	2.7	8187	14310	3.4	2.9	2.3		
Mining	347	419	0.2	0.1	0.8	123	619	0.1	0.1	6.7		
Non-food manufacturing	62160	48452	30.3	13.6	-1.0	56097	43311	23.1	8.9	-1.0		
Logistics	28690	42084	14.0	11.8	1.5	23460	34776	9.7	7.2	1.6		
Office services	18622	36912	9.1	10.3	2.8	30607	75474	12.6	15.5	3.7		
Money management	4083	7522	2.0	2.1	2.5	13924	25039	5.7	5.2	2.4		
Construction	12155	47567	5.9	13.3	5.6	13347	64760	5.5	13.3	6.5		
Distribution	34785	69500	17.0	19.5	2.8	53119	102265	21.9	21.0	2.7		
Convivial services	10038	22263	4.9	6.2	3.2	15154	35994	6.2	7.4	3.5		
Area services	26473	67420	12.9	18.9	3.8	29033	89407	11.9	18.4	4.6		
TOTAL	205146	357295	100	100	2.2	243051	485954	100	100	2.8		

	Melbourne Outer North: Local income												
			Place-of-v	work		Usual residence							
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019			
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)			
Agriculture	267	601	4.1	3.6	3.3	275	527	3.8	2.4	2.6			
Mining	78	23	1.2	0.1	-4.7	24	30	0.3	0.1	1.0			
Non-food manufacturing	1735	1914	26.8	11.4	0.4	1512	1570	20.8	7.2	0.2			
Logistics	974	2788	15.0	16.6	4.3	795	2202	10.9	10.1	4.2			
Office services	909	2601	14.0	15.5	4.3	1235	4819	17.0	22.1	5.6			
Money management	158	401	2.4	2.4	3.8	479	1261	6.6	5.8	3.9			
Construction	444	2082	6.9	12.4	6.4	474	2727	6.5	12.5	7.2			
Distribution	727	2065	11.2	12.3	4.3	1119	2925	15.4	13.4	3.9			
Convivial services	206	659	3.2	3.9	4.8	282	1046	3.9	4.8	5.4			
Area services	979	3674	15.1	21.9	5.4	1082	4715	14.9	21.6	6.1			
TOTAL	6476	16808	100	100	3.9	7276	21822	100	100	4.5			

MELBOURNE OUTER WEST

Located west of Footscray and Newport (exclusive), north of Port Phillip Bay and south of the Calder Highway, and stretching to the urban fringe including Melton but excluding Bacchus Marsh.

Classified as outer metropolitan. In 2016 89 per cent of its residents were located within the Melbourne metropolitan area with a further 10 per cent in Melton.

Population 1994 ('000)	264
Population 2019 ('000)	644
Rate of population growth 1994-2019 % a year	3.6

Household groups: Percentage poor and affluent, Census 2016											
Group '000 Poor Affluent											
Non-family	30	14	5								
Single parent	20	21	2								
Couple, children	66	8	5								
Couple only	39	8	9								
TOTAL	155	11	6								
Indigenous	1	14	3								

Melbourne Outer West: Gross value added												
		Place-of-work										
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)							
Agriculture	639	905	6.9	3.8	1.4							
Mining	32	22	0.3	0.1	-1.5							
Non-food manufacturing	2341	2270	25.1	9.4	-0.1							
Logistics	1257	5038	13.5	20.9	5.7							
Office services	1446	3085	15.5	12.8	3.1							
Money management	427	1180	4.6	4.9	4.1							
Construction	723	3380	7.7	14.0	6.4							
Distribution	1233	3985	13.2	16.5	4.8							
Convivial services	206	818	2.2	3.4	5.7							
Area services	1029	3418	11.0	14.2	4.9							
TOTAL	9334	24102	100	100	3.9							

	Melbourne Outer West: Hours worked													
		Pla	ce-of-wo	rk		Usual residence								
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019				
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)				
Agriculture	7647	15272	4.4	4.2	2.8	7094	15170	3.5	3.0	3.1				
Mining	144	321	0.1	0.1	3.3	216	914	0.1	0.2	5.9				
Non-food manufacturing	41355	33967	23.7	9.4	-0.8	40824	39740	20.0	7.8	-0.1				
Logistics	22749	44456	13.1	12.2	2.7	22579	49460	11.0	9.7	3.2				
Office services	16005	33183	9.2	9.1	3.0	31281	91847	15.3	18.0	4.4				
Money management	4079	9229	2.3	2.5	3.3	12334	32619	6.0	6.4	4.0				
Construction	12351	48309	7.1	13.3	5.6	11619	55817	5.7	10.9	6.5				
Distribution	42748	93938	24.5	25.9	3.2	42910	101549	21.0	19.9	3.5				
Convivial services	8090	22902	4.6	6.3	4.3	12369	37944	6.1	7.4	4.6				
Area services	19052	61655	10.9	17.0	4.8	23188	85672	11.3	16.8	5.4				
TOTAL	174218	363230	100	100	3.0	204414	510732	100	100	3.7				

Melbourne Outer West: Local income													
			Place-of-v	work		Usual residence							
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019			
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)			
Agriculture	268	632	4.8	3.8	3.5	248	601	3.7	2.5	3.6			
Mining	27	16	0.5	0.1	-2.1	39	46	0.6	0.2	0.6			
Non-food manufacturing	1204	1340	21.5	8.1	0.4	1231	1551	18.2	6.6	0.9			
Logistics	854	2811	15.2	16.9	4.9	813	2898	12.0	12.3	5.2			
Office services	748	2512	13.3	15.1	5.0	1423	6071	21.0	25.7	6.0			
Money management	177	482	3.2	2.9	4.1	451	1607	6.7	6.8	5.2			
Construction	468	2085	8.3	12.5	6.2	437	2324	6.5	9.8	6.9			
Distribution	911	2841	16.2	17.1	4.7	963	3007	14.2	12.7	4.7			
Convivial services	183	659	3.3	4.0	5.3	260	1081	3.8	4.6	5.9			
Area services	769	3253	13.7	19.6	5.9	899	4473	13.3	18.9	6.6			
TOTAL	5607	16631	100	100	4.4	6764	23658	100	100	5.1			

GEELONG

Comprises Geelong, the Bellarine Peninsula and the Surf Coast down to Lorne.

Classified as peri-metropolitan (with an established city). In 2016 its three largest urban areas (with percentage of regional population) were Geelong, 60; Ocean Grove, 7 and Drysdale, 5.

Population 1994 ('000)	198
Population 2019 ('000)	287
Rate of population growth 1994-2019 % a year	1.5

Household groups: Percentage poor and affluent, Census 2016											
Group '000 Poor Affluent											
Non-family	27	15	5								
Single parent	10	21	2								
Couple, children	24	5	7								
Couple only	25	7	10								
TOTAL	86	10	6								
Indigenous	1	19	2								

Geelong: Gross value added											
			Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	210	373	3.3	2.9	2.3						
Mining	24	107	0.4	0.8	6.2						
Non-food manufacturing	1847	1027	28.7	8.0	-2.3						
Logistics	316	793	4.9	6.2	3.7						
Office services	1126	2607	17.5	20.4	3.4						
Money management	555	1116	8.6	8.7	2.8						
Construction	441	1654	6.9	12.9	5.4						
Distribution	688	1525	10.7	11.9	3.2						
Convivial services	259	665	4.0	5.2	3.8						
Area services	961	2933	15.0	22.9	4.6						
TOTAL	6427	12798	100	100	2.8						

	Geelong: Hours worked												
		Pla	ce-of-wo	rk		Usual residence							
	1994 ('000	994 ('000 2019 ('000 1994 2019 1994-2019				1994 ('000	2019 ('000	1994	2019	1994-2019			
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)			
Agriculture	4177	7195	3.4	3.6	2.2	4953	7118	3.6	3.2	1.5			
Mining	31	593	0.0	0.3	12.6	103	1224	0.1	0.5	10.4			
Non-food manufacturing	23548	12778	19.3	6.4	-2.4	27040	14901	19.7	6.7	-2.4			
Logistics	7285	7240	6.0	3.6	0.0	9287	10259	6.8	4.6	0.4			
Office services	17017	34637	14.0	17.4	2.9	20075	39044	14.7	17.4	2.7			
Money management	4965	8340	4.1	4.2	2.1	6043	9347	4.4	4.2	1.8			
Construction	8942	23880	7.3	12.0	4.0	9817	30972	7.2	13.8	4.7			
Distribution	24385	35680	20.0	17.9	1.5	26233	37575	19.2	16.8	1.4			
Convivial services	10718	18231	8.8	9.1	2.1	11079	19949	8.1	8.9	2.4			
Area services	20747	50824	17.0	25.5	3.6	22288	53456	16.3	23.9	3.6			
TOTAL	121817	199396	100	100	2.0	136919	223845	100	100	2.0			

	Geelong: Local income											
		Place-of-v	vork			Usual resid	lence					
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	136	313	3.6	3.4	3.4	161	310	3.7	2.9	2.7		
Mining	6	25	0.2	0.3	5.9	18	52	0.4	0.5	4.5		
Non-food manufacturing	647	497	17.0	5.3	-1.0	757	590	17.4	5.6	-1.0		
Logistics	239	498	6.3	5.4	3.0	325	702	7.5	6.7	3.1		
Office services	744	2142	19.6	23.0	4.3	876	2409	20.1	22.8	4.1		
Money management	171	443	4.5	4.8	3.9	215	503	4.9	4.8	3.5		
Construction	344	966	9.1	10.4	4.2	373	1241	8.5	11.8	4.9		
Distribution	546	1069	14.4	11.5	2.7	584	1109	13.4	10.5	2.6		
Convivial services	222	535	5.9	5.8	3.6	230	592	5.3	5.6	3.9		
Area services	737	2806	19.4	30.2	5.5	825	3038	18.9	28.8	5.4		
TOTAL	3792	9294	100	100	3.7	4363	10548	100	100	3.6		

VICTORIA INNER WEST

Stretches from Apollo Bay on the coast through Colac to Ballarat and Bacchus Marsh and onwards to Kyneton and Gisborne.

Classified as peri-metropolitan (with an established city). Its two largest urban areas (with percentage of the 2016 regional population) are Ballarat, 38 and Bacchus Marsh, 7.

Population 1994 ('000)	190
Population 2019 ('000)	260
Rate of population growth 1994-2019 % a year	1.3

Household groups: Percentage poor and affluent, Census 2016										
Group	'000	Poor	Affluent							
Non-family	24	16	4							
Single parent	8	24	1							
Couple, children	23	5	6							
Couple only	23	8	8							
TOTAL	79	11	5							
Indigenous	1	20	2							

	Vict	oria Inner West:	Gross value added		
			Place-of-work		
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)
Agriculture	873	1414	18.5	15.0	2.0
Mining	137	239	2.9	2.5	2.3
Non-food manufacturing	391	421	8.3	4.5	0.3
Logistics	203	408	4.3	4.3	2.8
Office services	785	1667	16.6	17.7	3.1
Money management	400	582	8.5	6.2	1.5
Construction	361	1110	7.7	11.8	4.6
Distribution	514	1036	10.9	11.0	2.8
Convivial services	217	505	4.6	5.4	3.4
Area services	837	2052	17.7	21.8	3.7
TOTAL	4716	9434	100	100	2.8

	Victoria Inner West: Hours worked											
		ce-of-wo		Usua	l resider	ice						
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	18225	26598	17.7	16.5	1.5	19143	26282	14.5	12.7	1.3		
Mining	274	1335	0.3	0.8	6.5	314	1657	0.2	0.8	6.9		
Non-food manufacturing	9739	7493	9.5	4.7	-1.0	15416	11194	11.7	5.4	-1.3		
Logistics	4877	4140	4.7	2.6	-0.7	8883	8238	6.7	4.0	-0.3		
Office services	12419	20508	12.1	12.7	2.0	15846	29918	12.0	14.5	2.6		
Money management	3550	4018	3.5	2.5	0.5	4955	5518	3.8	2.7	0.4		
Construction	7745	19175	7.5	11.9	3.7	9931	28779	7.5	13.9	4.3		
Distribution	18585	25783	18.1	16.0	1.3	23904	34456	18.2	16.7	1.5		
Convivial services	8427	14721	8.2	9.1	2.3	9447	16889	7.2	8.2	2.4		
Area services	18874	37178	18.4	23.1	2.7	23787	43827	18.1	21.2	2.5		
TOTAL	102716	160948	100	100	1.8	131625	206759	100	100	1.8		

	Victoria Inner West: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	1994 2019 1994 2019 1994-2019					2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	568	1073	17.7	15.3	2.6	596	1058	14.4	11.3	2.3		
Mining	52	48	1.6	0.7	-0.3	61	67	1.5	0.7	0.4		
Non-food manufacturing	268	259	8.3	3.7	-0.1	434	412	10.4	4.4	-0.2		
Logistics	163	265	5.1	3.8	2.0	299	559	7.2	6.0	2.5		
Office services	518	1308	16.1	18.7	3.8	639	1916	15.4	20.5	4.5		
Money management	123	204	3.8	2.9	2.1	175	289	4.2	3.1	2.0		
Construction	300	738	9.3	10.5	3.7	378	1134	9.1	12.1	4.5		
Distribution	402	741	12.5	10.6	2.5	520	1008	12.5	10.8	2.7		
Convivial services	198	396	6.2	5.7	2.8	217	457	5.2	4.9	3.0		
Area services	621	1967	19.3	28.1	4.7	834	2461	20.1	26.3	4.4		
TOTAL	3213	7000	100	100	3.2	4153	9362	100	100	3.3		

VICTORIA INNER NORTH

Stretches in an arc around northern Melbourne from Castlemaine and Bendigo through Heathcote and Seymour to the upper Yarra valley around Healesville and Warburton.

Classified as peri-metropolitan (with an established city). Its three largest urban areas (with percentage of the 2016 regional population) are Bendigo, 32; Castlemaine 4 and Healesville, 3.

Population 1994 ('000)	202
Population 2019 ('000)	262
Rate of population growth 1994-2019 % a year	1.0

Household groups: Percentage poor and affluent, Census 2016										
Group '000 Poor Affluent										
Non-family	25	15	4							
Single parent	9	22	1							
Couple, children	22	5	5							
Couple only	24	7	8							
TOTAL	81	11	5							
Indigenous	2	20	1							

Victoria Inner North: Gross value added											
			Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	925	1161	15.1	12.2	0.9						
Mining	613	63	10.0	0.7	-8.7						
Non-food manufacturing	383	416	6.2	4.4	0.3						
Logistics	235	486	3.8	5.1	3.0						
Office services	1309	1625	21.3	17.1	0.9						
Money management	520	1095	8.5	11.5	3.0						
Construction	388	1016	6.3	10.7	3.9						
Distribution	601	1012	9.8	10.6	2.1						
Convivial services	255	570	4.1	6.0	3.3						
Area services	908	2080	14.8	21.8	3.4						
TOTAL	6136	9523	100	100	1.8						

	Victoria Inner North: Hours worked											
		Pla	ce-of-wo	rk			Usua	l resider	ice			
	1994 ('000	994 ('000 2019 ('000 1994 2019 1994-2019				1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	18623	21679	15.8	13.5	0.6	18054	22419	13.0	10.8	0.9		
Mining	490	2010	0.4	1.3	5.8	392	4736	0.3	2.3	10.5		
Non-food manufacturing	10154	7376	8.6	4.6	-1.3	15195	11797	10.9	5.7	-1.0		
Logistics	6638	4858	5.6	3.0	-1.2	8520	7496	6.1	3.6	-0.5		
Office services	16497	19820	14.0	12.3	0.7	20268	28648	14.6	13.8	1.4		
Money management	4631	5793	3.9	3.6	0.9	5529	7683	4.0	3.7	1.3		
Construction	8342	19439	7.1	12.1	3.4	10467	28625	7.5	13.8	4.1		
Distribution	21852	25229	18.6	15.7	0.6	27035	33786	19.4	16.3	0.9		
Convivial services	10180	16187	8.6	10.1	1.9	10429	16926	7.5	8.2	2.0		
Area services	20359	38193	17.3	23.8	2.5	23411	44951	16.8	21.7	2.6		
TOTAL	117766	160583	100	100	1.2	139299	207068	100	100	1.6		

	Victoria Inner North: Local income									
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	580	839	15.6	12.0	1.5	566	859	12.6	9.3	1.7
Mining	95	62	2.5	0.9	-1.7	88	153	2.0	1.7	2.2
Non-food manufacturing	276	267	7.4	3.8	-0.1	424	442	9.4	4.8	0.2
Logistics	183	308	4.9	4.4	2.1	265	518	5.9	5.6	2.7
Office services	734	1239	19.7	17.7	2.1	896	1772	19.9	19.2	2.8
Money management	166	293	4.5	4.2	2.3	201	397	4.5	4.3	2.8
Construction	309	803	8.3	11.5	3.9	387	1205	8.6	13.1	4.6
Distribution	460	732	12.4	10.5	1.9	581	977	12.9	10.6	2.1
Convivial services	234	451	6.3	6.5	2.7	239	482	5.3	5.2	2.8
Area services	687	1989	18.4	28.5	4.3	848	2408	18.9	26.1	4.3
TOTAL	3723	6983	100	100	2.5	4496	9214	100	100	2.9

GIPPSLAND

Gippsland lies east of the Melbourne fringe, south of the Great Dividing Range and north of Bass Strait, all the way to the NSW border.

