

Chapter 4 Labour Markets

Key Points

- » The Northern Territory labour market continues to remain strong in 2007-08 as buoyant onshore economic conditions prevail.
- » Labour market statistics and related indicators point to solid employment growth and a shortage of skilled labour in 2007-08.
- » Following an increase of 5.3 per cent in 2006-07, as reported by the ABS, resident employment is estimated to increase by 4.8 per cent in 2007-08.
- » Resident employment growth of 2.5 per cent is forecast for 2008-09, in line with a general easing of growth in state final demand in the Territory.
- » ABS-reported employment data does not include defence personnel or fly-in fly-out (FIFO) workers and as such it should be considered only generally indicative of the actual level of employment in the Territory. Even more importantly, ABS employment data for the Territory is subject to very high levels of volatility and must be interpreted and considered in conjunction with a range of other economic indicators.

Territory Labour Market Performance

Labour is a critical input in the production of goods and services. The demand for labour is derived from the demand for goods and services, the cost of labour relative to capital, and the level of output produced per unit of labour (productivity). Accordingly, employment growth and economic growth are highly interdependent.

Employment in the Territory is very much service-oriented. Service industry jobs account for almost 90 per cent of employment in the Territory, compared to just over 80 per cent nationally. The largest employers are retail trade, government administration, health, education and property and business services. The Territory also has a relatively young, mobile workforce, which is reflected in the Territory's large interstate migration flows.

There are a number of data quality issues associated with Territory labour market estimates that make its analysis difficult without using a range of economic indicators. These issues are explored in detail below, under 'Data Reliability'.

The Australian Bureau of Statistics (ABS) Labour Force Survey (LFS) is the most widely reported source of labour market data, producing monthly estimates of the employment, unemployment and labour force participation status of the civilian population aged 13 or over. Using ABS LFS figures, Northern Territory Treasury estimates that in 2007-08 Territory employment growth was 4.8 per cent, the unemployment rate averaged 4.5 per cent in the year and the participation rate increased by more than 2 percentage points to over 72 per cent (Table 4.1).

Table 4.1: Territory ABS-Reported
Labour Force Statistics
(annual average)

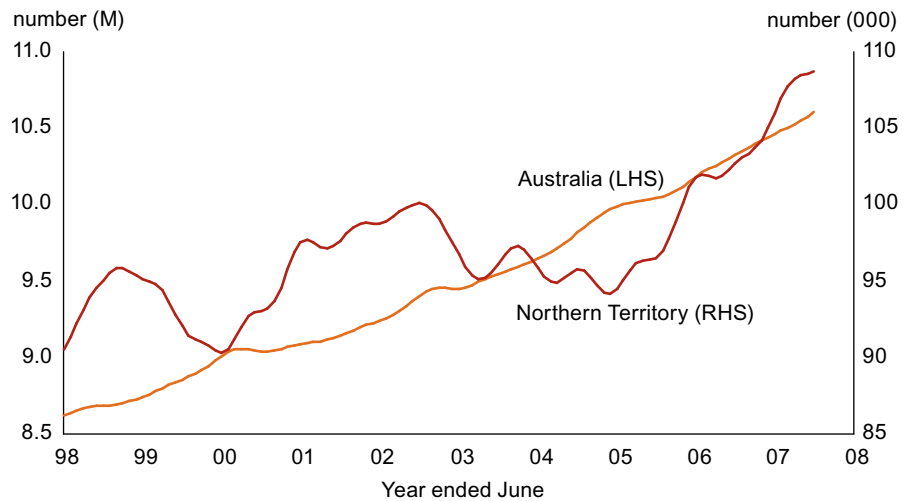
Year ended June	Civilians 15 years and Over		Labour Force		Participation Rate	Employed Persons		Unemployment Rate
	000	% Change	000	% Change	%	000	% Change	%
1988	109.9		71.7			64.7		9.8
1989	111.9	1.8	80.9	12.8	72.2	75.6	16.8	6.5
1990	114.7	2.5	83.2	2.8	72.5	77.7	2.8	6.5
1991	116.8	1.9	83.0	-0.1	71.1	76.4	-1.7	8.0
1992	118.2	1.1	86.2	3.8	73.0	78.8	3.1	8.6
1993	119.0	0.7	83.1	-3.6	69.9	76.4	-3.0	8.1
1994	119.9	0.8	80.8	-2.8	67.4	75.0	-1.8	7.1
1995	123.5	2.9	89.1	10.4	72.2	82.6	10.1	7.3
1996	128.3	3.9	90.6	1.7	70.6	84.3	2.1	7.0
1997	131.4	2.5	92.1	1.6	70.1	87.0	3.2	5.6
1998	134.4	2.2	94.5	2.6	70.3	89.8	3.3	4.9
1999	137.3	2.2	98.5	4.3	71.7	94.5	5.3	4.0
2000	139.9	1.9	96.6	-1.9	69.0	92.3	-2.3	4.4
2001	141.5	1.1	99.3	2.8	70.2	93.7	1.5	5.6
2002	142.5	0.7	105.0	5.7	73.7	98.0	4.6	6.7
2003	143.0	0.3	104.7	-0.2	73.3	99.0	1.1	5.5
2004	143.3	0.2	101.5	-3.1	70.8	96.2	-2.9	5.2
2005	145.1	1.2	100.7	-0.8	69.4	95.0	-1.3	5.7
2006	148.6	2.4	103.5	2.8	69.7	97.9	3.0	5.5
2007	152.5	2.6	107.1	3.4	70.2	103.0	5.3	3.8
2008e	156.3	2.5	113.1	5.6	72.4	108.0	4.8	4.5
Compound Annual Growth %								
1987-88 to 2007-08e	1.8		2.3			2.6		
2002-03 to 2007-08e	1.8		1.5			1.7		

