

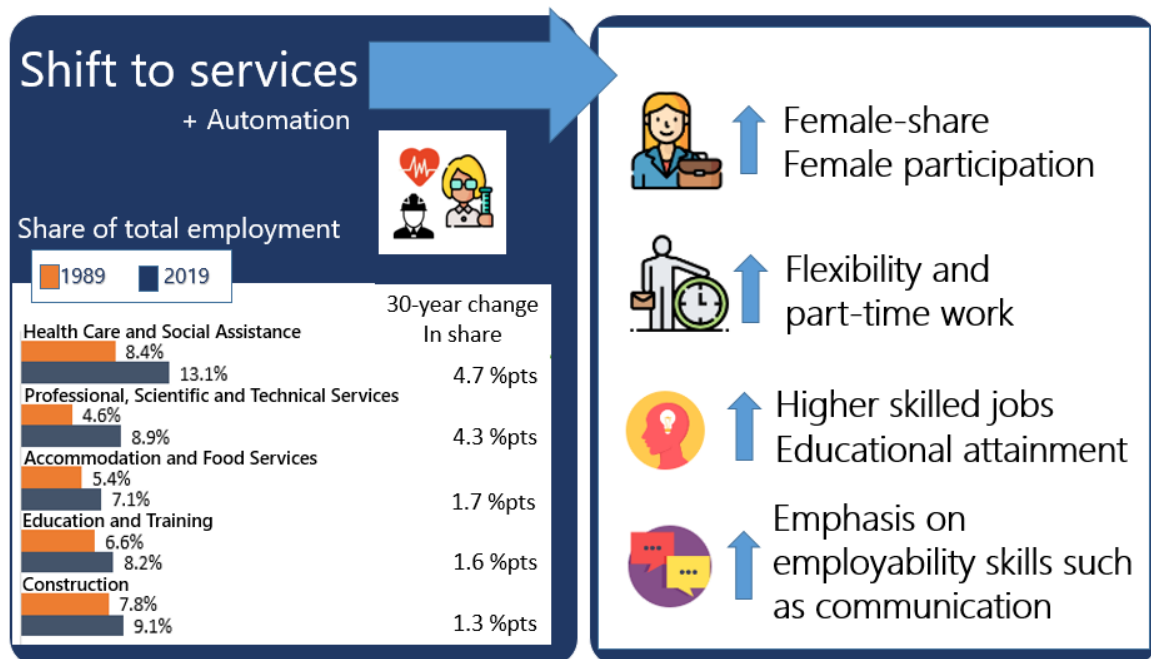


Changes in the Australian labour market: a 30-year perspective

The Australian labour market has experienced almost three decades of uninterrupted growth, with employment growth recorded across a diverse range of jobs and all skill levels. The labour market has undergone structural change, particularly shifting away from production industries towards labour-intensive service industries, as well as towards higher skilled occupations. Advances in technology have also affected the labour market, with increased automation favouring jobs that are non-routine in nature and require people to have skills that are not easily replicated by a machine (such as social skills, emotional intelligence, creativity and advanced reasoning).

Structural change in the labour market is an inevitable process as an economy grows and evolves, and knowing how Australia is changing provides a big picture view of where the future jobs might be. Furthermore, as some jobs disappear, many others are created, each with their own range of required skills and education.

Structural change in the economy also has the potential to affect other factors in the labour market such as the incidence of part-time work, educational attainment, labour market participation and gender trends in employment. Against the backdrop of an evolving labour market, monitoring these factors and the types of skills being demanded by employers is an important way to ensure ongoing job prosperity.



The shift towards a more service based economy

Over the 30 years between May 1989 and May 2019, employment increased by 5.2 million (or 66.9 per cent)¹. In addition to employment growth, job turnover (that is, people changing jobs or leaving jobs altogether) provides more job opportunities than net job growth with around 4 to 5 million movements into, and out of, employment *every year*.

Over the 30 years to May 2019, employment grew in 16 of the 19 broad industries, with the majority of growth recorded across service industries (Table 1).