Classified as peri-metropolitan. Its four largest urban areas (with percentage of the 2016 regional population) are Traralgon, 9; Moe, 5; Warragul, 5 and Bairnsdale, 4.

Population 1994 ('000)	247
Population 2019 ('000)	303
Rate of population growth 1994-2019 % a year	0.8

Household groups: Percentage poor and affluent, Census 2016									
Group	'000	Poor	Affluent						
Non-family	31	18	4						
Single parent	10	27	1						
Couple, children	24	7	5						
Couple only	31	9	7						
TOTAL	96	13	5						
Indigenous	2	25	2						

Gippsland: Gross value added										
	Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	1209	1734	7.9	11.3	1.5					
Mining	7476	3472	48.9	22.6	-3.0					
Non-food manufacturing	524	610	3.4	4.0	0.6					
Logistics	235	513	1.5	3.3	3.2					
Office services	2748	2448	18.0	15.9	-0.5					
Money management	562	951	3.7	6.2	2.1					
Construction	565	1408	3.7	9.2	3.7					
Distribution	691	1277	4.5	8.3	2.5					
Convivial services	272	614	1.8	4.0	3.3					
Area services	1007	2325	6.6	15.1	3.4					
TOTAL	15289	15352	100	100	0.0					

	Gippsland: Hours worked									
		Pla		Usual residence						
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	33162	33625	21.1	17.1	0.1	32976	35561	19.2	15.4	0.3
Mining	2913	5094	1.9	2.6	2.3	3396	5515	2.0	2.4	2.0
Non-food manufacturing	10626	10203	6.8	5.2	-0.2	13198	12836	7.7	5.6	-0.1
Logistics	6492	5501	4.1	2.8	-0.7	7946	8060	4.6	3.5	0.1
Office services	25358	25330	16.1	12.9	0.0	28044	33535	16.4	14.5	0.7
Money management	5521	5229	3.5	2.7	-0.2	6014	6493	3.5	2.8	0.3
Construction	11516	21490	7.3	10.9	2.5	12731	28352	7.4	12.3	3.3
Distribution	27011	30965	17.2	15.8	0.5	30598	36667	17.9	15.9	0.7
Convivial services	11126	17026	7.1	8.7	1.7	11652	18291	6.8	7.9	1.8
Area services	23463	41889	14.9	21.3	2.3	24778	45416	14.5	19.7	2.5
TOTAL	157187	196352	100	100	0.9	171333	230726	100	100	1.2

	Gippsland: Local income										
			Place-of-v	work				Usual resid	lence		
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019	
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	
Agriculture	979	1217	20.3	14.3	0.9	977	1288	18.6	12.6	1.1	
Mining	364	304	7.6	3.6	-0.7	430	302	8.2	3.0	-1.4	
Non-food manufacturing	263	377	5.5	4.4	1.4	333	484	6.3	4.8	1.5	
Logistics	188	342	3.9	4.0	2.4	224	507	4.3	5.0	3.3	
Office services	922	1479	19.1	17.3	1.9	1030	1988	19.6	19.5	2.7	
Money management	177	294	3.7	3.4	2.1	196	359	3.7	3.5	2.5	
Construction	398	923	8.3	10.8	3.4	436	1209	8.3	11.9	4.2	
Distribution	541	909	11.2	10.6	2.1	610	1082	11.6	10.6	2.3	
Convivial services	247	484	5.1	5.7	2.7	244	520	4.6	5.1	3.1	
Area services	738	2212	15.3	25.9	4.5	779	2450	14.8	24.0	4.7	
TOTAL	4817	8541	100	100	2.3	5258	10189	100	100	2.7	

VICTORIA OUTER NORTH

Lies between the Great Dividing Range and the Murray River (the NSW border), as far west as Echuca and Rochester, excluding Bendigo.

Classified as country (rural). Its three largest urban areas (with percentage of the 2016 regional population) are Shepparton, 18; Wodonga, 14 and Wangaratta, 7.

Population 1994 ('000)	228
Population 2019 ('000)	266
Rate of population growth 1994-2019 % a year	0.6

Household groups: Percentage poor and affluent, Census 2016									
Group	'000	Poor	Affluent						
Non-family	27	16	3						
Single parent	9	25	1						
Couple, children	22	7	4						
Couple only	27	8	6						
TOTAL	84	12	4						
Indigenous	2	25	1						

Victoria Outer North: Gross value added											
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	2452	2868	26.8	23.5	0.6						
Mining	987	88	10.8	0.7	-9.2						
Non-food manufacturing	524	701	5.7	5.7	1.2						
Logistics	396	656	4.3	5.4	2.0						
Office services	1585	2035	17.3	16.7	1.0						
Money management	575	606	6.3	5.0	0.2						
Construction	499	1012	5.4	8.3	2.9						
Distribution	758	1395	8.3	11.4	2.5						
Convivial services	291	553	3.2	4.5	2.6						
Area services	1082	2283	11.8	18.7	3.0						
TOTAL	9148	12197	100	100	1.2						

	Victoria Outer North: Hours worked									
		Pla			Usua	l residen	ice			
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	47480	54474	28.7	25.8	0.6	46437	52979	27.0	24.5	0.5
Mining	634	2682	0.4	1.3	5.9	160	861	0.1	0.4	7.0
Non-food manufacturing	12659	12369	7.6	5.9	-0.1	13523	11873	7.9	5.5	-0.5
Logistics	8655	6673	5.2	3.2	-1.0	9101	6732	5.3	3.1	-1.2
Office services	19177	22303	11.6	10.6	0.6	20575	24713	12.0	11.4	0.7
Money management	4887	4451	3.0	2.1	-0.4	5228	5682	3.0	2.6	0.3
Construction	9188	20121	5.5	9.5	3.2	9749	22439	5.7	10.4	3.4
Distribution	27609	33263	16.7	15.8	0.7	29804	34642	17.3	16.0	0.6
Convivial services	11699	15473	7.1	7.3	1.1	12607	16593	7.3	7.7	1.1
Area services	23619	39106	14.3	18.5	2.0	24728	39474	14.4	18.3	1.9
TOTAL	165606	210915	100	100	1.0	171913	215988	100	100	0.9

	Victoria Outer North: Local income										
			Place-of-v	work				Usual resid	lence		
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019	
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	
Agriculture	1635	1995	30.0	22.2	0.8	1592	1854	28.8	20.4	0.6	
Mining	126	86	2.3	1.0	-1.5	34	26	0.6	0.3	-1.1	
Non-food manufacturing	351	454	6.4	5.1	1.0	375	427	6.8	4.7	0.5	
Logistics	288	387	5.3	4.3	1.2	295	402	5.3	4.4	1.3	
Office services	854	1434	15.7	16.0	2.1	909	1542	16.5	17.0	2.1	
Money management	183	205	3.4	2.3	0.4	193	252	3.5	2.8	1.1	
Construction	364	800	6.7	8.9	3.2	379	896	6.9	9.9	3.5	
Distribution	602	994	11.0	11.1	2.0	638	1032	11.5	11.4	1.9	
Convivial services	251	441	4.6	4.9	2.3	267	455	4.8	5.0	2.2	
Area services	803	2184	14.7	24.3	4.1	843	2197	15.3	24.2	3.9	
TOTAL	5459	8981	100	100	2.0	5525	9083	100	100	2.0	

VICTORIA OUTER WEST

Includes Camperdown, Ararat, Maryborough, Kerang and parts west, bounded by the ocean, the SA border and the NSW border.

Classified as country (rural). Its three largest urban areas (with percentage of the 2016 regional population) are Mildura, 13; Warrnambool, 12 and Horsham, 6. Other well-known centres include Portland, Hamilton and Swan Hill.

Population 1994 ('000)	258
Population 2019 ('000)	260
Rate of population growth 1994-2019 % a year	0.0

Household groups: Percentage poor and affluent, Census 2016								
Group '000 Poor Affluent								
Non-family	30	14	5					
Single parent	20	21	2					
Couple, children	66	8	5					
Couple only	27	9	7					
TOTAL	155	11	6					
Indigenous	1	14	3					

Victoria Outer West: Gross value added											
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	3562	3686	37.6	31.1	0.1						
Mining	162	127	1.7	1.1	-1.0						
Non-food manufacturing	450	369	4.8	3.1	-0.8						
Logistics	494	665	5.2	5.6	1.2						
Office services	1227	1555	12.9	13.1	1.0						
Money management	615	590	6.5	5.0	-0.2						
Construction	454	738	4.8	6.2	2.0						
Distribution	862	1267	9.1	10.7	1.5						
Convivial services	312	536	3.3	4.5	2.2						
Area services	1339	2314	14.1	19.5	2.2						
TOTAL	9478	11848	100	100	0.9						

Victoria Outer West: Hours worked											
		Pla	ce-of-wo	rk		Usual residence					
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000 2019 ('000 1994 2019 1994				1994-2019	
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)	
Agriculture	65672	61641	34.8	29.9	-0.3	66707	65462	34.0	30.0	-0.1	
Mining	581	1271	0.3	0.6	3.2	555	1803	0.3	0.8	4.8	
Non-food manufacturing	10002	7326	5.3	3.6	-1.2	9938	7352	5.1	3.4	-1.2	
Logistics	9952	6984	5.3	3.4	-1.4	10832	8368	5.5	3.8	-1.0	
Office services	17885	21292	9.5	10.3	0.7	19029	23066	9.7	10.6	0.8	
Money management	5227	4030	2.8	2.0	-1.0	5340	4443	2.7	2.0	-0.7	
Construction	9453	15201	5.0	7.4	1.9	9500	16691	4.8	7.6	2.3	
Distribution	29891	31097	15.8	15.1	0.2	32099	32650	16.3	15.0	0.1	
Convivial services	12121	15674	6.4	7.6	1.0	12705	15801	6.5	7.2	0.9	
Area services	28115	41427	14.9	20.1	1.6	29765	42747	15.1	19.6	1.5	
TOTAL	188900	205944	100	100	0.3	196468	218384	100	100	0.4	

	Victoria Outer West: Local income											
			Place-of-v	vork				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	94 2019 1994 2019 1994-20					
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	2308	2267	36.4	26.4	-0.1	2352	2421	35.7	26.5	0.1		
Mining	127	60	2.0	0.7	-2.9	129	79	2.0	0.9	-2.0		
Non-food manufacturing	293	280	4.6	3.3	-0.2	288	273	4.4	3.0	-0.2		
Logistics	367	421	5.8	4.9	0.6	385	503	5.8	5.5	1.1		
Office services	741	1186	11.7	13.8	1.9	800	1305	12.1	14.3	2.0		
Money management	198	189	3.1	2.2	-0.2	206	207	3.1	2.3	0.0		
Construction	383	624	6.0	7.3	2.0	384	687	5.8	7.5	2.4		
Distribution	674	910	10.6	10.6	1.2	717	963	10.9	10.5	1.2		
Convivial services	269	421	4.2	4.9	1.8	278	423	4.2	4.6	1.7		
Area services	985	2214	15.5	25.8	3.3	1047	2280	15.9	24.9	3.2		
TOTAL	6344	8572	100	100	1.2	6586	9141	100	100	1.3		

BRISBANE INNER

Includes Brisbane CBD and inner suburbs developed prior to the Second World War including Chermside, Corinda and Morningside.

Classified as central/inner metropolitan. Lies wholly within metropolitan Brisbane.

Population 1994 ('000)	355
Population 2019 ('000)	552
Rate of population growth 1994-2019 % a year	1.8

Household groups: Percentage poor and affluent, Census 2016								
Group '000 Poor Affluent								
Non-family	29	17	3					
Single parent	8	27	1					
Couple, children	21	8	4					
Couple only	48	4	25					
TOTAL	166	7	19					
Indigenous	3	13	10					

	Brisbane Inner: Gross value added										
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	375	817	1.5	1.1	3.2						
Mining	477	2945	1.9	4.0	7.6						
Non-food manufacturing	871	1269	3.5	1.7	1.5						
Logistics	1556	4578	6.2	6.2	4.4						
Office services	8647	27343	34.5	37.2	4.7						
Money management	4239	13473	16.9	18.4	4.7						
Construction	1682	4806	6.7	6.5	4.3						
Distribution	2012	3736	8.0	5.1	2.5						
Convivial services	1306	3160	5.2	4.3	3.6						
Area services	3899	11280	15.6	15.4	4.3						
TOTAL	25064	73407	100	100	4.4						

	Brisbane Inner: Hours worked											
		Pla	ce-of-wo	rk			Usua	l resider	ice			
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	7313	9867	1.6	1.1	1.2	6357	6488	2.0	1.2	0.1		
Mining	3607	21967	0.8	2.5	7.5	1600	12262	0.5	2.3	8.5		
Non-food manufacturing	21066	18634	4.5	2.1	-0.5	22436	16669	7.0	3.1	-1.2		
Logistics	30784	39690	6.5	4.5	1.0	26584	27554	8.3	5.2	0.1		
Office services	145665	309167	30.9	35.1	3.1	82279	167750	25.8	31.6	2.9		
Money management	49105	77633	10.4	8.8	1.8	26709	42631	8.4	8.0	1.9		
Construction	28736	62093	6.1	7.1	3.1	18671	34095	5.9	6.4	2.4		
Distribution	59984	76175	12.7	8.7	1.0	48892	53453	15.3	10.1	0.4		
Convivial services	45707	78895	9.7	9.0	2.2	31606	53862	9.9	10.2	2.2		
Area services	79817	185863	16.9	21.1	3.4	53638	115726	16.8	21.8	3.1		
TOTAL	471785	879984	100	100	2.5	318770	530488	100	100	2.1		

	Brisbane Inner: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	268	573	1.7	1.1	3.1	243	389	2.3	1.2	1.9		
Mining	284	1449	1.8	2.8	6.7	128	803	1.2	2.6	7.6		
Non-food manufacturing	589	798	3.7	1.6	1.2	649	779	6.1	2.5	0.7		
Logistics	1090	2661	6.8	5.2	3.6	903	1894	8.4	6.1	3.0		
Office services	6037	21976	37.5	43.2	5.3	3551	12706	33.2	40.8	5.2		
Money management	1600	4643	9.9	9.1	4.4	886	2690	8.3	8.6	4.5		
Construction	1160	3153	7.2	6.2	4.1	766	1837	7.1	5.9	3.6		
Distribution	1520	2684	9.5	5.3	2.3	1236	1917	11.5	6.2	1.8		
Convivial services	866	2743	5.4	5.4	4.7	617	1857	5.8	6.0	4.5		
Area services	2665	10242	16.6	20.1	5.5	1731	6283	16.2	20.2	5.3		
TOTAL	16079	50922	100	100	4.7	10710	31155	100	100	4.4		

BRISBANE SOUTH EAST

Includes the southern shore of Moreton Bay from Wynnum to Redland, extending inland to Mt Gravatt and Beenleigh.

Classified as outer metropolitan. Nearly all within the Brisbane metropolitan area.

Population 1994 ('000)	400
Population 2019 ('000)	608
Rate of population growth 1994-2019 % a year	1.7

Household groups: Percentage poor and affluent, Census 2016								
Group '000 Poor Affluent								
Non-family	43	13	5					
Single parent	22	18	2					
Couple, children	58	5	9					
Couple only	51	6	12					
TOTAL	175	9	8					
Indigenous	5	16	3					

Brisbane South East: Gross value added											
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	538	1135	5.1	4.6	3.0						
Mining	83	225	0.8	0.9	4.1						
Non-food manufacturing	1605	2261	15.3	9.1	1.4						
Logistics	982	2748	9.4	11.0	4.2						
Office services	1169	3965	11.2	15.9	5.0						
Money management	898	2449	8.6	9.8	4.1						
Construction	1299	2813	12.4	11.3	3.1						
Distribution	1838	3444	17.6	13.8	2.5						
Convivial services	530	1218	5.1	4.9	3.4						
Area services	1530	4684	14.6	18.8	4.6						
TOTAL	10474	24943	100	100	3.5						

	Brisbane South East: Hours worked												
		Pla	ce-of-wo	rk			Usua	l resider	ce				
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019			
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)			
Agriculture	11884	15010	4.9	3.8	0.9	14598	15773	4.5	3.1	0.3			
Mining	507	2460	0.2	0.6	6.5	967	7051	0.3	1.4	8.3			
Non-food manufacturing	27974	27681	11.5	7.0	0.0	37076	33168	11.4	6.6	-0.4			
Logistics	22111	25553	9.1	6.5	0.6	32649	36393	10.0	7.2	0.4			
Office services	25183	51008	10.4	12.9	2.9	48525	92847	14.9	18.5	2.6			
Money management	12415	17836	5.1	4.5	1.5	20545	27212	6.3	5.4	1.1			
Construction	25457	54851	10.5	13.9	3.1	32049	60398	9.9	12.0	2.6			
Distribution	61192	77580	25.2	19.6	1.0	68309	84091	21.0	16.8	0.8			
Convivial services	20455	33885	8.4	8.6	2.0	26005	41160	8.0	8.2	1.9			
Area services	35214	89120	14.5	22.6	3.8	44500	103895	13.7	20.7	3.4			
TOTAL	242393	394984	100	100	2.0	325224	501988	100	100	1.8			

	Brisbane South East: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	414	721	6.1	4.0	2.2	521	787	5.4	3.2	1.7		
Mining	51	112	0.8	0.6	3.2	85	409	0.9	1.6	6.5		
Non-food manufacturing	728	1117	10.7	6.2	1.7	964	1416	9.9	5.7	1.6		
Logistics	650	1475	9.6	8.1	3.3	1005	2176	10.4	8.8	3.1		
Office services	860	3329	12.6	18.4	5.6	1827	6192	18.8	24.9	5.0		
Money management	347	928	5.1	5.1	4.0	628	1504	6.5	6.1	3.6		
Construction	981	2546	14.4	14.1	3.9	1234	2908	12.7	11.7	3.5		
Distribution	1377	2467	20.3	13.6	2.4	1567	2788	16.2	11.2	2.3		
Convivial services	347	1099	5.1	6.1	4.7	454	1360	4.7	5.5	4.5		
Area services	1046	4318	15.4	23.8	5.8	1416	5297	14.6	21.3	5.4		
TOTAL	6802	18110	100	100	4.0	9703	24838	100	100	3.8		

BRISBANE SOUTH WEST

Adjoining Brisbane inner, includes Inala and Browns Plains and extends west to the urban fringe on the other side of Ipswich and Springfield.