e: estimate

Source: Northern Territory Treasury, ABS Cat. No. 6202.0

In original terms, ABS-reported resident employment grew by 5.3 per cent in 2006-07, in line with a broadly based expansion of economic activity in the Territory. It continued to expand in 2007-08 with growth estimated at 4.8 per cent. In trend terms, the number of employed persons in the Territory in March 2008 increased by almost 3000 to 108 816 from June 2007 (Chart 4.1).

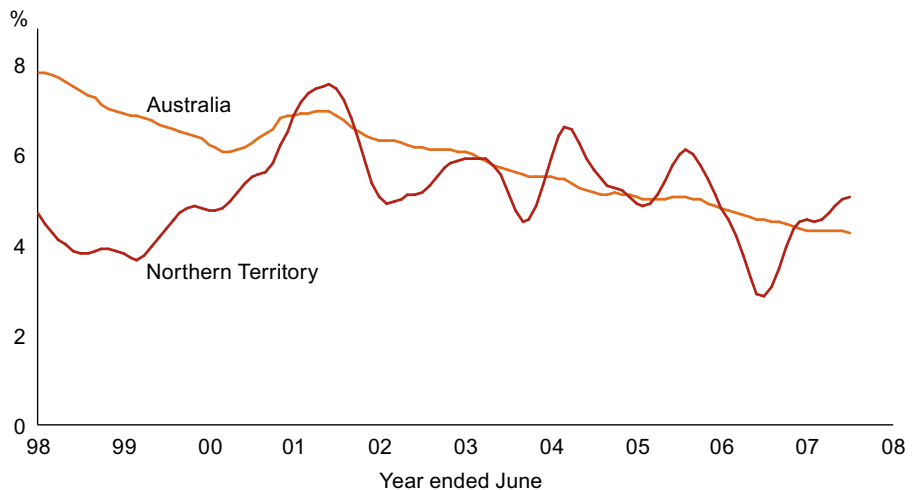
Chart 4.1: ABS-Reported Trend Resident Employment



Source: ABS Cat. No. 6202.0

The average unemployment rate rose from 3.8 per cent in 2006-07 to an estimated 4.5 per cent in 2007-08 (Chart 4.2). The increase in the unemployment rate is attributed to a volatile data series, potentially understating the unemployment rate in 2006-07, as well as solid growth in the labour force.