The largest increase in employment was recorded in the Health Care and Social Assistance industry (up by 1,047,300 or 163.2 per cent), with growth in the industry underpinned in the longer term by ongoing population growth and an ageing population, as well as more recently with the roll out of the National Disability Insurance Scheme (NDIS). The strong growth recorded over the past 30 years saw the industry move from third largest employing industry to the top employing industry. Further, the industry's share of total employment rose from 8.4 per cent to 13.1 per cent.

Table 1. Change in industry share of employment, 30 years to May 2019, by broad industry

	30 year change in employment		30 year change in industry share of employment (%pts)
	('000)	(%)	
Health Care and Social Assistance	1047.3	163.2	4.7
Professional, Scientific and Technical Services	791.8	226.2	4.3
Construction	571.6	95.6	1.3
Education and Training	553.5	109.8	1.6
Accommodation and Food Services	500.3	119.8	1.7
Retail Trade	452.7	53.6	-0.9
Public Administration and Safety	439.0	108.2	1.3
Administrative and Support Services	291.2	180.1	1.4
Transport, Postal and Warehousing	232.3	54.4	-0.4
Other Services	176.8	51.4	-0.4
Arts and Recreation Services	160.6	166.2	0.7
Mining	143.7	138.6	0.6
Rental, Hiring and Real Estate Services	96.0	80.9	0.1
Financial and Insurance Services	89.4	25.6	-1.1
Information Media and Telecommunications	27.8	15.7	-0.7
Electricity, Gas, Water and Waste Services	24.2	18.5	-0.5
Wholesale Trade	-12.3	-3.0	-2.3
Agriculture, Forestry and Fishing	-91.4	-21.5	-2.9
Manufacturing	-316.6	-27.2	-8.6

Source: ABS, Labour Force, Australia, Detailed, Quarterly, cat. no. 6291.0.55.003, trend.

Other labour intensive service industries to record large growth in employment over the 30 years to May 2019 include:

- Professional, Scientific and Technical Services (up by 791,800 or 226.2 per cent);
- Construction (571,600 or 95.6 per cent);
- Education and Training (553,500 or 109.8 per cent) and
- Accommodation and Food Services (500,300 or 119.8 per cent).

¹ Source: ABS, Labour Force, Australia, cat. no. 6202.0, May 2019, seasonally adjusted data.

By contrast, employment growth in production industries was weaker or negative.

Manufacturing was the largest employing industry in Australia 30 years ago, with the industry accounting for 15.2 per cent of total employment. Since then, employment in Manufacturing has decreased by 316,600 (or 27.2 per cent). In May 2019, the Manufacturing industry was the seventh largest employing industry, and accounted for 6.6 per cent of total employment. Despite the long-term decline recorded in the industry, Manufacturing remains a large employing industry, with 848,700 workers in May 2019.

Over the past 30 years, the only other two industries to record a decrease in employment were Agriculture, Forestry and Fishing (down by 91,400 or 21.5 per cent) and Wholesale Trade (12,300 or 3.0 per cent).

The shift towards higher skilled occupations

Over the past 30 years, employment has grown for all skill levels. However, alongside a shift towards a more service-based economy, employment growth has been stronger in higher skilled occupations.

Occupations commensurate with the highest skill level (usually requiring a Bachelor degree or higher) accounted for 45.1 per cent of total employment growth over the past three decades. By contrast, occupations commensurate with the lowest skill level (usually requiring only Certificate I or secondary education) accounted for only 9.4 per cent of total employment growth.

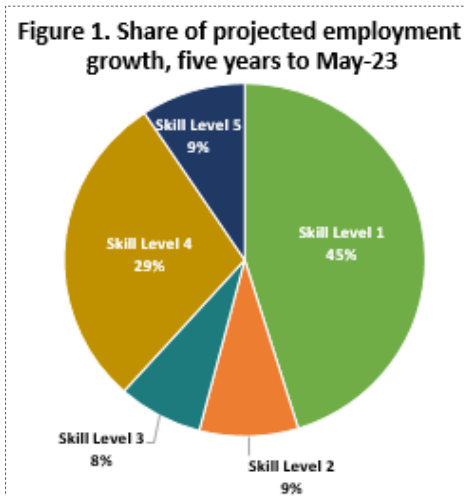
- Reflecting this trend, the share of employment in occupations of the highest skill level increased from 22.9 per cent to 31.8 per cent over the past 30 years, while the share of employment in lowest skill level occupations decreased from 21.3 per cent to 16.5 per cent.