Classified as outer metropolitan. Nearly all within the Brisbane metropolitan area.

Population 1994 ('000)	320
Population 2019 ('000)	565
Rate of population growth 1994-2019 % a year	2.3

Household groups: Percentage poor and affluent, Census 2016										
Group '000 Poor Affluent										
Non-family	33	12	5							
Single parent	20	20	1							
Couple, children	55	6	8							
Couple only	40	6	11							
TOTAL	148	9	7							
Indigenous	5	17	2							

	Brisk	oane South West:	Gross value adde	d							
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	555	1294	5.8	5.3	3.4						
Mining	62	276	0.6	1.1	6.2						
Non-food manufacturing	2045	3114	21.3	12.7	1.7						
Logistics	1402	3814	14.6	15.5	4.1						
Office services	1109	3316	11.5	13.5	4.5						
Money management	476	1546	5.0	6.3	4.8						
Construction	915	2886	9.5	11.8	4.7						
Distribution	1430	3541	14.9	14.4	3.7						
Convivial services	319	870	3.3	3.5	4.1						
Area services	1296	3899	13.5	15.9	4.5						
TOTAL	9608	24556	100	100	3.8						

	Brisbane South West: Hours worked												
		Pla	ce-of-wo	rk		Usual residence							
	1994 ('000	94 ('000 2019 ('000 1994 2019 1994-201				1994 ('000	2019 ('000	1994	2019	1994-2019			
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)			
Agriculture	12396	17772	5.3	4.7	1.5	11258	17212	4.5	3.9	1.7			
Mining	690	2190	0.3	0.6	4.7	1235	5053	0.5	1.1	5.8			
Non-food manufacturing	47093	45908	20.3	12.1	-0.1	35250	34722	14.0	7.8	-0.1			
Logistics	30900	39667	13.3	10.4	1.0	23252	32607	9.2	7.3	1.4			
Office services	19502	40382	8.4	10.6	3.0	40851	84707	16.2	19.1	3.0			
Money management	6954	11406	3.0	3.0	2.0	13385	21307	5.3	4.8	1.9			
Construction	18292	42214	7.9	11.1	3.4	19465	42567	7.7	9.6	3.2			
Distribution	53046	82437	22.9	21.7	1.8	50586	77872	20.1	17.5	1.7			
Convivial services	13167	25591	5.7	6.7	2.7	18690	35718	7.4	8.0	2.6			
Area services	30052	72767	12.9	19.1	3.6	37808	92597	15.0	20.8	3.6			
TOTAL	232091	380333	100	100	2.0	251779	444362	100	100	2.3			

	Brisbane South West: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	409	817	6.5	4.8	2.8	374	802	5.1	3.7	3.1		
Mining	36	137	0.6	0.8	5.5	75	465	1.0	2.2	7.6		
Non-food manufacturing	1167	1882	18.4	11.1	1.9	858	1404	11.8	6.5	2.0		
Logistics	932	2097	14.7	12.4	3.3	714	1787	9.8	8.3	3.7		
Office services	716	2570	11.3	15.2	5.2	1639	5741	22.5	26.6	5.1		
Money management	202	585	3.2	3.5	4.3	393	1148	5.4	5.3	4.4		
Construction	662	1944	10.5	11.5	4.4	691	1991	9.5	9.2	4.3		
Distribution	1060	2525	16.7	14.9	3.5	1049	2435	14.4	11.3	3.4		
Convivial services	211	777	3.3	4.6	5.4	313	1160	4.3	5.4	5.4		
Area services	936	3576	14.8	21.1	5.5	1173	4682	16.1	21.7	5.7		
TOTAL	6331	16909	100	100	4.0	7278	21616	100	100	4.5		

BRISBANE NORTH

Includes Bald Hills, Nundah, Sandgate, the Redcliffe Peninsula and Caboolture; excludes Bribie Island and the hills round Dayboro'.

Classified as outer metropolitan. Nearly all within the Brisbane metropolitan area.

Population 1994 ('000)	308
Population 2019 ('000)	576
Rate of population growth 1994-2019 % a year	2.5

Household groups: Percentage poor and affluent, Census 2016										
Group '000 Poor Affluent										
Non-family	41	12	5							
Single parent	20	17	2							
Couple, children	55	4	8							
Couple only	48	6	11							
TOTAL	164	8	7							
Indigenous	6	15	3							

	Brisbane North: Gross value added									
			Place-of-work							
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	329	656	3.5	2.6	2.8					
Mining	38	196	0.4	0.8	6.8					
Non-food manufacturing	1599	2327	17.0	9.3	1.5					
Logistics	1262	4461	13.4	17.9	5.2					
Office services	1230	3833	13.0	15.4	4.7					
Money management	534	1661	5.7	6.7	4.6					
Construction	1167	3385	12.4	13.6	4.4					
Distribution	1645	3427	17.4	13.7	3.0					
Convivial services	405	1030	4.3	4.1	3.8					
Area services	1221	3990	12.9	16.0	4.9					
TOTAL	9431	24967	100	100	4.0					

	Brisbane North: Hours worked												
		Pla	ce-of-wo	rk			Usua	l resider	ice				
	1994 ('000	1994 ('000 2019 ('000 1994 2019 <mark>1994-201</mark>				1994 ('000	2019 ('000	1994	2019	1994-2019			
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)			
Agriculture	8249	9361	3.9	2.5	0.5	8976	10740	3.5	2.2	0.7			
Mining	291	2021	0.1	0.5	8.1	644	7917	0.3	1.6	10.6			
Non-food manufacturing	33641	33620	15.9	9.1	0.0	30741	34486	12.0	7.1	0.5			
Logistics	27389	37978	13.0	10.3	1.3	25527	35211	9.9	7.3	1.3			
Office services	18646	41212	8.8	11.2	3.2	40618	91676	15.8	18.9	3.3			
Money management	7533	12708	3.6	3.4	2.1	15315	25680	6.0	5.3	2.1			
Construction	22840	53440	10.8	14.5	3.5	25526	62167	9.9	12.8	3.6			
Distribution	50180	75846	23.8	20.5	1.7	52763	80191	20.6	16.5	1.7			
Convivial services	15331	29166	7.3	7.9	2.6	19439	35398	7.6	7.3	2.4			
Area services	27065	73954	12.8	20.0	4.1	37138	101577	14.5	20.9	4.1			
TOTAL	211165	369305	100	100	2.3	256686	485044	100	100	2.6			

	Brisbane North: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	1994 2019 1994 2019 1994-2019					2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	287	472	4.6	2.7	2.0	308	507	4.0	2.2	2.0		
Mining	23	99	0.4	0.6	6.1	47	430	0.6	1.9	9.3		
Non-food manufacturing	875	1395	14.2	8.1	1.9	780	1328	10.2	5.7	2.2		
Logistics	875	2345	14.2	13.6	4.0	802	2078	10.5	9.0	3.9		
Office services	655	2698	10.6	15.6	5.8	1488	5947	19.5	25.6	5.7		
Money management	238	698	3.9	4.0	4.4	469	1368	6.1	5.9	4.4		
Construction	869	2548	14.1	14.8	4.4	962	2862	12.6	12.3	4.5		
Distribution	1215	2451	19.7	14.2	2.8	1237	2511	16.2	10.8	2.9		
Convivial services	268	906	4.3	5.2	5.0	341	1093	4.5	4.7	4.8		
Area services	863	3657	14.0	21.2	5.9	1200	5075	15.7	21.9	5.9		
TOTAL	6168	17270	100	100	4.2	7633	23199	100	100	4.5		

GOLD COAST

Comprises the Gold Coast beaches and related coastal developments south to the NSW border.

Classified as peri-metropolitan (urban). Comprises the urban Gold Coast.

Population 1994 ('000)	270
Population 2019 ('000)	577
Rate of population growth 1994-2019 % a year	3.1

Household groups: Percentage poor and affluent, Census 2016											
Group '000 Poor Affluent											
Non-family	49	12	6								
Single parent 20 16											
Couple, children	47	5	8								
Couple only	50	6	11								
TOTAL 165 9 8											
Indigenous	4	12	4								

Gold Coast: Gross value added												
	Place-of-work											
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)							
Agriculture	325	738	3.2	2.4	3.3							
Mining	36	409	0.4	1.3	10.2							
Non-food manufacturing	969	2154	9.6	7.1	3.2							
Logistics	510	2252	5.1	7.4	6.1							
Office services	1404	5577	14.0	18.4	5.7							
Money management	1500	4000	14.9	13.2	4.0							
Construction	1502	3796	15.0	12.5	3.8							
Distribution	1516	3965	15.1	13.1	3.9							
Convivial services	1002	2577	10.0	8.5	3.9							
Area services	1281	4868	12.8	16.0	5.5							
TOTAL	10042	30333	100	100	4.5							

	Gold Coast: Hours worked												
		Pla	ice-of-wo	rk		Usual residence							
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019			
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)			
Agriculture	6490	9271	2.8	2.0	1.4	5589	7904	2.6	1.6	1.4			
Mining	154	1825	0.1	0.4	10.4	226	5405	0.1	1.1	13.5			
Non-food manufacturing	23493	32505	10.0	6.9	1.3	19033	29755	8.8	6.2	1.8			
Logistics	13511	21911	5.8	4.6	2.0	12927	23231	6.0	4.8	2.4			
Office services	27494	67022	11.8	14.1	3.6	26242	73258	12.2	15.2	4.2			
Money management	19670	26595	8.4	5.6	1.2	18725	27862	8.7	5.8	1.6			
Construction	32217	67527	13.8	14.3	3.0	29263	66804	13.6	13.8	3.4			
Distribution	49385	87310	21.1	18.4	2.3	46279	85713	21.5	17.8	2.5			
Convivial services	34299	68218	14.7	14.4	2.8	32082	67890	14.9	14.1	3.0			
Area services	27172	91621	11.6	19.3	5.0	24746	94900	11.5	19.7	5.5			
TOTAL	233886	473804	100	100	2.9	215112	482722	100	100	3.3			

Gold Coast: Local income												
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	249	451	3.6	2.1	2.4	220	408	3.4	1.8	2.5		
Mining	13	78	0.2	0.4	7.3	20	234	0.3	1.0	10.3		
Non-food manufacturing	616	1329	9.0	6.1	3.1	515	1197	7.9	5.3	3.4		
Logistics	374	1252	5.4	5.7	5.0	380	1344	5.9	6.0	5.2		
Office services	1060	4843	15.4	22.1	6.3	1041	5214	16.0	23.1	6.7		
Money management	515	1447	7.5	6.6	4.2	494	1504	7.6	6.7	4.6		
Construction	1309	3132	19.1	14.3	3.6	1223	3145	18.8	14.0	3.9		
Distribution	1160	2820	16.9	12.9	3.6	1111	2764	17.1	12.3	3.7		
Convivial services	686	2120	10.0	9.7	4.6	644	2120	9.9	9.4	4.9		
Area services	888	4438	12.9	20.3	6.6	843	4614	13.0	20.5	7.0		
TOTAL	6869	21910	100	100	4.7	6492	22544	100	100	5.1		

SUNSHINE COAST

Comprises the coast from Bribie Island to north of Noosa, inland to Maleny and the upper Mary River.

Classified as peri-metropolitan (urban). In 2016 80 per cent of the region's population lived in the Sunshine Coast urban area with a further 5 per cent in Nambour.

Population 1994 ('000)	206
Population 2019 ('000)	417
Rate of population growth 1994-2019 % a year	2.9

Household groups: Percentage poor and affluent, Census 2016											
Group '000 Poor Affluent											
Non-family	36	13	4								
Single parent	14	18	1								
Couple, children	32	5	6								
Couple only	44	7	9								
TOTAL	126	10	6								
Indigenous	3	15	2								

Sunshine Coast: Gross value added												
	Place-of-work											
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)							
Agriculture	370	600	6.9	3.6	1.9							
Mining	14	217	0.3	1.3	11.7							
Non-food manufacturing	363	751	6.8	4.5	3.0							
Logistics	219	844	4.1	5.1	5.6							
Office services	718	3113	13.4	18.6	6.0							
Money management	627	2138	11.7	12.8	5.0							
Construction	1010	2264	18.9	13.6	3.3							
Distribution	810	2034	15.2	12.2	3.8							
Convivial services	430	1177	8.0	7.0	4.1							
Area services	783	3572	14.6	21.4	6.3							
TOTAL	5343	16709	100	100	4.7							

Sunshine Coast: Hours worked												
		Pla	ice-of-wo	rk			Usua	l residen	ice			
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	9855	9442	8.0	3.5	-0.2	10006	9438	7.5	3.0	-0.2		
Mining	68	1245	0.1	0.5	12.3	213	9952	0.2	3.1	16.6		
Non-food manufacturing	8581	11195	7.0	4.1	1.1	9812	13295	7.4	4.2	1.2		
Logistics	5812	8225	4.7	3.0	1.4	7163	12653	5.4	4.0	2.3		
Office services	12825	38423	10.5	14.2	4.5	14578	46418	11.0	14.7	4.7		
Money management	7760	14689	6.3	5.4	2.6	8132	15927	6.1	5.0	2.7		
Construction	19781	41147	16.2	15.2	3.0	21990	47590	16.5	15.1	3.1		
Distribution	25697	46976	21.0	17.4	2.4	27424	51008	20.6	16.1	2.5		
Convivial services	15052	32509	12.3	12.0	3.1	15596	35217	11.7	11.1	3.3		
Area services	17016	66639	13.9	24.6	5.6	18117	74698	13.6	23.6	5.8		
TOTAL	122447	270489	100	100	3.2	133031	316196	100	100	3.5		

Sunshine Coast: Local income												
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	362	498	9.8	4.1	1.3	377	498	9.1	3.4	1.1		
Mining	8	56	0.2	0.5	8.2	20	420	0.5	2.8	13.0		
Non-food manufacturing	226	438	6.1	3.6	2.7	269	549	6.5	3.7	2.9		
Logistics	162	482	4.4	3.9	4.5	216	781	5.2	5.3	5.3		
Office services	481	2525	13.0	20.6	6.9	544	3052	13.1	20.7	7.1		
Money management	223	823	6.0	6.7	5.4	233	904	5.6	6.1	5.6		
Construction	825	1744	22.2	14.2	3.0	931	2073	22.4	14.0	3.3		
Distribution	606	1444	16.3	11.8	3.5	670	1606	16.1	10.9	3.6		
Convivial services	288	974	7.8	7.9	5.0	299	1064	7.2	7.2	5.2		
Area services	529	3285	14.3	26.8	7.6	595	3815	14.3	25.8	7.7		
TOTAL	3710	12269	100	100	4.9	4154	14762	100	100	5.2		

INLAND SOUTH EAST QUEENSLAND

Comprises an arc stretching from Mt Tambourine and Mudgeeraba through Beaudesert and the Scenic Rim to the Lockyer Valley, Kilcoy and Woodford. The western boundary lies at the foot of the range below the Darling Downs.

Classified as peri-metropolitan. The region has no large towns. In 2016 Gatton and Beaudesert were its largest urban areas, each with 3 cent of the region's population.