Future employment outlook

Looking forward, over the five years to May 2023, the future employment outlook remains strong with total employment projected to increase by 886,100 (or up by 7.1 per cent).

The shift towards service industries is set to continue. Health Care and Social Assistance is projected to contribute the most to employment growth of all 19 broad industries (increasing by 250,300), followed by Construction (118,800), Education and Training (113,000) and Professional, Scientific and Technical Services (106,600)². Together, these four industries are projected to provide two-thirds (or 66.4 per cent) of total net employment growth over the period. By contrast, declines in employment are projected in Wholesale Trade (down by 9700) and Agriculture, Forestry and Fishing (1400).

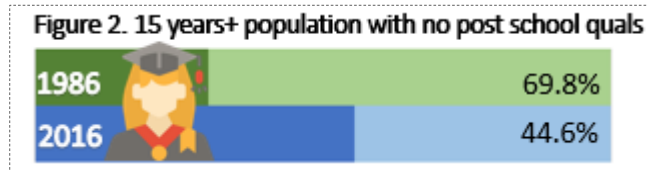
The trend towards higher skilled occupations is also projected to continue over the five years to May 2023, with 45.2 per cent of employment growth projected in occupations of the highest skill level, and only 9.4 per cent is projected in occupations of the lowest skill level (Figure 1).



² Source: Department of Employment, Skills, Small and Family Business, 2018 employment projections, five years to May 2023. Employment projections are based on the forecasts and projections for total employment in the 2018-19 Budget.

- At a detailed occupational level, the largest growth in employment is projected for Aged and Disabled Carers (up by 69,200), Registered Nurses (51,400), Child Carers (27,600), Software and Applications Programmers (25,500), Waiters (21,800), Education Aides (18,800) and Chefs (16,800). Many of these reflect strength in service sectors of the economy.

Increasing levels of educational attainment



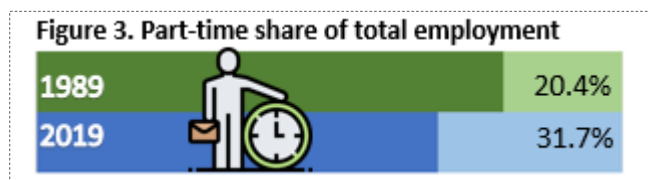
Australia's shift to higher skilled occupations and service-based industries has meant that education has become increasingly important, with unemployment rates much

lower and participation rates much higher for those who have completed higher levels of education.

In 2016, the unemployment rate was just 4.3 per cent for those with a Bachelor degree or higher level of educational attainment³. This compares with 10.1 per cent for those with no post-school qualifications (year 12 or lower educational attainment). Similarly, the participation rate for those with a Bachelor degree or higher stood at 80.8 per cent in 2016, but was only 51.4 per cent for those with no post-school qualifications.

Against this backdrop, the population (aged 15 and over) has become increasingly more highly educated, with the proportion with no post-school qualifications decreasing from 69.8 per cent to 44.6 per cent over the 30 years to 2016 (Figure 2). Bachelor degree or higher educational attainment increased from 5.8 per cent to 24.5 per cent, and Non-degree post-school attainment (including diplomas and certificates) increased from 24.4 per cent to 30.9 per cent.

The shift to part-time employment



Over the 30 years to May 2019, the share of the workforce employed part-time has increased from 20.4 per cent to 31.7 per cent⁴ (Figure 3). This shift towards part-time work can be attributed, to some degree, to

the shift towards service industries which provide more part-time opportunities. Four of the top six largest growing industries have a higher part-time share of employment than across all industries. By contrast, all three industries to record a decrease in employment over the past 30 years have low part-time shares of employment.

Other factors contributing to the shift to part-time work include:

- increased female participation in the labour market;
- young people remaining in education for longer (and supplementing it with part-time work);
- the desire for increased flexibility; and
- a rise in mature-aged participation (with many mature-aged persons staying in part-time work while transitioning to retirement).

Over the same 30 year period, the underemployment ratio (underemployment as a proportion of employed persons) has also increased from 4.1 per cent to 9.0 per cent.

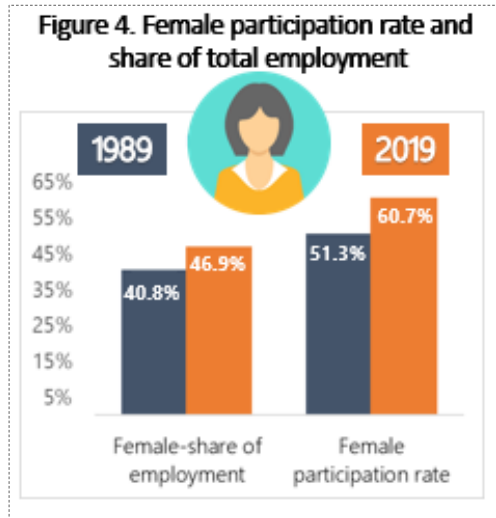
³ Source: ABS Census of Population and Housing, 1986 and 2016, custom data request.

⁴ Source: ABS, Labour Force, Australia, cat. no. 6202.0, May 2019, seasonally adjusted data.

Increased levels of female participation in the workforce

The participation rate for females has increased considerably over the last three decades, up from 51.3 per cent in May 1989, to a near-record high, of 60.7 per cent in May 2019, in seasonally adjusted terms (Figure 4). This reflects, in part, a shift towards employment in industries that have traditionally favoured females and part-time employment, as well as:

- greater access to childcare;
- the emergence of more flexible work arrangements; and
- an increasing acceptance of women remaining in the labour force even with children.

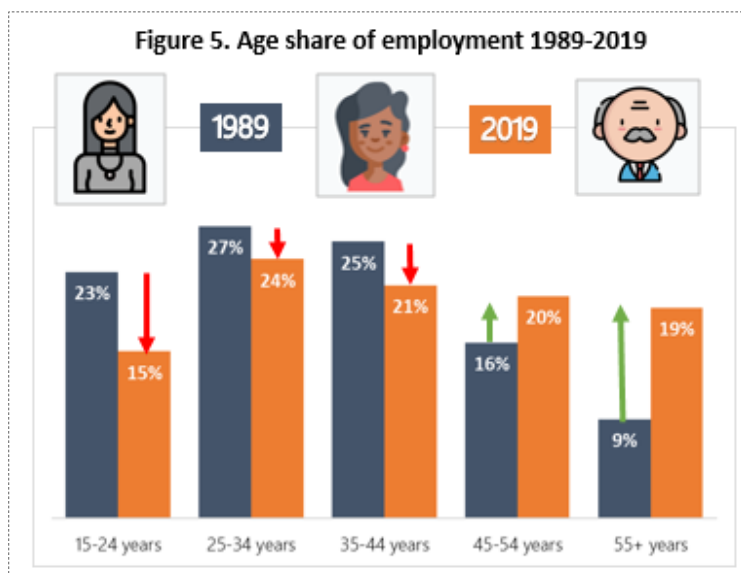


By contrast, over the past 30 years the male participation rate has decreased from 75.6 per cent to 71.5 per cent.

Alongside increased participation, the female share of employment has increased from 40.8 per cent in May 1989 to 46.9 per cent in May 2019.

Workforce ageing

Another feature of the changing workforce has been a dramatic increase in the share of workers in older age demographics. Notably, the proportion of total employment accounted for by mature-aged persons (aged 55 years and over) has increased from 9.1 per cent in May 1989 to 19.3 per cent in May 2019 (Figure 5). This reflects an ageing population overall with life expectancy increasing over time.