Population 1994 ('000)	122
Population 2019 ('000)	233
Rate of population growth 1994-2019 % a year	2.6

Household groups: Percentage poor and affluent, Census 2016											
Group '000 Poor Affluent											
Non-family	13	14	3								
Single parent	Single parent 7 21										
Couple, children	20	5	5								
Couple only	Couple only 19 7 8										
TOTAL	59	10	5								
Indigenous	2	16	2								

Inland South East Queensland: Gross value added										
			Place-of-work							
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	535	1048	16.5	15.0	2.7					
Mining	30	153	0.9	2.2	6.7					
Non-food manufacturing	182	222	5.6	3.2	0.8					
Logistics	83	224	2.6	3.2	4.0					
Office services	1037	1657	32.0	23.8	1.9					
Money management	134	338	4.1	4.9	3.8					
Construction	383	954	11.8	13.7	3.7					
Distribution	331	830	10.2	11.9	3.8					
Convivial services	119	332	3.7	4.8	4.2					
Area services	410	1206	12.6	17.3	4.4					
TOTAL	3243	6966	100	100	3.1					

		Inland	South E	ast Qu	eensland: Ho	urs worked				
		Pla	ice-of-wo	rk			Usua	l residen	ice	
	1994 ('000	1994 ('000 2019 ('000 1994 2019 1994-2019					2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	14641	16744	20.9	15.6	0.5	14358	17165	14.7	9.0	0.7
Mining	278	615	0.4	0.6	3.2	444	2562	0.5	1.3	7.3
Non-food manufacturing	4519	3378	6.5	3.1	-1.2	10480	11982	10.8	6.3	0.5
Logistics	2896	2532	4.1	2.4	-0.5	6959	9761	7.1	5.1	1.4
Office services	10573	15451	15.1	14.4	1.5	11474	24865	11.8	13.1	3.1
Money management	1828	2188	2.6	2.0	0.7	3768	6092	3.9	3.2	1.9
Construction	8951	16595	12.8	15.4	2.5	11789	29523	12.1	15.6	3.7
Distribution	12231	18652	17.5	17.3	1.7	19499	37270	20.0	19.6	2.6
Convivial services	4672	9192	6.7	8.5	2.7	6500	15133	6.7	8.0	3.4
Area services	9376	22256	13.4	20.7	3.5	12102	35503	12.4	18.7	4.4
TOTAL	69967	107605	100	100	1.7	97374	189856	100	100	2.7

	Inland South East Queensland: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	507	796	23.5	15.5	1.8	481	782	17.6	9.3	2.0		
Mining	16	52	0.7	1.0	4.9	25	167	0.9	2.0	7.9		
Non-food manufacturing	113	128	5.2	2.5	0.5	248	458	9.0	5.4	2.5		
Logistics	65	132	3.0	2.6	2.9	188	500	6.9	5.9	4.0		
Office services	496	1158	23.0	22.5	3.5	426	1555	15.5	18.5	5.3		
Money management	47	117	2.2	2.3	3.8	105	310	3.8	3.7	4.4		
Construction	328	743	15.2	14.4	3.3	416	1261	15.2	15.0	4.5		
Distribution	237	612	11.0	11.9	3.9	382	1177	13.9	14.0	4.6		
Convivial services	80	289	3.7	5.6	5.2	112	478	4.1	5.7	6.0		
Area services	271	1125	12.5	21.8	5.9	358	1737	13.1	20.6	6.5		
TOTAL	2160	5152	100	100	3.5	2740	8424	100	100	4.6		

DARLING DOWNS

Includes Toowoomba, the Darling Downs the Granite Belt and Kingaroy. The southern boundary of the region is the NSW border, its western boundary lies where arable country gives way to pastoral, and its northern boundary marks, more or less, the limit of the hinterland of Toowoomba.

Classified as country (rural). Its four largest urban areas (with percentage of the 2016 regional population) are Toowoomba, 37; Warwick, 5; Dalby, 5 and Kingaroy 4. Other well-known centres include Stanthorpe, Goondiwindi and Miles.

Population 1994 ('000)	216
Population 2019 ('000)	274
Rate of population growth 1994-2019 % a year	0.9

Household groups: Percentage poor and affluent, Census 2016									
Group	'000	Poor	Affluent						
Non-family	26	13	4						
Single parent	9	23	1						
Couple, children	23	7	5						
Couple only	27	7	8						
TOTAL	85	11	5						
Indigenous	4	21	2						

	Darling Downs: Gross value added										
			Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	1471	2161	21.0	12.2	1.6						
Mining	371	2977	5.3	16.9	8.7						
Non-food manufacturing	372	692	5.3	3.9	2.5						
Logistics	417	721	6.0	4.1	2.2						
Office services	1362	3068	19.4	17.4	3.3						
Money management	443	1247	6.3	7.1	4.2						
Construction	582	1773	8.3	10.0	4.6						
Distribution	754	1592	10.8	9.0	3.0						
Convivial services	258	686	3.7	3.9	4.0						
Area services	983	2736	14.0	15.5	4.2						
TOTAL	7014	17653	100	100	3.8						

			Darlin	g Down	s: Hours wor	ked				
		Pla	ce-of-wo	rk			Usua	l residen	ice	
	1994 ('000	1994 ('000 2019 ('000 1994 2019 1994-2019					2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	39973	34078	24.5	14.8	-0.6	40295	34103	24.8	15.5	-0.7
Mining	1151	8108	0.7	3.5	8.1	854	5421	0.5	2.5	7.7
Non-food manufacturing	10508	11696	6.4	5.1	0.4	10000	11101	6.1	5.0	0.4
Logistics	10521	8409	6.4	3.7	-0.9	10501	8626	6.5	3.9	-0.8
Office services	19495	33783	11.9	14.7	2.2	19320	32119	11.9	14.6	2.1
Money management	5708	7094	3.5	3.1	0.9	5543	6533	3.4	3.0	0.7
Construction	10111	22406	6.2	9.7	3.2	9642	18928	5.9	8.6	2.7
Distribution	30063	35672	18.4	15.5	0.7	30449	35457	18.7	16.1	0.6
Convivial services	10400	18299	6.4	8.0	2.3	10758	18586	6.6	8.4	2.2
Area services	25258	50350	15.5	21.9	2.8	25325	49605	15.6	22.5	2.7
TOTAL	163188	229893	100	100	1.4	162687	220480	100	100	1.2

	Darling Downs: Local income										
			Place-of-v	work				Usual resid	lence		
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019	
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	
Agriculture	1266	1584	28.3	15.0	0.9	1281	1598	28.9	15.9	0.9	
Mining	55	427	1.2	4.0	8.5	41	257	0.9	2.6	7.6	
Non-food manufacturing	246	413	5.5	3.9	2.1	235	393	5.3	3.9	2.1	
Logistics	289	433	6.5	4.1	1.6	277	441	6.2	4.4	1.9	
Office services	727	2049	16.3	19.4	4.2	726	1977	16.4	19.7	4.1	
Money management	169	400	3.8	3.8	3.5	165	359	3.7	3.6	3.2	
Construction	335	1044	7.5	9.9	4.7	317	863	7.2	8.6	4.1	
Distribution	570	1128	12.7	10.7	2.8	574	1106	12.9	11.0	2.7	
Convivial services	172	576	3.9	5.4	4.9	176	576	4.0	5.7	4.8	
Area services	641	2511	14.3	23.8	5.6	640	2476	14.4	24.7	5.6	
TOTAL	4470	10565	100	100	3.5	4432	10045	100	100	3.3	

WIDE BAY

Includes Fraser Island and the Wide Bay coast to north of Bundaberg, and stretches inland to Gayndah and Monto.

Classified country (rural). Its three largest urban areas (with percentage of the 2016 regional population) are Bundaberg, 26; Hervey Bay, 20 and Maryborough, 8.

Population 1994 ('000)	189
Population 2019 ('000)	274
Rate of population growth 1994-2019 % a year	1.5

Household groups: Percentage poor and affluent, Census 2016									
Group '000 Poor Affluent									
Non-family	27	17	2						
Single parent	10	27	1						
Couple, children	19	10	3						
Couple only	31	10	4						
TOTAL	89	14	3						
Indigenous	5	27	1						

	Wide Bay: Gross value added										
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	879	1265	19.1	13.0	1.5						
Mining	53	186	1.1	1.9	5.2						
Non-food manufacturing	372	638	8.1	6.5	2.2						
Logistics	245	462	5.3	4.7	2.6						
Office services	655	1527	14.2	15.6	3.4						
Money management	332	589	7.2	6.0	2.3						
Construction	585	1156	12.7	11.8	2.8						
Distribution	555	1225	12.1	12.6	3.2						
Convivial services	213	465	4.6	4.8	3.2						
Area services	713	2246	15.5	23.0	4.7						
TOTAL	4602	9759	100	100	3.1						

	Wide Bay: Hours worked											
		Pla	ce-of-wo	rk			Usua	l residen	ice			
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	26852	19707	22.2	12.2	-1.2	26794	19640	21.9	11.4	-1.2		
Mining	283	1516	0.2	0.9	7.0	390	4593	0.3	2.7	10.4		
Non-food manufacturing	10790	9674	8.9	6.0	-0.4	10795	9841	8.8	5.7	-0.4		
Logistics	6729	5345	5.6	3.3	-0.9	7004	6309	5.7	3.7	-0.4		
Office services	12230	20423	10.1	12.6	2.1	12495	22646	10.2	13.2	2.4		
Money management	4699	4117	3.9	2.5	-0.5	4804	4369	3.9	2.5	-0.4		
Construction	9695	15527	8.0	9.6	1.9	10058	16238	8.2	9.4	1.9		
Distribution	22225	30086	18.4	18.6	1.2	22781	32914	18.6	19.1	1.5		
Convivial services	9040	13997	7.5	8.7	1.8	9143	14220	7.5	8.3	1.8		
Area services	18562	41167	15.3	25.5	3.2	18093	41372	14.8	24.0	3.4		
TOTAL	121105	161560	100	100	1.2	122357	172141	100	100	1.4		

Wide Bay: Local income										
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	786	881	25.5	12.9	0.5	778	880	25.3	12.1	0.5
Mining	26	51	0.8	0.7	2.8	32	175	1.0	2.4	7.1
Non-food manufacturing	238	369	7.7	5.4	1.8	237	374	7.7	5.2	1.8
Logistics	178	263	5.8	3.8	1.6	183	310	6.0	4.3	2.1
Office services	374	1131	12.1	16.5	4.5	385	1243	12.5	17.1	4.8
Money management	119	196	3.9	2.9	2.0	121	205	3.9	2.8	2.1
Construction	322	633	10.5	9.3	2.7	328	662	10.7	9.1	2.8
Distribution	414	867	13.4	12.7	3.0	422	942	13.7	13.0	3.3
Convivial services	141	384	4.6	5.6	4.1	142	385	4.6	5.3	4.1
Area services	481	2061	15.6	30.1	6.0	453	2079	14.7	28.7	6.3
TOTAL	3079	6836	100	100	3.2	3081	7255	100	100	3.5

CENTRAL QUEENSLAND

Stretches from the Capricorn coast inland to the Peak Downs and the downs around Biloela, including the coal mines in the southern half of the Bowen Basin.

Classified as country (rural) with coal mining. Its four largest urban areas (with percentage of the 2016 regional population) are Rockhampton, 27; Gladstone, 15; Yeppoon, 7 and Emerald, 6.

Population 1994 ('000)	176
Population 2019 ('000)	226
Rate of population growth 1994-2019 % a year	1.0

Household groups: Percentage poor and affluent, Census 2016									
Group '000 Poor Affluent									
Non-family	19	15	8						
Single parent	7	25	2						
Couple, children	20	5	8						
Couple only	20	7	14						
TOTAL	66	11	9						
Indigenous	4	20	5						

Central Queensland: Gross value added										
		Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	601	1335	7.0	6.1	3.2					
Mining	2685	9665	31.5	44.1	5.3					
Non-food manufacturing	597	901	7.0	4.1	1.7					
Logistics	552	1158	6.5	5.3	3.0					
Office services	1427	2525	16.7	11.5	2.3					
Money management	351	631	4.1	2.9	2.4					
Construction	688	1583	8.1	7.2	3.4					
Distribution	615	1327	7.2	6.1	3.1					
Convivial services	270	854	3.2	3.9	4.7					
Area services	749	1953	8.8	8.9	3.9					
TOTAL	8536	21932	100	100	3.8					

Central Queensland: Hours worked										
		Pla	ce-of-wo	rk		Usual residence				
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	17532	20840	12.4	10.9	0.7	18290	24450	13.0	12.9	1.2
Mining	8778	22899	6.2	12.0	3.9	8435	19277	6.0	10.2	3.4
Non-food manufacturing	13371	11430	9.4	6.0	-0.6	13041	11388	9.3	6.0	-0.5
Logistics	11765	10573	8.3	5.5	-0.4	11576	10590	8.3	5.6	-0.4
Office services	17741	24554	12.5	12.8	1.3	17291	23764	12.3	12.5	1.3
Money management	4974	4567	3.5	2.4	-0.3	4949	4491	3.5	2.4	-0.4
Construction	12926	22202	9.1	11.6	2.2	11967	22372	8.5	11.8	2.5
Distribution	24023	27759	17.0	14.5	0.6	24082	27378	17.2	14.4	0.5
Convivial services	11466	13226	8.1	6.9	0.6	11673	12889	8.3	6.8	0.4
Area services	19033	33434	13.4	17.5	2.3	18970	33155	13.5	17.5	2.3
TOTAL	141608	191483	100	100	1.2	140274	189753	100	100	1.2

	Central Queensland: Local income									
			Place-of-v	work		Usual residence				
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	525	955	13.4	9.8	2.4	549	1119	14.3	11.7	2.9
Mining	357	1064	9.1	10.9	4.5	332	876	8.6	9.2	4.0
Non-food manufacturing	317	579	8.1	6.0	2.4	308	582	8.0	6.1	2.6
Logistics	384	668	9.8	6.9	2.2	374	662	9.7	6.9	2.3
Office services	633	1597	16.2	16.4	3.8	618	1545	16.1	16.1	3.7
Money management	147	244	3.8	2.5	2.1	145	240	3.8	2.5	2.0
Construction	404	1101	10.3	11.3	4.1	374	1108	9.7	11.6	4.4
Distribution	457	952	11.7	9.8	3.0	456	940	11.9	9.8	2.9
Convivial services	180	743	4.6	7.6	5.8	183	720	4.8	7.5	5.6
Area services	500	1816	12.8	18.7	5.3	501	1783	13.0	18.6	5.2
TOTAL	3903	9720	100	100	3.7	3840	9575	100	100	3.7

MACKAY

Includes the coast from Hay Point to Abbot Point (both of them coal ports) and stretches inland to the coal mines of the northern Bowen basin. Includes the sugar country around Mackay and in the Burdekin Delta.

Classified as country (rural) with coal mining. Its three largest urban areas (with percentage of the 2016 regional population) are Mackay, 40; Bowen, 5 and Ayr, 4.

Population 1994 ('000)	147
Population 2019 ('000)	190
Rate of population growth 1994-2019 % a year	1.0

Household groups: Percentage poor and affluent, Census 2016										
Group	'000	Poor	Affluent							
Non-family	16	14	8							
Single parent	6	24	2							
Couple, children	16	4	9							
Couple only	17	7	14							
TOTAL	55	10	9							
Indigenous	3	19	5							

Mackay: Gross value added										
		Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	1043	1433	13.5	5.2	1.3					
Mining	3002	18411	39.0	67.1	7.5					
Non-food manufacturing	283	568	3.7	2.1	2.8					
Logistics	504	1125	6.5	4.1	3.3					
Office services	641	1422	8.3	5.2	3.2					
Money management	334	526	4.3	1.9	1.8					
Construction	477	1023	6.2	3.7	3.1					
Distribution	567	1117	7.4	4.1	2.8					
Convivial services	296	545	3.8	2.0	2.5					
Area services	554	1271	7.2	4.6	3.4					
TOTAL	7701	27442	100	100	5.2					

Mackay: Hours worked										
		Pla	ce-of-wo	rk			Usua	l residen	ce	
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	26895	18724	21.2	10.1	-1.4	8977	6353	8.4	3.9	-1.4
Mining	11470	41371	9.0	22.3	5.3	10503	29806	9.8	18.4	4.3
Non-food manufacturing	6343	7072	5.0	3.8	0.4	5756	7113	5.4	4.4	0.9
Logistics	10851	10381	8.6	5.6	-0.2	11131	11207	10.4	6.9	0.0
Office services	10363	17431	8.2	9.4	2.1	10365	17881	9.7	11.0	2.2
Money management	4348	4001	3.4	2.2	-0.3	4297	4134	4.0	2.6	-0.2
Construction	9678	21400	7.6	11.5	3.2	9154	20584	8.5	12.7	3.3
Distribution	21158	25171	16.7	13.5	0.7	21140	25809	19.7	15.9	0.8
Convivial services	12353	15322	9.7	8.2	0.9	12307	15130	11.5	9.3	0.8
Area services	13414	25005	10.6	13.5	2.5	13533	23983	12.6	14.8	2.3
TOTAL	126873	185879	100	100	1.5	107161	162001	100	100	1.7

	Mackay: Local income									
			Place-of-v	work		Usual residence				
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	902	937	24.9	11.0	0.2	888	869	25.1	11.0	-0.1
Mining	399	1915	11.0	22.4	6.5	348	1351	9.9	17.1	5.6
Non-food manufacturing	164	333	4.5	3.9	2.9	150	332	4.2	4.2	3.2
Logistics	347	637	9.6	7.5	2.5	355	685	10.1	8.7	2.7
Office services	351	1152	9.7	13.5	4.9	353	1159	10.0	14.7	4.9
Money management	135	214	3.7	2.5	1.9	135	219	3.8	2.8	2.0
Construction	337	901	9.3	10.6	4.0	317	871	9.0	11.0	4.1
Distribution	427	805	11.8	9.4	2.6	428	822	12.1	10.4	2.6
Convivial services	196	462	5.4	5.4	3.5	195	461	5.5	5.8	3.5
Area services	362	1177	10.0	13.8	4.8	363	1123	10.3	14.2	4.6
TOTAL	3619	8533	100	100	3.5	3532	7892	100	100	3.3

TOWNSVILLE

Includes Townsville and Charters Towers, excludes the Burdekin Delta and the sugar country round Ingham.

Classified as country (urban). In 2016 82 per cent of the population lived in Townsville with Charters Towers accounting for a further 4 per cent.