The participation rate of the 55 years and over group has also risen as average retirement ages have increased. Over the 10 years to June 2017 (latest available data), the average age at retirement from the labour force for persons aged 45 years and over increased from 52 years to 55 years⁵.

- In May 1989, the participation rate for people aged 55 years and over was 22.4 per cent, compared with 37.0 per cent in May 2019.
- By contrast, over the same period, the participation rate for persons aged 15 to 24 years decreased; down from 72.4 per cent in May 1989 to 68.3 per cent in May 2019 as young people remain in education for longer.

⁵ Source: ABS, Retirement and Retirement Intentions, Australia, cat. no. 6238.0, July 2016 to June 2017.

Skills required by employers now

With the shift towards service industries, employability skills have become increasingly valued by employers, particularly the way people engage and interact with others. These cover a broad range of personal attributes and transferable skills that contribute significantly to an individual's prospects of gaining employment across all occupations and skill levels. These types of skills are harder to replace with a machine.

- Departmental research⁶ shows that around three-quarters of employers place at least as much emphasis, if not more, on employability skills than they do on technical skills.
- When employers are recruiting staff to fill lower skilled roles they seek applicants who are reliable, motivated and hardworking, and have good personal presentation. By comparison, for higher skilled occupations, employers place greater emphasis on recruiting staff who have good communication and teamwork skills, are caring and empathetic, and organised.

In the year to May 2019, many of the most common skills requested by employers in job advertisements were for employability skills (see Figure 6)⁷, such as:

- Communication skills (with 30.7 per cent of all job advertisements requesting the skill).
- Building Relationships (15.7 per cent).
- Teamwork/Collaboration (11.6 per cent).
- Planning (11.1 per cent).



⁶ Source: Department of Employment, Skills, Small and Family Business, *Survey of Employers Recruitment Experiences*. More information at: <http://lmip.gov.au/default.aspx?LMIP/GainInsights/EmployersRecruitmentInsights>

⁷ Source: Burning Glass Technologies. <http://www.burning-glass.com>. 2019. Burning Glass does not reflect the total number of job advertisements in the labour market as it does not include jobs advertised through online job boards not covered (including SEEK). In addition, the Department's research shows that around 20 per cent of vacancies are not advertised, with employers instead using methods such as word of mouth.

Skill Shortages

The structural change towards service industries has created strong demand for skilled workers. As such, shortages of skilled workers have become more prevalent, with the proportion of skilled occupations in shortage rising in recent years. Shortages are currently more common in the technicians and trades worker occupations than for professionals.

- In 2018, there were 25 technicians and trades worker occupations in shortage, compared with 11 professionals⁸.
- Around 80 per cent of assessed technicians and trades occupations were in shortage in 2018, including almost all assessed construction trades. Shortages in the construction trades have re-emerged in recent years following increased construction activity.

For a number of trade occupations, shortages have been persistent. For some of these, shortages are structural in nature, with perceived lower wages and difficult working conditions contributing to high wastage and relatively low training numbers. Trades that are regularly in shortage include:

- A range of automotive trades (i.e. Automotive Electrician, Panelbeater and Motor Mechanic).
- Some engineering trades (i.e. Sheetmetal Trades Worker and Metal Machinist).
- A number of food trades (i.e. Baker, Pastrycook and Butcher or Smallgoods Maker).
- Other trades (i.e. Hairdresser, Airconditioning and Refrigeration Mechanic, and Arborist).

Labour Market Research and Analysis Branch

Australian Government Department of Employment, Skills, Small and Family Business

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Additional resources

Guide to Australian careers: joboutlook.gov.au

Australian labour market information: lmip.gov.au

Australian Jobs publication: employment.gov.au/Australian-jobs-publication

Workforce analysis research program: employment.gov.au/skillshortages

Icons used in this note are from Flaticon: www.flaticon.com Authors: Freepik, Eucalyp, Icon Pond, Smashicons, Linector, photo3idea_studio

⁸ For more information on the occupations in shortage, see <https://docs.employment.gov.au/documents/ratings-summary-labour-market-analysis-skilled-occupations>.