Population 1994 ('000)	142
Population 2019 ('000)	209
Rate of population growth 1994-2019 % a year	1.6

Household groups: Percentage poor and affluent, Census 2016							
Group	'000	Poor	Affluent				
Non-family	18	14	5				
Single parent	8	22	1				
Couple, children	17	5	7				
Couple only	18	6	11				
TOTAL	61	10	7				
Indigenous	5	23	3				

	Townsville: Gross value added									
		Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	202	304	3.5	2.7	1.7					
Mining	279	509	4.8	4.5	2.4					
Non-food manufacturing	359	525	6.2	4.7	1.5					
Logistics	460	876	7.9	7.8	2.6					
Office services	2036	3306	35.0	29.3	2.0					
Money management	375	783	6.5	6.9	3.0					
Construction	521	1033	9.0	9.2	2.8					
Distribution	598	1089	10.3	9.7	2.4					
Convivial services	255	522	4.4	4.6	2.9					
Area services	726	2319	12.5	20.6	4.8					
TOTAL	5809	11267	100	100	2.7					

	Townsville: Hours worked										
		Pla	ce-of-wo	rk			Usua	l resider	ice		
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019	
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)	
Agriculture	5582	4412	4.9	2.6	-0.9	2980	2811	2.6	1.6	-0.2	
Mining	1728	4485	1.5	2.7	3.9	2430	10172	2.2	5.8	5.9	
Non-food manufacturing	8381	7798	7.3	4.7	-0.3	8287	8327	7.4	4.7	0.0	
Logistics	9954	8790	8.7	5.3	-0.5	10005	9122	8.9	5.2	-0.4	
Office services	24483	34942	21.4	21.0	1.4	24537	35399	21.8	20.2	1.5	
Money management	5352	5451	4.7	3.3	0.1	5446	5737	4.8	3.3	0.2	
Construction	9851	17185	8.6	10.3	2.3	9088	16720	8.1	9.5	2.5	
Distribution	21641	25446	18.9	15.3	0.6	22006	27275	19.5	15.6	0.9	
Convivial services	10358	14649	9.0	8.8	1.4	10529	15334	9.3	8.7	1.5	
Area services	17226	43610	15.0	26.2	3.8	17362	44476	15.4	25.4	3.8	
TOTAL	114556	166767	100	100	1.5	112671	175373	100	100	1.8	

Townsville: Local income										
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	162	198	4.6	2.5	0.8	176	221	4.9	2.7	0.9
Mining	162	157	4.6	2.0	-0.1	215	357	6.0	4.3	2.0
Non-food manufacturing	203	334	5.7	4.3	2.0	197	363	5.5	4.4	2.5
Logistics	319	495	9.0	6.3	1.8	320	517	8.9	6.3	1.9
Office services	1081	2253	30.5	28.8	3.0	1091	2271	30.2	27.6	3.0
Money management	153	272	4.3	3.5	2.3	156	286	4.3	3.5	2.4
Construction	345	776	9.7	9.9	3.3	321	756	8.9	9.2	3.5
Distribution	447	779	12.6	9.9	2.2	453	832	12.5	10.1	2.5
Convivial services	170	440	4.8	5.6	3.9	175	460	4.8	5.6	3.9
Area services	502	2127	14.2	27.2	5.9	508	2173	14.1	26.4	6.0
TOTAL	3545	7831	100	100	3.2	3612	8236	100	100	3.4

CAIRNS

Comprises the coast from a little north of Townsville past Cairns and Port Douglas to the Daintree. Includes Mareeba and the Atherton and Evelyn Tablelands.

Classified as country (rural). Its four largest urban areas (with percentage of the 2016 regional population) are Cairns, 56; Innisfail, 3; Mareeba, 3 and Ingham, 2.

Population 1994 ('000)	185
Population 2019 ('000)	264
Rate of population growth 1994-2019 % a year	1.4

Household groups: Percentage poor and affluent, Census 2016										
Group	Group '000 Poor Affluent									
Non-family	25	15	4							
Single parent	10	22	1							
Couple, children	20	7	5							
Couple only	24	8	9							
TOTAL	79	11	6							
Indigenous	7	23	2							

Cairns: Gross value added									
	Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)				
Agriculture	874	1218	13.5	9.6	1.3				
Mining	72	158	1.1	1.3	3.2				
Non-food manufacturing	307	532	4.7	4.2	2.2				
Logistics	475	1061	7.3	8.4	3.3				
Office services	1228	2602	19.0	20.6	3.0				
Money management	523	1053	8.1	8.3	2.8				
Construction	749	1179	11.6	9.3	1.8				
Distribution	818	1381	12.6	10.9	2.1				
Convivial services	563	950	8.7	7.5	2.1				
Area services	863	2499	13.3	19.8	4.3				
TOTAL	6472	12632	100	100	2.7				

		Pla	ice-of-wo	rk			Usua	l resider	ice	
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	23476	18022	15.7	8.9	-1.1	23742	17087	15.3	8.0	-1.3
Mining	323	1458	0.2	0.7	6.2	1114	6623	0.7	3.1	7.4
Non-food manufacturing	7675	8577	5.1	4.2	0.4	7896	8625	5.1	4.0	0.4
Logistics	11308	10277	7.6	5.1	-0.4	11681	11320	7.5	5.3	-0.1
Office services	19559	29830	13.1	14.7	1.7	19404	32003	12.5	14.9	2.0
Money management	6913	7673	4.6	3.8	0.4	7218	8076	4.7	3.8	0.5
Construction	10256	24459	6.8	12.1	3.5	10564	24856	6.8	11.6	3.5
Distribution	29154	31669	19.5	15.7	0.3	30264	34846	19.6	16.2	0.6
Convivial services	21416	26051	14.3	12.9	0.8	22724	26804	14.7	12.5	0.7
Area services	19667	44265	13.1	21.9	3.3	20132	44521	13.0	20.7	3.2
TOTAL	149747	202281	100	100	1.2	154740	214761	100	100	1.3

			ocal income							
			Place-of-v	work		Usual residence				
	1994	2019	1994	2019	1994-2019	1994 2019 1994 2019 1994-20				1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	814	924	19.1	9.8	0.5	825	880	18.5	8.8	0.3
Mining	35	45	0.8	0.5	1.0	135	225	3.0	2.3	2.1
Non-food manufacturing	193	331	4.5	3.5	2.2	199	335	4.5	3.4	2.1
Logistics	331	543	7.8	5.7	2.0	346	598	7.8	6.0	2.2
Office services	717	1969	16.9	20.8	4.1	703	2081	15.8	20.9	4.4
Money management	209	397	4.9	4.2	2.6	219	416	4.9	4.2	2.6
Construction	376	1171	8.8	12.4	4.7	386	1186	8.7	11.9	4.6
Distribution	619	994	14.6	10.5	1.9	645	1091	14.5	11.0	2.1
Convivial services	376	785	8.8	8.3	3.0	397	809	8.9	8.1	2.9
Area services	586	2291	13.8	24.2	5.6	603	2325	13.5	23.4	5.5
TOTAL	4254	9448	100	100	3.2	4457	9947	100	100	3.3

QUEENSLAND OUTBACK

Comprises pastoral western Queensland, excluding the Bowen Basin with its coal mines. Stretches from the NSW border to the Gulf of Carpentaria and includes the Torres Strait Islands.

Classified as remote. Its three largest urban areas (with percentage of the 2016 regional population) are Mt Isa, 18; Roma, 7 and Charleville, 3. Other towns include Blackall, Barcaldine, Hughenden, Cooktown and Thursday Island.

Population 1994 ('000)	103
Population 2019 ('000)	99
Rate of population growth 1994-2019 % a year	-0.2

Household groups: Percentage poor and affluent, Census 2016								
Group	'000	Poor	Affluent					
Non-family	8	15	9					
Single parent	3	30	2					
Couple, children	7	11	8					
Couple only	8	9	15					
TOTAL 26 14 10								
Indigenous	7	30	3					

Queensland Outback: Gross value added									
	Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)				
Agriculture	1033	1536	21.6	18.8	1.6				
Mining	1587	3001	33.1	36.7	2.6				
Non-food manufacturing	104	188	2.2	2.3	2.4				
Logistics	200	245	4.2	3.0	0.8				
Office services	590	764	12.3	9.3	1.0				
Money management	115	165	2.4	2.0	1.5				
Construction	285	568	5.9	6.9	2.8				
Distribution	272	436	5.7	5.3	1.9				
Convivial services	167	281	3.5	3.4	2.1				
Area services	437	1004	9.1	12.3	3.4				
TOTAL	4790	8189	100	100	2.2				

	Queensland Outback: Hours worked											
		Pla	ce-of-wo	rk		Usual residence						
	1994 ('000	994 ('000 2019 ('000 1994 2019 1994-2019 1					2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	23210	17042	25.0	17.5	-1.2	22648	18447	25.2	21.0	-0.8		
Mining	10815	19150	11.7	19.6	2.3	11139	13166	12.4	15.0	0.7		
Non-food manufacturing	2880	2059	3.1	2.1	-1.3	2283	1534	2.5	1.7	-1.6		
Logistics	5124	2541	5.5	2.6	-2.8	4896	2339	5.4	2.7	-2.9		
Office services	12209	12746	13.2	13.1	0.2	10270	12019	11.4	13.7	0.6		
Money management	1635	1120	1.8	1.1	-1.5	1727	897	1.9	1.0	-2.6		
Construction	5355	8544	5.8	8.8	1.9	4943	6644	5.5	7.6	1.2		
Distribution	11781	9745	12.7	10.0	-0.8	12054	9116	13.4	10.4	-1.1		
Convivial services	7755	7096	8.4	7.3	-0.4	7735	6843	8.6	7.8	-0.5		
Area services	12035	17453	13.0	17.9	1.5	12178	16677	13.6	19.0	1.3		
TOTAL	92800	97495	100	100	0.2	89872	87682	100	100	-0.1		

	Queensland Outback: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	746	748	26.2	17.5	0.0	731	815	26.9	21.4	0.4		
Mining	787	751	27.7	17.6	-0.2	753	523	27.7	13.7	-1.4		
Non-food manufacturing	56	105	2.0	2.5	2.5	40	74	1.5	1.9	2.4		
Logistics	143	144	5.0	3.4	0.0	139	128	5.1	3.4	-0.3		
Office services	336	589	11.8	13.8	2.3	287	538	10.6	14.1	2.6		
Money management	45	59	1.6	1.4	1.1	47	45	1.7	1.2	-0.2		
Construction	135	387	4.7	9.1	4.3	122	302	4.5	7.9	3.7		
Distribution	199	312	7.0	7.3	1.8	205	288	7.5	7.6	1.4		
Convivial services	108	235	3.8	5.5	3.2	108	219	4.0	5.7	2.9		
Area services	289	931	10.2	21.8	4.8	283	879	10.4	23.1	4.6		
TOTAL	2845	4262	100	100	1.6	2716	3813	100	100	1.4		

ADELAIDE INNER

Comprises Adelaide CBD, the northern suburbs as far as Prospect, the eastern suburbs as far as the Mt Lofty scarp, the southern suburbs to O'Halloran's Hill and the western suburbs excluding Port Adelaide.

Classified as central/inner metropolitan. Lies wholly within the Adelaide metropolitan area.

Population 1994 ('000)	392
Population 2019 ('000)	462
Rate of population growth 1994-2019 % a year	0.7

Household groups: Percentage poor and affluent, Census 2016									
Group	'000	Poor	Affluent						
Non-family	56	15	7						
Single parent	14	16	4						
Couple, children	42	5	14						
Couple only	43	6	16						
TOTAL	155	10	11						
Indigenous	1	18	5						

Adelaide Inner: Gross value added										
			Place-of-work							
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	444	509	2.1	1.3	0.5					
Mining	230	747	1.1	1.8	4.8					
Non-food manufacturing	1650	1036	7.9	2.5	-1.8					
Logistics	1122	2327	5.4	5.7	3.0					
Office services	6967	12508	33.2	30.8	2.4					
Money management	3179	7236	15.2	17.8	3.3					
Construction	890	3139	4.2	7.7	5.2					
Distribution	2326	3148	11.1	7.8	1.2					
Convivial services	1045	2210	5.0	5.4	3.0					
Area services	3102	7760	14.8	19.1	3.7					
TOTAL	20956	40620	100	100	2.7					

	Adelaide Inner: Hours worked												
		Pla	ice-of-wo	rk			Usua	l residen	ice				
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019			
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)			
Agriculture	7794	10066	1.8	1.8	1.0	7271	10027	2.3	2.7	1.3			
Mining	2072	6327	0.5	1.1	4.6	1472	5595	0.5	1.5	5.5			
Non-food manufacturing	39228	18462	9.0	3.3	-3.0	31448	16896	10.1	4.5	-2.5			
Logistics	29384	21439	6.7	3.8	-1.3	23080	17731	7.4	4.7	-1.0			
Office services	99075	158860	22.7	28.2	1.9	63734	94820	20.6	25.2	1.6			
Money management	41208	38878	9.4	6.9	-0.2	23925	21640	7.7	5.8	-0.4			
Construction	20502	51286	4.7	9.1	3.7	13634	30978	4.4	8.2	3.3			
Distribution	74981	75224	17.2	13.4	0.0	51756	50445	16.7	13.4	-0.1			
Convivial services	39627	55975	9.1	9.9	1.4	28344	38956	9.1	10.4	1.3			
Area services	83136	126399	19.0	22.5	1.7	65185	88641	21.0	23.6	1.2			
TOTAL	437006	562918	100	100	1.0	309848	375730	100	100	0.8			

	Adelaide Inner: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	1994 2019 1994 2019 1994-2019				1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	296	492	2.1	1.7	2.0	270	540	2.6	2.7	2.8		
Mining	138	418	1.0	1.5	4.6	99	372	1.0	1.9	5.4		
Non-food manufacturing	1334	693	9.2	2.5	-2.6	1103	721	10.7	3.6	-1.7		
Logistics	960	1560	6.6	5.5	2.0	783	1388	7.6	7.0	2.3		
Office services	4414	9728	30.6	34.5	3.2	3081	6313	29.8	31.7	2.9		
Money management	1497	2347	10.4	8.3	1.8	901	1376	8.7	6.9	1.7		
Construction	659	1888	4.6	6.7	4.3	453	1242	4.4	6.2	4.1		
Distribution	2236	2312	15.5	8.2	0.1	1497	1633	14.5	8.2	0.3		
Convivial services	600	1671	4.2	5.9	4.2	442	1186	4.3	6.0	4.0		
Area services	2308	7071	16.0	25.1	4.6	1710	5156	16.5	25.9	4.5		
TOTAL	14441	28181	100	100	2.7	10339	19927	100	100	2.7		

ADELAIDE NORTH

Includes Port Adelaide, Woodville, Holden's Hill and suburbs north to the urban fringe, but west of the Mt Lofty scarp.

Classified as outer metropolitan. In 2016 93 per cent of the region's population lived in the Adelaide metropolitan area with a further 5 per cent in Gawler.

Population 1994 ('000)	405
Population 2019 ('000)	523
Rate of population growth 1994-2019 % a year	1.0

Household groups: Percentage poor and affluent, Census 2016									
Group	'000	Poor	Affluent						
Non-family	53	17	3						
Single parent	22	24	1						
Couple, children	47	9	4						
Couple only	44	8	7						
TOTAL	167	13	4						
Indigenous	4	24	2						

Adelaide North: Gross value added									
			Place-of-work						
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)				
Agriculture	561	998	4.3	4.2	2.3				
Mining	60	198	0.5	0.8	4.9				
Non-food manufacturing	3060	2619	23.7	11.1	-0.6				
Logistics	1449	3548	11.2	15.1	3.6				
Office services	2843	4127	22.0	17.5	1.5				
Money management	680	1378	5.3	5.9	2.9				
Construction	719	2482	5.6	10.5	5.1				
Distribution	1636	3268	12.7	13.9	2.8				
Convivial services	383	916	3.0	3.9	3.6				
Area services	1519	4015	11.8	17.1	4.0				
TOTAL	12909	23548	100	100	2.4				

	Adelaide North: Hours worked											
		Pla	ice-of-wo	rk			Usua	l residen	ice			
	1994 ('000	('000 2019 ('000 1994 2019 1994-2019 1				1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	12579	21108	4.4	5.8	2.1	11826	19113	4.2	4.9	1.9		
Mining	488	2472	0.2	0.7	6.7	781	5473	0.3	1.4	8.1		
Non-food manufacturing	64932	43410	22.8	12.0	-1.6	52308	32862	18.4	8.4	-1.8		
Logistics	33607	33777	11.8	9.3	0.0	25787	23622	9.1	6.0	-0.4		
Office services	30900	44113	10.9	12.2	1.4	39910	68798	14.0	17.6	2.2		
Money management	7930	8384	2.8	2.3	0.2	13773	15932	4.8	4.1	0.6		
Construction	18749	40188	6.6	11.1	3.1	16347	38592	5.7	9.9	3.5		
Distribution	58777	77434	20.7	21.3	1.1	59870	75664	21.0	19.3	0.9		
Convivial services	15785	24475	5.5	6.7	1.8	21079	32553	7.4	8.3	1.8		
Area services	40712	67457	14.3	18.6	2.0	42776	79011	15.0	20.2	2.5		
TOTAL	284461	362819	100	100	1.0	284457	391620	100	100	1.3		

	Adelaide North: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	1994 2019 1994 2019 1994-2019					2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	421	1009	4.7	6.0	3.6	378	857	4.5	4.9	3.3		
Mining	36	119	0.4	0.7	4.9	43	270	0.5	1.5	7.6		
Non-food manufacturing	2185	1775	24.2	10.5	-0.8	1673	1278	19.7	7.3	-1.1		
Logistics	1161	2234	12.8	13.3	2.7	827	1473	9.8	8.4	2.3		
Office services	1515	2934	16.8	17.4	2.7	1687	4107	19.9	23.3	3.6		
Money management	301	434	3.3	2.6	1.5	451	831	5.3	4.7	2.5		
Construction	581	1595	6.4	9.5	4.1	485	1472	5.7	8.4	4.5		
Distribution	1507	2345	16.7	13.9	1.8	1553	2244	18.3	12.7	1.5		
Convivial services	226	683	2.5	4.1	4.5	290	908	3.4	5.2	4.7		
Area services	1103	3702	12.2	22.0	5.0	1092	4168	12.9	23.7	5.5		
TOTAL	9035	16830	100	100	2.5	8479	17608	100	100	3.0		

ADELAIDE RANGES

Comprises the Adelaide hills broadly defined to include the Barossa Valley and the other areas between the Mt Lofty Scarp and the Murray River, also the Fleurieu Peninsula from O'Halloran's hill southwards.

Classified as peri-metropolitan, though 20 per cent of the population lives within the Adelaide metropolitan area, mainly around Noarlunga and Tea Tree Gully. Other urban areas (with percentages of the 2016 population) include Murray Bridge, 4 and Victor Harbor, 3.

Population 1994 ('000)	392
Population 2019 ('000)	491
Rate of population growth 1994-2019 % a year	0.9

Household groups: Percentage poor and affluent, Census 2016										
Group	'000	Poor	Affluent							
Non-family	44	15	3							
Single parent	17	17 21 47 5	1							
Couple, children	47		5							
Couple only	51	7	7							
TOTAL	159	10	5							
Indigenous	2	21	1							

	Adelaide Ranges: Gross value added												
		Place-of-work											
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)								
Agriculture	1571	2048	17.2	13.9	1.1								
Mining	44	186	0.5	1.3	5.9								
Non-food manufacturing	953	674	10.4	4.6	-1.4								
Logistics	324	684	3.6	4.7	3.0								
Office services	1712	2132	2132	2132	2132	2132	18.8	14.5	0.9				
Money management	629	949	6.9	6.5	1.7								
Construction	746	1712	8.2	11.7	3.4								
Distribution	1189	1947	13.0	13.3	2.0								
Convivial services	446	858	4.9	5.8	2.7								
Area services	1515	3500	16.6	23.8	3.4								
TOTAL	9128	14689	100	100	1.9								

Adelaide Ranges: Hours worked											
		Pla	ice-of-wo	rk		Usual residence					
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019	
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)	
Agriculture	30570	32371	15.4	13.5	0.2	31826	31520	10.1	8.1	0.0	
Mining	204	1797	0.1	0.7	9.1	1127	6575	0.4	1.7	7.3	
Non-food manufacturing	19406	11952	9.8	5.0	-1.9	39474	23744	12.5	6.1	-2.0	
Logistics	8659	6938	4.4	2.9	-0.9	22186	16903	7.0	4.4	-1.1	
Office services	19557	26586	9.9	11.1	1.2	44929	64452	14.2	16.6	1.5	
Money management	6472	5677	3.3	2.4	-0.5	17435	15876	5.5	4.1	-0.4	
Construction	17813	26194	9.0	10.9	1.6	27376	47192	8.6	12.2	2.2	
Distribution	39492	46696	19.9	19.5	0.7	57702	67099	18.2	17.3	0.6	
Convivial services	16763	22733	8.4	9.5	1.2	21585	30713	6.8	7.9	1.4	
Area services	39466	59123	19.9	24.6	1.6	52990	83890	16.7	21.6	1.9	
TOTAL	198401	240067	100	100	0.8	316629	387965	100	100	0.8	

	Adelaide Ranges: Local income												
			Place-of-v	work				Usual resid	lence				
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019			
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)			
Agriculture	1005	1586	16.2	14.6	1.8	1068	1541	10.1	8.6	1.5			
Mining	15	80	0.2	0.7	6.8	75	324	0.7	1.8	6.0			
Non-food manufacturing	682	455	11.0	4.2	-1.6	1400	909	13.3	5.1	-1.7			
Logistics	268	450	4.3	4.2	2.1	741	1130	7.0	6.3	1.7			
Office services	1017	1713	16.4	15.8	2.1	2120	3928	20.1	21.9	2.5			
Money management	240	282	3.9	2.6	0.7	660	858	6.3	4.8	1.1			
Construction	610	997	9.8	9.2	2.0	919	1752	8.7	9.8	2.6			
Distribution	1111	1403	17.9	13.0	0.9	1694	2019	16.1	11.3	0.7			
Convivial services	263	631	4.2	5.8	3.6	333	866	3.2	4.8	3.9			
Area services	983	3229	15.9	29.8	4.9	1512	4603	14.4	25.7	4.6			
TOTAL	6194	10826	100	100	2.3	10522	17930	100	100	2.2			

SA OUTER

This region comprises the rest of SA: the South East, the Murray Mallee, the Riverland, the Lower and Upper North, Yorke and Eyre Peninsulas and the remote country beyond Goyder's Line.

Location: country (rural). Its four largest urban areas (with percentage of the 2016 regional population) are Mt Gambier, 5; Whyalla, 5; Port Lincoln, 3 and Port Pirie, 3.

Population 1994 ('000)	273
Population 2019 ('000)	271
Rate of population growth 1994-2019 % a year	0.0

Household groups: Percentage poor and affluent, Census 2016										
Group '000 Poor Affluer										
Non-family	31	19	4							
Single parent	9	30	1							
Couple, children	21	8	4							
Couple only	29	9	7							
TOTAL	90	14	5							
Indigenous	4	31	2							

SA Outer: Gross value added													
		Place-of-work											
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)								
Agriculture	3337	4111	24.4	28.0	0.8								
Mining	2747	2338	20.1	15.9	-0.6								
Non-food manufacturing	1100	1100 567	8.1	3.9	-2.6								
Logistics	643	611	4.7	4.2	-0.2								
Office services	1960	1258	14.3	8.6	-1.8								
Money management	544	667	4.0	4.5	0.8								
Construction	573	1088	4.2	7.4	2.6								
Distribution	1096	1336	8.0	9.1	0.8								
Convivial services	403	504	3.0	3.4	0.9								
Area services	1257	2193	9.2	14.9	2.3								
TOTAL	13661	14673	100	100	0.3								

			Hours worked							
		Pla	ce-of-wo	rk		Usual residence				
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	63269	52828	31.2	24.6	-0.7	62749	54790	30.4	25.4	-0.5
Mining	4150	15184	2.0	7.1	5.3	2528	9881	1.2	4.6	5.6
Non-food manufacturing	17579	11972	8.7	5.6	-1.5	18483	11864	9.0	5.5	-1.8
Logistics	12260	6959	6.0	3.2	-2.2	13062	7992	6.3	3.7	-1.9
Office services	16536	17588	8.2	8.2	0.2	17295	18155	8.4	8.4	0.2
Money management	5288	4166	2.6	1.9	-0.9	5619	4295	2.7	2.0	-1.1
Construction	9995	19548	4.9	9.1	2.7	9811	20444	4.8	9.5	3.0
Distribution	32191	34041	15.9	15.8	0.2	33717	35243	16.3	16.4	0.2
Convivial services	13345	13682	6.6	6.4	0.1	13657	13634	6.6	6.3	0.0
Area services	28233	38971	13.9	18.1	1.3	29476	39250	14.3	18.2	1.2
TOTAL	202846	214939	100	100	0.2	206395	215548	100	100	0.2

	SA Outer: Local income											
			Place-of-v	work		Usual residence						
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	2317	2837	31.9	29.1	0.8	2296	2963	31.3	30.4	1.0		
Mining	335	735	4.6	7.5	3.2	219	441	3.0	4.5	2.8		
Non-food manufacturing	583	479	8.0	4.9	-0.8	617	475	8.4	4.9	-1.0		
Logistics	519	404	7.1	4.1	-1.0	560	461	7.6	4.7	-0.8		
Office services	848	928	11.7	9.5	0.4	913	941	12.4	9.7	0.1		
Money management	240	204	3.3	2.1	-0.7	260	210	3.5	2.2	-0.8		
Construction	337	778	4.6	8.0	3.4	334	816	4.5	8.4	3.6		
Distribution	1016	978	14.0	10.0	-0.2	1046	1009	14.2	10.3	-0.1		
Convivial services	238	356	3.3	3.7	1.6	245	352	3.3	3.6	1.5		
Area services	829	2056	11.4	21.1	3.7	853	2079	11.6	21.3	3.6		
TOTAL	7262	9756	100	100	1.2	7342	9748	100	100	1.1		

PERTH INNER

Includes the Perth CBD and also the Fremantle CBD, along with the suburbs between them on both sides of the Swan River, also the inner northern suburbs and Bayswater and Bassendean to the east.

Classified as central/inner metropolitan. Lies wholly within the Perth metropolitan area.

Population 1994 ('000)	413
Population 2019 ('000)	530
Rate of population growth 1994-2019 % a year	1.0

Household groups: Percentage poor and affluent, Census 2016										
Group	'000	Poor	Affluent							
Non-family	58	12	14							
Single parent	13	16	7							
Couple, children	45	4	25							
Couple only	y 50		26							
TOTAL	166	8	20							
Indigenous	2	22	11							

Perth Inner: Gross value added										
			Place-of-work							
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	343	785	1.4	1.0	3.4					
Mining	1549	13740	6.2	18.1	9.1					
Non-food manufacturing	764	1726	3.1	2.3	3.3					
Logistics	1610	5528	6.4	7.3	5.1					
Office services	7091	20350	28.4	26.7	4.3					
Money management	4776	10591	19.1	13.9	3.2					
Construction	1886	5318	7.5	7.0	4.2					
Distribution	2202	4300	8.8	5.6	2.7					
Convivial services	1180	3427	4.7	4.5	4.4					
Area services	3596	10346	14.4	13.6	4.3					
TOTAL	24998	76110	100	100	4.6					

	Perth Inner: Hours worked											
		Pla	ce-of-wo	rk			Usua	l resider	ice			
	1994 ('000	1994 ('000 2019 ('000 1994 2019 1994-2019				1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	9113	11505	1.8	1.4	0.9	0	0	0.0	0.0	0.0		
Mining	11821	70450	2.3	8.5	7.4	0	0	0.0	0.0	0.0		
Non-food manufacturing	29756	22725	5.8	2.7	-1.1	5069	13968	1.5	3.0	4.1		
Logistics	41639	44417	8.1	5.3	0.3	0	0	0.0	0.0	0.0		
Office services	122828	229606	23.8	27.7	2.5	54431	66109	15.9	14.2	0.8		
Money management	51509	56708	10.0	6.8	0.4	22854	20738	6.7	4.5	-0.4		
Construction	28011	63009	5.4	7.6	3.3	26020	20560	7.6	4.4	-0.9		
Distribution	78493	85741	15.2	10.3	0.4	28593	35615	8.4	7.6	0.9		
Convivial services	49559	82926	9.6	10.0	2.1	26718	21836	7.8	4.7	-0.8		
Area services	93457	163250	18.1	19.7	2.3	81132	111008	23.8	23.8	1.3		
TOTAL	516188	830337	100	100	1.9	51720	87458	100	100	2.1		

	Perth Inner: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	310	767	1.9	1.5	3.7	256	638	2.3	2.0	3.7		
Mining	807	6601	4.9	12.9	8.8	549	4316	5.0	13.9	8.6		
Non-food manufacturing	878	1224	5.3	2.4	1.3	837	1157	7.6	3.7	1.3		
Logistics	1319	3072	8.0	6.0	3.4	851	1783	7.7	5.7	3.0		
Office services	5137	16661	31.0	32.6	4.8	3243	9618	29.4	30.9	4.4		
Money management	1714	3579	10.4	7.0	3.0	927	1837	8.4	5.9	2.8		
Construction	1156	4094	7.0	8.0	5.2	982	2976	8.9	9.6	4.5		
Distribution	1930	3045	11.7	6.0	1.8	1327	1865	12.0	6.0	1.4		
Convivial services	726	2611	4.4	5.1	5.3	476	1536	4.3	4.9	4.8		
Area services	2583	9399	15.6	18.4	5.3	1580	5410	14.3	17.4	5.0		
TOTAL	16559	51053	100	100	4.6	11028	31136	100	100	4.2		

PERTH NORTH

Comprises the Perth suburbs from Stirling north along the coast to the urban fringe.

Classified as outer metropolitan. Lies wholly within the Perth metropolitan area.

Population 1994 ('000)	350
Population 2019 ('000)	569
Rate of population growth 1994-	-2019 % a year 2.0

Household groups: Percentage poor and affluent, Census 2016										
Group	'000	Poor	Affluent							
Non-family	43	12	9							
Single parent	17	18	3							
Couple, children	58	4	13							
Couple only	48	6	17							
TOTAL	166	8	12							
Indigenous	2	19	6							

	Perth North: Gross value added										
			Place-of-work								
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	230	430	3.0	2.2	2.5						
Mining	149	629	1.9	3.2	5.9						
Non-food manufacturing	446	1187	5.8	6.0	4.0						
Logistics	392	1331	5.1	6.7	5.0						
Office services	1345	3982	17.6	20.0	4.4						
Money management	1032	1952	13.5	9.8	2.6						
Construction	1298	2302	17.0	11.6	2.3						
Distribution	1213	2722	15.8	13.7	3.3						
Convivial services	346	1099	4.5	5.5	4.7						
Area services	1208	4256	15.8	21.4	5.2						
TOTAL	7659	19890	100	100	3.9						

	Perth North: Hours worked											
		Pla	ce-of-wo	rk			Usua	l residen	ce			
	1994 ('000	1994 ('000 2019 ('000 1994 2019 1994-2019				1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	6992	6978	3.7	2.3	0.0	8218	10028	2.8	2.0	0.8		
Mining	939	4200	0.5	1.4	6.2	5123	42122	1.8	8.5	8.8		
Non-food manufacturing	17833	16581	9.3	5.4	-0.3	25358	27892	8.7	5.6	0.4		
Logistics	13742	12611	7.2	4.1	-0.3	22482	23712	7.7	4.8	0.2		
Office services	25246	45411	13.2	14.9	2.4	50928	95964	17.5	19.3	2.6		
Money management	11052	12045	5.8	4.0	0.3	22776	24471	7.8	4.9	0.3		
Construction	26350	48048	13.8	15.8	2.4	34138	67344	11.7	13.5	2.8		
Distribution	44466	56357	23.2	18.5	1.0	54604	69164	18.7	13.9	0.9		
Convivial services	15054	27594	7.9	9.1	2.5	22744	38308	7.8	7.7	2.1		
Area services	29883	74717	15.6	24.5	3.7	44999	99121	15.4	19.9	3.2		
TOTAL	191556	304541	100	100	1.9	291369	498125	100	100	2.2		

	Perth North: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	230	426	3.9	2.6	2.5	272	620	3.0	2.2	3.4		
Mining	78	356	1.3	2.2	6.3	357	3464	3.9	12.0	9.5		
Non-food manufacturing	544	920	9.3	5.7	2.1	758	1540	8.3	5.3	2.9		
Logistics	355	816	6.1	5.1	3.4	615	1583	6.7	5.5	3.9		
Office services	976	3142	16.7	19.5	4.8	2009	6726	21.9	23.4	5.0		
Money management	358	721	6.1	4.5	2.8	750	1501	8.2	5.2	2.8		
Construction	1205	3048	20.6	18.9	3.8	1511	4388	16.5	15.2	4.4		
Distribution	1069	1917	18.3	11.9	2.4	1324	2368	14.4	8.2	2.4		
Convivial services	218	878	3.7	5.5	5.7	324	1246	3.5	4.3	5.5		
Area services	817	3877	14.0	24.1	6.4	1258	5366	13.7	18.6	6.0		
TOTAL	5849	16101	100	100	4.1	9177	28803	100	100	4.7		

PERTH SOUTH EAST

Comprises the inland outer suburbs of Perth, stretching from the Swan valley through Midland and Guildford to Armidale and Byford, including suburbs built up the Darling escarpment.

Classified as outer metropolitan. Lies wholly within the Perth metropolitan area.

Population 1994 ('000)	344
Population 2019 ('000)	575
Rate of population growth 1994-2019 % a year	2.1

Household groups: Percentage poor and affluent, Census 2016										
Group	'000	Poor	Affluent							
Non-family	38	13	7							
Single parent	18	20	2							
Couple, children	56	5	7							
Couple only	45	7	12							
TOTAL	157	9	8							
Indigenous	4	20	6							

Perth South East: Gross value added										
			Place-of-work							
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	386	731	3.9	2.6	2.6					
Mining	363	1969	3.7	7.1	7.0					
Non-food manufacturing	1093	3337	11.0	12.1	4.6					
Logistics	1006	3426	10.1	12.4	5.0					
Office services	1803	4529	18.2	16.4	3.8					
Money management	842	1369	8.5	4.9	2.0					
Construction	1171	3035	11.8	11.0	3.9					
Distribution	1505	4010	15.2	14.5	4.0					
Convivial services	376	1056	3.8	3.8	4.2					
Area services	1378	4199	13.9	15.2	4.6					
TOTAL	9922	27662	100	100	4.2					

	Perth South East: Hours worked										
		Pla			Usua	l residen	ice				
	1994 ('000	1994 ('000 2019 ('000 1994 2019 1994-2019				1994 ('000	2019 ('000	1994	2019	1994-2019	
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)	
Agriculture	11892	12542	4.6	3.2	0.2	10956	12223	3.9	2.5	0.4	
Mining	2965	14963	1.2	3.8	6.7	5392	34020	1.9	7.1	7.6	
Non-food manufacturing	37813	43188	14.7	10.9	0.5	31519	36876	11.2	7.7	0.6	
Logistics	29551	34157	11.5	8.6	0.6	27768	34231	9.9	7.1	0.8	
Office services	28993	50707	11.3	12.8	2.3	41765	77980	14.9	16.2	2.5	
Money management	9358	9435	3.6	2.4	0.0	17483	20914	6.2	4.4	0.7	
Construction	25014	48451	9.8	12.2	2.7	24724	51336	8.8	10.7	3.0	
Distribution	61687	83531	24.0	21.1	1.2	59740	87681	21.3	18.3	1.5	
Convivial services	16291	26940	6.4	6.8	2.0	20010	38056	7.1	7.9	2.6	
Area services	32933	72396	12.8	18.3	3.2	40861	86825	14.6	18.1	3.1	
TOTAL	256497	396310	100	100	1.8	280219	480141	100	100	2.2	

	Perth South East: Local income									
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	375	750	4.8	3.5	2.8	336	692	4.1	2.7	2.9
Mining	189	1136	2.4	5.3	7.4	361	2375	4.4	9.4	7.8
Non-food manufacturing	1106	2522	14.3	11.8	3.4	905	2017	10.9	8.0	3.3
Logistics	828	2109	10.7	9.9	3.8	801	2081	9.7	8.3	3.9
Office services	1348	3565	17.4	16.7	4.0	1589	5027	19.2	20.0	4.7
Money management	328	560	4.3	2.6	2.2	564	1144	6.8	4.5	2.9
Construction	1048	3181	13.6	14.9	4.5	991	3215	12.0	12.8	4.8
Distribution	1297	2818	16.8	13.2	3.2	1288	2906	15.6	11.5	3.3
Convivial services	233	833	3.0	3.9	5.2	273	1134	3.3	4.5	5.9
Area services	973	3899	12.6	18.2	5.7	1160	4593	14.0	18.2	5.7
TOTAL	7723	21372	100	100	4.2	8267	25182	100	100	4.6

PERTH SOUTH COAST

Comprises Perth (or Fremantle) suburbs from Kwinana south along the coast to Mandurah.

Classified as outer metropolitan. Lies wholly within the Perth metropolitan area.

Population 1994 ('000)	163
Population 2019 ('000)	384
Rate of population growth 1994-2019 % a year	3.5

Household groups: Percentage poor and affluent, Census 2016									
Group	'000	Poor	Affluent						
Non-family	28	14	8						
Single parent	13	23	2						
Couple, children	34	4	9						
Couple only	32	7	13						
TOTAL	107	10	9						
Indigenous	3	20	5						

	Perth South Coast: Gross value added										
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	128	307	2.5	1.8	3.6						
Mining	139	941	2.8	5.5	7.9						
Non-food manufacturing	965	3193	19.1	18.8	4.9						
Logistics	326	1394	6.4	8.2	6.0						
Office services	1137	2810	22.5	16.5	3.7						
Money management	337	967	6.7	5.7	4.3						
Construction	848	2327	16.8	13.7	4.1						
Distribution	496	1947	9.8	11.5	5.6						
Convivial services	160	747	3.2	4.4	6.4						
Area services	515	2366	10.2	13.9	6.3						
TOTAL	5051	16999	100	100	5.0						

	Perth South Coast: Hours worked									
		Pla	ce-of-wo	rk			Usua	l residen	ce	
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	4041	4992	4.4	2.3	0.8	5162	6733	4.5	2.1	1.1
Mining	939	5681	1.0	2.6	7.5	2514	31730	2.2	10.1	10.7
Non-food manufacturing	19198	26093	20.8	12.0	1.2	19111	26735	16.6	8.5	1.4
Logistics	6983	12743	7.6	5.9	2.4	10087	16988	8.8	5.4	2.1
Office services	10528	29658	11.4	13.6	4.2	14214	50415	12.3	16.1	5.2
Money management	3163	5998	3.4	2.8	2.6	5471	10260	4.7	3.3	2.5
Construction	13905	28212	15.0	13.0	2.9	13855	36568	12.0	11.7	4.0
Distribution	16609	41094	18.0	18.9	3.7	22457	50021	19.5	16.0	3.3
Convivial services	5886	19974	6.4	9.2	5.0	8415	27417	7.3	8.8	4.8
Area services	11195	42869	12.1	19.7	5.5	13930	56358	12.1	18.0	5.7
TOTAL	92448	217313	100	100	3.5	115216	313225	100	100	4.1

	Perth South Coast: Local income									
	Place-of-work							Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	136	306	4.3	2.7	3.3	179	411	4.3	2.4	3.4
Mining	68	449	2.1	3.9	7.8	234	2207	5.6	12.9	9.4
Non-food manufacturing	635	1623	19.9	14.1	3.8	634	1651	15.3	9.7	3.9
Logistics	223	788	7.0	6.8	5.2	348	1076	8.4	6.3	4.6
Office services	480	1997	15.1	17.3	5.9	676	3388	16.3	19.9	6.7
Money management	115	337	3.6	2.9	4.4	204	559	4.9	3.3	4.1
Construction	663	1894	20.8	16.4	4.3	700	2390	16.9	14.0	5.0
Distribution	416	1364	13.1	11.8	4.9	571	1644	13.8	9.6	4.3
Convivial services	101	577	3.2	5.0	7.2	139	812	3.4	4.8	7.3
Area services	350	2179	11.0	18.9	7.6	463	2923	11.2	17.1	7.7
TOTAL	3188	11515	100	100	5.3	4148	17060	100	100	5.8

WA SOUTH WEST

Bounded to the west and south by the sea, to the east by the transition from forests to wheat paddocks and to the north by the Perth metropolitan area.

Classified as peri-metropolitan. Its four largest urban areas (with percentage of the 2016 regional population) are Bunbury, 36; Busselton, 13; Collie, 4 and Margaret River, 4.

Population 1994 ('000)	121
Population 2019 ('000)	204
Rate of population growth 1994-2019 % a year	2.1

Household groups: Percentage poor and affluent, Census 2016									
Group	'000	Poor	Affluent						
Non-family	16	15	7						
Single parent	6	25	2						
Couple, children	17	5	7						
Couple only	20	8	12						
TOTAL	60	11	8						
Indigenous	2	24	3						

WA South West: Gross value added										
	Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	641	1515	10.8	10.0	3.5					
Mining	2051	4898	34.5	32.4	3.5					
Non-food manufacturing	685	1902	11.5	12.6	4.2					
Logistics	118	358	2.0	2.4	4.5					
Office services	681	1428	11.5	9.5	3.0					
Money management	324	597	5.4	4.0	2.5					
Construction	451	1130	7.6	7.5	3.7					
Distribution	372	1148	6.3	7.6	4.6					
Convivial services	171	524	2.9	3.5	4.6					
Area services	453	1601	7.6	10.6	5.2					
TOTAL	5948	15101	100	100	3.8					

	WA South West: Hours worked									
		Pla			Usual residence					
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	18389	23261	20.1	15.2	0.9	17712	23930	18.4	14.2	1.2
Mining	3603	10069	3.9	6.6	4.2	4675	17232	4.9	10.2	5.4
Non-food manufacturing	11772	12406	12.9	8.1	0.2	10724	10351	11.2	6.1	-0.1
Logistics	4055	3949	4.4	2.6	-0.1	4706	4907	4.9	2.9	0.2
Office services	9743	16614	10.7	10.8	2.2	10850	19030	11.3	11.3	2.3
Money management	3054	3592	3.3	2.3	0.7	3400	4441	3.5	2.6	1.1
Construction	8356	18311	9.1	11.9	3.2	8823	20939	9.2	12.4	3.5
Distribution	14318	23726	15.7	15.5	2.0	15764	23895	16.4	14.2	1.7
Convivial services	6904	13712	7.6	8.9	2.8	7225	14496	7.5	8.6	2.8
Area services	11215	27594	12.3	18.0	3.7	12189	29096	12.7	17.3	3.5
TOTAL	91409	153235	100	100	2.1	96067	168315	100	100	2.3

	WA South West: Local income									
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	551	1379	19.9	17.6	3.7	525	1403	17.8	16.1	4.0
Mining	238	542	8.6	6.9	3.3	328	986	11.1	11.3	4.5
Non-food manufacturing	344	735	12.4	9.4	3.1	315	605	10.6	6.9	2.6
Logistics	110	217	4.0	2.8	2.8	129	278	4.4	3.2	3.1
Office services	334	986	12.1	12.6	4.4	377	1178	12.7	13.5	4.7
Money management	98	205	3.5	2.6	3.0	112	252	3.8	2.9	3.3
Construction	374	1110	13.5	14.2	4.4	381	1273	12.9	14.6	4.9
Distribution	324	801	11.7	10.2	3.7	357	804	12.1	9.2	3.3
Convivial services	106	382	3.8	4.9	5.3	110	398	3.7	4.6	5.3
Area services	295	1459	10.6	18.7	6.6	324	1529	10.9	17.6	6.4
TOTAL	2773	7815	100	100	4.2	2958	8706	100	100	4.4

WA WHEATBELT

Includes two WA planning regions (Great Southern and Wheatbelt) plus the arable country round Geraldton.

Classified as country (rural). Its four largest urban areas (with percentage of the 2016 regional population) are Geraldton, 17; Albany, 16; Northam, 3 and Narrogin, 2.

Population 1994 ('000)	166
Population 2019 ('000)	185
Rate of population growth 1994-2019 % a year	0.4

Household groups: Percentage poor and affluent, Census 2016									
Group '000 Poor Affluent									
Non-family	18	16	6						
Single parent	6	26	2						
Couple, children	14	7	7						
Couple only	20	8	11						
TOTAL	58	12	8						
Indigenous	3	29	3						

WA Wheatbelt: Gross value added											
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	2930	3731	31.7	21.5	1.0						
Mining	2311	7318	25.0	42.2	4.7						
Non-food manufacturing	144	300	1.6	1.7	3.0						
Logistics	403	660	4.4	3.8	2.0						
Office services	827	1042	9.0	6.0	0.9						
Money management	452	533	4.9	3.1	0.7						
Construction	553	962	6.0	5.5	2.2						
Distribution	555	962	6.0	5.5	2.2						
Convivial services	218	380	2.4	2.2	2.2						
Area services	843	1459	9.1	8.4	2.2						
TOTAL	9237	17348	100	100	2.6						

WA Wheatbelt: Hours worked										
		Pla	ce-of-wo	rk			Usua	l resider	ice	
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)
Agriculture	48223	41503	37.5	27.8	-0.6	47778	40392	35.5	25.5	-0.7
Mining	3059	10902	2.4	7.3	5.2	3529	8570	2.6	5.4	3.6
Non-food manufacturing	4071	4090	3.2	2.7	0.0	4490	4824	3.3	3.0	0.3
Logistics	7867	6134	6.1	4.1	-1.0	8562	7755	6.4	4.9	-0.4
Office services	11414	14781	8.9	9.9	1.0	12526	17521	9.3	11.1	1.4
Money management	3753	3111	2.9	2.1	-0.7	3889	3578	2.9	2.3	-0.3
Construction	7929	12552	6.2	8.4	1.9	8451	12650	6.3	8.0	1.6
Distribution	18476	20273	14.4	13.6	0.4	20022	24191	14.9	15.3	0.8
Convivial services	7671	10137	6.0	6.8	1.1	7942	11334	5.9	7.2	1.4
Area services	16132	25623	12.5	17.2	1.9	17419	27505	12.9	17.4	1.8
TOTAL	128595	149105	100	100	0.6	134609	158321	100	100	0.7

WA Wheatbelt: Local income										
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	2156	2485	43.2	32.2	0.6	2154	2416	41.2	30.0	0.5
Mining	285	670	5.7	8.7	3.5	340	517	6.5	6.4	1.7
Non-food manufacturing	136	198	2.7	2.6	1.5	147	232	2.8	2.9	1.9
Logistics	292	383	5.8	5.0	1.1	312	493	6.0	6.1	1.8
Office services	477	789	9.5	10.2	2.0	524	931	10.0	11.5	2.3
Money management	150	163	3.0	2.1	0.3	157	191	3.0	2.4	0.8
Construction	341	732	6.8	9.5	3.1	351	724	6.7	9.0	2.9
Distribution	487	672	9.8	8.7	1.3	526	809	10.0	10.0	1.7
Convivial services	135	280	2.7	3.6	3.0	139	307	2.7	3.8	3.2
Area services	535	1350	10.7	17.5	3.8	585	1442	11.2	17.9	3.7
TOTAL	4992	7723	100	100	1.8	5235	8061	100	100	1.7

GASCOYNE, GOLDFIELDS

Comprises the pastoral/mining country north and east of the WA Wheatbelt, but south of the Pilbara Planning Region.

Classified as remote (with an established city). Its three largest urban areas (with percentage of the 2016 regional population) are Kalgoorlie, 42; Esperance, 15 and Carnarvon, 6.

Population 1994 ('000)	69
Population 2019 ('000)	66
Rate of population growth 1994-2019 % a year	-0.2

Household groups: Percentage poor and affluent, Census 2016									
Group '000 Poor Affluent									
Non-family	6	11	25						
Single parent	2	31	5						
Couple, children	7	6	19						
Couple only	6	5	37						
TOTAL	21	10	24						
Indigenous	5	31	8						

Gascoyne, Goldfields: Gross value added									
			Place-of-work						
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)				
Agriculture	425	484	3.8	2.3	0.5				
Mining	8890	17255	80.5	83.6	2.7				
Non-food manufacturing	124	376	1.1	1.8	4.6				
Logistics	128	331	1.2	1.6	3.9				
Office services	365	466	3.3	2.3	1.0				
Money management	160	152	1.4	0.7	-0.2				
Construction	314	508	2.8	2.5	1.9				
Distribution	219	413	2.0	2.0	2.6				
Convivial services	129	166	1.2	0.8	1.0				
Area services	284	492	2.6	2.4	2.2				
TOTAL	11038	20643	100	100	2.5				

	Gascoyne, Goldfields: Hours worked										
		Pla	ce-of-wo	rk		Usual residence					
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019	
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)	
Agriculture	8022	4650	12.0	5.8	-2.2	8083	4736	12.5	7.6	-2.1	
Mining	18125	35156	27.0	43.8	2.7	15348	15347	23.7	24.7	0.0	
Non-food manufacturing	2558	2892	3.8	3.6	0.5	2367	2290	3.6	3.7	-0.1	
Logistics	3464	2998	5.2	3.7	-0.6	3824	3743	5.9	6.0	-0.1	
Office services	6094	6287	9.1	7.8	0.1	6214	7544	9.6	12.1	0.8	
Money management	1897	1343	2.8	1.7	-1.4	2035	1540	3.1	2.5	-1.1	
Construction	5630	5465	8.4	6.8	-0.1	4395	4818	6.8	7.8	0.4	
Distribution	9215	8504	13.8	10.6	-0.3	10000	8773	15.4	14.1	-0.5	
Convivial services	5196	4517	7.8	5.6	-0.6	5301	4853	8.2	7.8	-0.4	
Area services	6813	8399	10.2	10.5	0.8	7328	8463	11.3	13.6	0.6	
TOTAL	67013	80212	100	100	0.7	64896	62106	100	100	-0.2	

	Gascoyne, Goldfields: Local income										
			Place-of-v	work			Usual residence				
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019	
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	
Agriculture	278	278	10.3	6.2	0.0	283	293	11.5	8.9	0.1	
Mining	1262	2225	46.9	49.3	2.3	1034	935	42.0	28.3	-0.4	
Non-food manufacturing	75	154	2.8	3.4	2.9	71	126	2.9	3.8	2.3	
Logistics	106	198	4.0	4.4	2.5	114	244	4.6	7.4	3.1	
Office services	231	374	8.6	8.3	1.9	224	421	9.1	12.8	2.6	
Money management	70	76	2.6	1.7	0.3	76	86	3.1	2.6	0.5	
Construction	202	344	7.5	7.6	2.1	167	302	6.8	9.1	2.4	
Distribution	188	289	7.0	6.4	1.7	205	302	8.3	9.1	1.6	
Convivial services	81	119	3.0	2.6	1.6	82	125	3.3	3.8	1.7	
Area services	195	460	7.3	10.2	3.5	209	467	8.5	14.1	3.3	
TOTAL	2688	4519	100	100	2.1	2464	3301	100	100	1.2	

PILBARA, KIMBERLEY

Comprises the Pilbara and Kimberley planning regions.

Classified as remote. Its three largest urban areas (with percentage of the 2016 regional population) are Karratha, 16; Port Hedland, 14 and Broome, 14.

Population 1994 ('000)	67
Population 2019 ('000)	98
Rate of population growth 1994-2019 % a year	1.5

Household groups: Percentage poor and affluent, Census 2016									
Group '000 Poor Affluent									
Non-family	6	13	13						
Single parent	2	26	4						
Couple, children	6	5	11						
Couple only	5	6	22						
TOTAL	19	10	14						
Indigenous	2	30	5						

Pilbara, Kimberley: Gross value added											
		Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)						
Agriculture	163	290	0.9	0.3	2.3						
Mining	15687	77144	87.9	89.8	6.6						
Non-food manufacturing	70	345	0.4	0.4	6.6						
Logistics	147	741	0.8	0.9	6.7						
Office services	521	1296	2.9	1.5	3.7						
Money management	140	225	0.8	0.3	1.9						
Construction	384	3879	2.2	4.5	9.7						
Distribution	211	722	1.2	0.8	5.0						
Convivial services	156	379	0.9	0.4	3.6						
Area services	367	843	2.1	1.0	3.4						
TOTAL	17846	85864	100	100	6.5						

	Pilbara, Kimberley: Hours worked											
		Pla	ce-of-wo	rk		Usual residence						
	1994 ('000	94 ('000 2019 ('000 1994 2019 1994-2019					2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	3642	3390	4.9	2.0	-0.3	3925	3003	5.6	2.9	-1.1		
Mining	19992	76128	26.7	44.7	5.5	17312	31417	24.7	30.3	2.4		
Non-food manufacturing	2834	2977	3.8	1.7	0.2	2907	2376	4.2	2.3	-0.8		
Logistics	4333	5206	5.8	3.1	0.7	4508	4967	6.4	4.8	0.4		
Office services	7915	16012	10.6	9.4	2.9	7017	12640	10.0	12.2	2.4		
Money management	1775	2325	2.4	1.4	1.1	1886	2742	2.7	2.6	1.5		
Construction	8191	27069	11.0	15.9	4.9	4871	13319	7.0	12.8	4.1		
Distribution	8751	13652	11.7	8.0	1.8	9035	11173	12.9	10.8	0.9		
Convivial services	7371	9629	9.9	5.7	1.1	7354	8733	10.5	8.4	0.7		
Area services	9992	13921	13.4	8.2	1.3	11174	13463	16.0	13.0	0.7		
TOTAL	74797	170308	100	100	3.3	69989	103832	100	100	1.6		

Pilbara, Kimberley: Local income											
			Place-of-v	work				Usual resid	lence		
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019	
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	
Agriculture	161	192	5.9	1.8	0.7	171	174	7.1	2.8	0.1	
Mining	1234	5082	45.1	48.2	5.8	990	2168	41.2	34.4	3.2	
Non-food manufacturing	78	228	2.8	2.2	4.4	74	185	3.1	2.9	3.8	
Logistics	121	382	4.4	3.6	4.7	127	370	5.3	5.9	4.4	
Office services	285	1059	10.4	10.0	5.4	238	807	9.9	12.8	5.0	
Money management	65	141	2.4	1.3	3.1	71	166	2.9	2.6	3.5	
Construction	251	1884	9.2	17.9	8.4	151	986	6.3	15.7	7.8	
Distribution	180	517	6.6	4.9	4.3	186	428	7.7	6.8	3.4	
Convivial services	97	272	3.5	2.6	4.2	95	246	4.0	3.9	3.9	
Area services	266	787	9.7	7.5	4.4	300	763	12.5	12.1	3.8	
TOTAL	2739	10545	100	100	5.5	2403	6295	100	100	3.9	

SOUTH TASMANIA

Comprises Hobart and surrounds as far north as Tarraleah, Oatlands and, on the east coast, Bicheno.

Classified as country (with an established city). In 2016 68 per cent of the region's population lived in Hobart urban area. The next largest urban area, New Norfolk, accounted for 2 per cent of the region's population.

Population 1994 ('000)	229
Population 2019 ('000)	274
Rate of population growth 1994-2019 % a year	0.7

Household groups: Percentage poor and affluent, Census 2016									
Group	'000	Poor	Affluent						
Non-family	30	15	4						
Single parent	10	23	1						
Couple, children	23	6	7						
Couple only	27	7	9						
TOTAL	90	11	6						
Indigenous	5	19	2						

South Tasmania: Gross value added										
			Place-of-work							
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	755	1384	10.1	9.6	2.5					
Mining	51	52	0.7	0.4	0.1					
Non-food manufacturing	498	485	6.7	3.4	-0.1					
Logistics	378	724	5.1	5.0	2.6					
Office services	1808	3743	24.2	26.1	3.0					
Money management	836	1345	11.2	9.4	1.9					
Construction	446	1313	6.0	9.1	4.4					
Distribution	771	1279	10.3	8.9	2.0					
Convivial services	440	783	5.9	5.4	2.3					
Area services	1480	3255	19.8	22.7	3.2					
TOTAL	7462	14363	100	100	2.7					

	South Tasmania: Hours worked											
		Pla	ce-of-wo	rk		Usual residence						
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	14877	13912	9.2	6.7	-0.3	14637	13320	9.1	6.5	-0.4		
Mining	244	545	0.2	0.3	3.3	291	671	0.2	0.3	3.4		
Non-food manufacturing	12101	8861	7.5	4.3	-1.2	11999	9130	7.5	4.5	-1.1		
Logistics	9116	7335	5.6	3.5	-0.9	8511	6620	5.3	3.2	-1.0		
Office services	31866	45518	19.7	21.9	1.4	32068	44268	19.9	21.7	1.3		
Money management	9771	9413	6.0	4.5	-0.1	9781	9206	6.1	4.5	-0.2		
Construction	13070	22318	8.1	10.7	2.2	13086	21816	8.1	10.7	2.1		
Distribution	27972	30348	17.3	14.6	0.3	27742	28406	17.2	13.9	0.1		
Convivial services	15679	23375	9.7	11.2	1.6	15532	23258	9.7	11.4	1.6		
Area services	27135	46610	16.8	22.4	2.2	27276	47148	16.9	23.1	2.2		
TOTAL	161832	208236	100	100	1.0	160924	203845	100	100	1.0		

	South Tasmania: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	597	1177	12.4	11.1	2.7	588	1136	12.3	10.9	2.7		
Mining	19	23	0.4	0.2	0.8	23	25	0.5	0.2	0.3		
Non-food manufacturing	258	361	5.4	3.4	1.4	256	372	5.3	3.6	1.5		
Logistics	268	432	5.6	4.1	1.9	246	386	5.1	3.7	1.8		
Office services	1264	2789	26.3	26.3	3.2	1270	2710	26.5	25.9	3.1		
Money management	241	444	5.0	4.2	2.5	242	434	5.1	4.1	2.4		
Construction	394	654	8.2	6.2	2.1	395	657	8.2	6.3	2.1		
Distribution	632	901	13.1	8.5	1.4	629	844	13.1	8.1	1.2		
Convivial services	235	687	4.9	6.5	4.4	232	686	4.8	6.6	4.4		
Area services	907	3155	18.8	29.7	5.1	912	3211	19.0	30.7	5.2		
TOTAL	4815	10623	100	100	3.2	4794	10463	100	100	3.2		

NORTH TASMANIA

Comprises Tasmania north of St Marys, Ross and the Great Lake, including the West Coast.

Classified as country (rural with an established city). Its three largest urban areas (with percentage of the 2016 regional population) are Launceston, 30; Devonport, 9 and Burnie, 8.

Population 1994 ('000)	245
Population 2019 ('000)	258
Rate of population growth 1994-2019 % a year	0.2

Household groups: Percentage poor and affluent, Census 2016									
Group	'000	Poor	Affluent						
Non-family	29	18	3						
Single parent	9	27	1						
Couple, children	21	8	4						
Couple only	27	9	6						
TOTAL	87	14	4						
Indigenous	5	20	1						

North Tasmania: Gross value added									
			Place-of-work						
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)				
Agriculture	1503	2498	17.8	19.2	2.1				
Mining	1010	803	12.0	6.2	-0.9				
Non-food manufacturing	833	712	9.9	5.5	-0.6				
Logistics	522	914	6.2	7.0	2.3				
Office services	1018	1673	12.0	12.8	2.0				
Money management	625	942	7.4	7.2	1.7				
Construction	419	1060	5.0	8.1	3.8				
Distribution	800	1214	9.5	9.3	1.7				
Convivial services	387	493	4.6	3.8	1.0				
Area services	1331	2718	15.8	20.9	2.9				
TOTAL	8448	13027	100	100	1.7				

	North Tasmania: Hours worked											
		Pla	ce-of-wo	rk		Usual residence						
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019		
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)		
Agriculture	25520	21785	15.3	12.0	-0.6	25744	21036	15.3	11.4	-0.8		
Mining	2621	5071	1.6	2.8	2.7	2934	5103	1.7	2.8	2.2		
Non-food manufacturing	19520	12260	11.7	6.7	-1.8	19324	11836	11.5	6.4	-1.9		
Logistics	12416	9307	7.4	5.1	-1.1	12442	9534	7.4	5.2	-1.1		
Office services	18457	22228	11.1	12.2	0.7	18185	23321	10.8	12.6	1.0		
Money management	7145	6120	4.3	3.4	-0.6	7309	6638	4.3	3.6	-0.4		
Construction	11833	18458	7.1	10.2	1.8	11835	19049	7.0	10.3	1.9		
Distribution	30645	30511	18.4	16.8	0.0	31332	31956	18.6	17.3	0.1		
Convivial services	13709	16181	8.2	8.9	0.7	13776	16509	8.2	9.0	0.7		
Area services	25005	39761	15.0	21.9	1.9	25420	39386	15.1	21.4	1.8		
TOTAL	166871	181681	100	100	0.3	168301	184366	100	100	0.4		

	North Tasmania: Local income											
			Place-of-v	work				Usual resid	lence			
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019		
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)		
Agriculture	1064	1686	21.3	18.7	1.9	1067	1667	21.2	18.2	1.8		
Mining	169	208	3.4	2.3	0.8	192	213	3.8	2.3	0.4		
Non-food manufacturing	424	557	8.5	6.2	1.1	417	540	8.3	5.9	1.0		
Logistics	370	514	7.4	5.7	1.3	373	529	7.4	5.8	1.4		
Office services	756	1308	15.1	14.5	2.2	737	1369	14.7	15.0	2.5		
Money management	183	270	3.7	3.0	1.6	188	292	3.7	3.2	1.8		
Construction	359	555	7.2	6.1	1.8	358	571	7.1	6.2	1.9		
Distribution	657	861	13.2	9.5	1.1	669	907	13.3	9.9	1.2		
Convivial services	203	438	4.1	4.8	3.1	205	445	4.1	4.9	3.1		
Area services	806	2630	16.2	29.1	4.8	821	2605	16.3	28.5	4.7		
TOTAL	4992	9027	100	100	2.4	5029	9136	100	100	2.4		

DARWIN

Comprises the Darwin urban area plus places within commuting distance of Darwin.

Classified as remote (urban). In 2016 81 per cent of the population of the region lived in the Darwin urban area.

Population 1994 ('000)	91
Population 2019 ('000)	148
Rate of population growth 1994-2019 % a year	2.0

Household groups: Percentage poor and affluent, Census 2016									
Group	'000	Poor	Affluent						
Non-family	10	8	18						
Single parent	4	16	5						
Couple, children	12	2	17						
Couple only	11	4	30						
TOTAL	38	6	20						
Indigenous	4	15	12						

Darwin: Gross value added										
	Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)					
Agriculture	164	587	4.1	3.7	5.2					
Mining	310	3390	7.8	21.4	10.0					
Non-food manufacturing	212	745	5.3	4.7	5.2					
Logistics	217	1191	5.4	7.5	7.0					
Office services	1144	3555	28.6	22.4	4.6					
Money management	371	918	9.3	5.8	3.7					
Construction	298	1473	7.4	9.3	6.6					
Distribution	422	993	10.5	6.3	3.5					
Convivial services	235	676	5.9	4.3	4.3					
Area services	629	2311	15.7	14.6	5.3					
TOTAL	4002	15839	100	100	5.7					

	Darwin: Hours worked										
		Pla	ce-of-wo	rk			Usua	l residen	ce		
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019	
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)	
Agriculture	1702	3063	2.1	1.8	2.4	1904	2992	2.4	1.9	1.8	
Mining	1054	5681	1.3	3.4	7.0	1592	5970	2.0	3.7	5.4	
Non-food manufacturing	4442	6094	5.6	3.7	1.3	4033	5974	5.1	3.7	1.6	
Logistics	6020	8979	7.5	5.4	1.6	6173	8948	7.8	5.5	1.5	
Office services	22721	45224	28.5	27.2	2.8	21375	42357	26.9	26.3	2.8	
Money management	4691	6429	5.9	3.9	1.3	4701	6547	5.9	4.1	1.3	
Construction	5402	17150	6.8	10.3	4.7	6084	16632	7.7	10.3	4.1	
Distribution	13459	25207	16.9	15.2	2.5	13370	24155	16.8	15.0	2.4	
Convivial services	8735	15996	10.9	9.6	2.4	8562	16325	10.8	10.1	2.6	
Area services	11605	32537	14.5	19.6	4.2	11592	31376	14.6	19.5	4.1	
TOTAL	79831	166359	100	100	3.0	79385	161276	100	100	2.9	

Darwin: Local income										
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	138	348	5.5	3.6	3.8	151	344	6.1	3.7	3.3
Mining	41	815	1.7	8.4	12.7	64	753	2.6	8.1	10.3
Non-food manufacturing	117	285	4.7	2.9	3.6	107	279	4.3	3.0	3.9
Logistics	174	627	7.0	6.4	5.3	180	613	7.3	6.6	5.0
Office services	919	2937	36.9	30.2	4.8	842	2793	34.1	29.9	4.9
Money management	79	327	3.2	3.4	5.9	78	332	3.2	3.6	6.0
Construction	197	1049	7.9	10.8	6.9	222	953	9.0	10.2	6.0
Distribution	285	710	11.5	7.3	3.7	280	678	11.3	7.3	3.6
Convivial services	183	515	7.3	5.3	4.2	179	533	7.3	5.7	4.5
Area services	357	2115	14.3	21.7	7.4	364	2049	14.7	22.0	7.2
TOTAL	2489	9728	100	100	5.6	2467	9326	100	100	5.5

NT OUTBACK

Comprises the whole of the NT outside Darwin and its periphery.

Classified as remote. Its four largest urban areas (with percentage of the 2016 regional population) are Alice Springs, 24; Katherine, 6; Nhulunbuy, 3 and Tennant Creek, 3

Population 1994 ('000)	83
Population 2019 ('000)	99
Rate of population growth 1994-2019 % a year	0.7

Household groups: Percentage poor and affluent, Census 2016										
Group	'000	Poor	Affluent							
Non-family	5	12	12							
Single parent	2	36	1							
Couple, children	5	18	8							
Couple only	6	17	16							
TOTAL	18	18	11							
Indigenous	7	42	2							

NT Outback: Gross value added									
Place-of-work									
Industry	1994 (\$m)	2019 (\$m)	1994 (%)	2019 (%)	1994-2019 (r.g. %p.a.)				
Agriculture	381	442	9.2	7.5	0.6				
Mining	1631	1731	39.2	29.4	0.2				
Non-food manufacturing	67	81	1.6	1.4	0.8				
Logistics	113	192	2.7	3.3	2.1				
Office services	637	923	15.3	15.7	1.5				
Money management	119	182	2.9	3.1	1.7				
Construction	183	334	4.4	5.7	2.4				
Distribution	229	308	5.5	5.2	1.2				
Convivial services	243	361	5.8	6.1	1.6				
Area services	554	1343	13.3	22.8	3.6				
TOTAL	4159	5898	100	100	1.4				

	NT Outback: Hours worked										
		Pla	ce-of-wo	rk		Usual residence					
	1994 ('000	2019 ('000	1994	2019	1994-2019	1994 ('000	2019 ('000	1994	2019	1994-2019	
Industry	hours)	hours)	(%)	(%)	(r.g. %p.a.)	hours)	hours)	(%)	(%)	(r.g. %p.a.)	
Agriculture	4228	3212	6.7	4.2	-1.1	3889	3154	6.6	4.3	-0.8	
Mining	6159	8663	9.7	11.3	1.4	4015	2065	6.8	2.8	-2.6	
Non-food manufacturing	2644	1055	4.2	1.4	-3.6	2982	969	5.0	1.3	-4.4	
Logistics	2877	1856	4.5	2.4	-1.7	2456	2004	4.1	2.7	-0.8	
Office services	13876	13975	21.9	18.3	0.0	12486	14547	21.1	19.6	0.6	
Money management	1553	1497	2.5	2.0	-0.1	1606	1695	2.7	2.3	0.2	
Construction	4801	8103	7.6	10.6	2.1	4121	8536	6.9	11.5	3.0	
Distribution	8112	8271	12.8	10.8	0.1	8244	9231	13.9	12.5	0.5	
Convivial services	8847	9626	14.0	12.6	0.3	9103	9807	15.3	13.2	0.3	
Area services	10248	20116	16.2	26.3	2.7	10401	22085	17.5	29.8	3.1	
TOTAL	63345	76374	100	100	0.8	59302	74094	100	100	0.9	

NT Outback: Local income										
			Place-of-v	work				Usual resid	lence	
	1994	2019	1994	2019	1994-2019	1994	2019	1994	2019	1994-2019
Industry	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)	(\$m)	(\$m)	(%)	(%)	(r.g. %p.a.)
Agriculture	336	267	15.7	6.5	-0.9	334	262	17.0	6.6	-1.0
Mining	316	560	14.7	13.6	2.3	202	184	10.3	4.6	-0.4
Non-food manufacturing	62	51	2.9	1.2	-0.8	68	46	3.5	1.1	-1.6
Logistics	74	105	3.4	2.6	1.4	61	121	3.1	3.0	2.8
Office services	563	802	26.2	19.6	1.4	511	797	26.0	20.0	1.8
Money management	26	62	1.2	1.5	3.6	26	69	1.3	1.7	4.0
Construction	156	538	7.3	13.1	5.1	131	634	6.7	15.9	6.5
Distribution	152	214	7.1	5.2	1.4	158	241	8.0	6.0	1.7
Convivial services	163	278	7.6	6.8	2.2	171	280	8.7	7.0	2.0
Area services	301	1225	14.0	29.9	5.8	301	1359	15.3	34.0	6.2
TOTAL	2148	4104	100	100	2.6	1963	3993	100	100	2.9