Chart 4.2: ABS-Reported Resident Unemployment Rate



Source: ABS Cat. No. 6202.0

Labour Demand

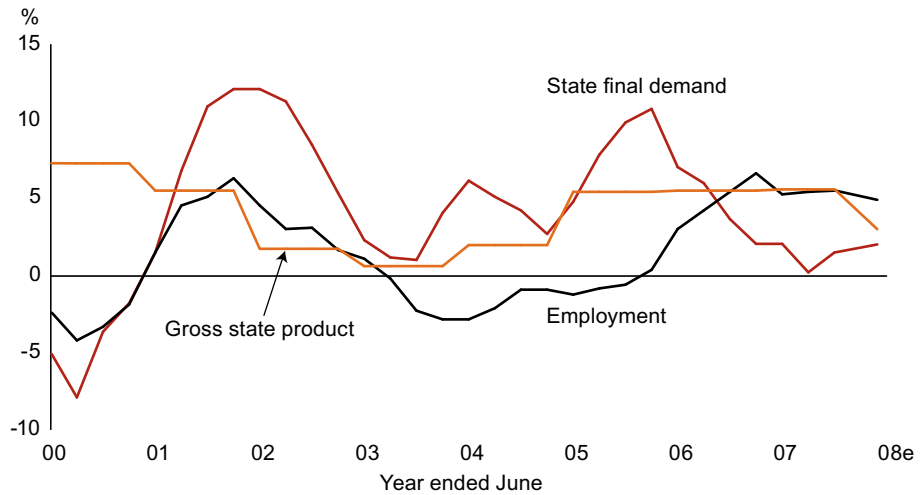
Economic Growth

Employment is generally pro-cyclical, increasing during periods of strengthening economic activity and contracting during periods of low growth. After experiencing solid economic growth in 2005-06, supported by high levels of business investment, the Territory economy remained strong in 2006-07. Economic growth of 5.5 per cent in 2005-06 (the highest of the jurisdictions) and 5.6 per cent in 2006-07 has coincided with the highest level of resident employment (107 000) recorded for the Territory. These strong economic growth rates have also coincided with the Territory reporting a participation rate of 72 per cent, the second highest in Australia behind the Australian Capital Territory (ACT).

The Territory continues to experience strong economic growth in 2007-08, although the shifting of the economy from an investment phase to an exporting phase was more noticeable. State final demand (SFD) was estimated to increase by 2.1 per cent in 2007-08, while gross state product (GSP), essentially equal to SFD plus interstate and international trade, was estimated to increase by 2.8 per cent. The significant difference between SFD and GSP represents the Territory's strengthening export economy. Construction activity remained steady in the Territory in 2007-08, with

work continuing on the over \$1 billion Darwin Waterfront and numerous residential construction projects supporting economic and employment growth (Chart 4.3).

Chart 4.3: Territory Economic and Employment Growth (year-on-year)



e: estimate

Source: Northern Territory Treasury, ABS Cat. Nos 5206.0, 6202.0

In the Territory in recent years there have been noticeable discrepancies between the growth rates of SFD and resident employment. The discrepancies are largely due to widely changing investment levels on major projects which, in a relatively small economy such as the Territory, can have a significant impact on economic growth figures.

An example of this is the importation of pre-assembled modules (PAMs) for the Alcan G3 refinery expansion from 2005 to mid 2007. Although the refinery expansion has had a significant impact on the Territory businesses involved, the overwhelming majority of work done constructing PAMs occurred elsewhere. When the PAMs were transported to Gove and connected to the existing refinery, the investment component was attributed to Territory SFD. This boosts SFD growth while at the same time having little impact on Territory resident employment or other aspects of the onshore economy (Chart 4.3).

Employment Indicators

The Sensis Business Index for Small and Medium Enterprises (SMEs) reported relatively strong net employment and the ANZ Job Advertisement Series displayed strong year-on-year growth of 7.9 per cent in 2006-07. In addition, Territory newspaper job advertisements hit record levels in 2006-07, and remained well above the long-term trend. These are all indicators of the demand for labour in the Territory.

The Territory's labour market continues to strengthen in 2007-08, against a backdrop of strong economic growth, with resident employment growth estimated at 4.8 per cent in year-on-year terms. Latest data indicate a further increase in job advertisements in 2007-08, with growth of 13.6 per cent in the year to March 2008. In addition, the Sensis Business Index reports that a net balance of 24 per cent of SMEs expected to increase the size of their workforce in the three months to May 2008.

In the February 2008 Sensis Business Index, 32 per cent of SMEs reported that finding quality staff was their prime concern, compared to 15 per cent nationally. According to Sensis, the issue of staff recruitment for SMEs has risen substantially in recent years. Since late 2004, the percentage of SMEs reporting staff recruitment as their primary concern has ranged between 25 and 30 per cent, compared to around 10 per cent in the early part of the decade. Despite their concerns, recruitment is expected to increase, with the index reporting that 24 per cent of SMEs expect to

increase staff in the next quarter, compared with 16 per cent nationally.

The recent strong growth in employment and skilled labour shortages are also highlighted by the Department of Education, Employment and Workplace Relations (DEEWR) skilled vacancy survey, which reports that Northern Territory skilled vacancies were up 22.1 per cent in the year to March 2008, while the ANZ job advertisements increased by 13.6 per cent over the same period.

Job vacancies are increasing, while the number of unemployed people in the Territory is decreasing. This means that the labour market is tight and the pool of available labour from which employers must select is small.

Skills Shortages Skills shortages are a key indicator of the demand for labour and are widely reported across the country. The Northern Territory continues to experience a high demand for labour across a range of occupations, industries and skill levels. With an ongoing resources boom in Queensland and Western Australia, and low unemployment nationally, skills and labour shortages in the Northern Territory are expected to continue, particularly in regional areas.

Skills shortages can occur for a number of reasons, including strong employment and economic growth, changing skills needs, changing technology, the geographical location of labour, and demographic factors such as the ageing of the population and associated retirement rates. The Territory has traditionally experienced difficulty in attracting and retaining skilled labour, with recruitment difficulties even greater in regional areas. Lack of suitable skilled labour can have a significant impact on the economy, constraining the rate of economic growth and putting upward pressure on wages as employers try to attract workers.

In recent years, strong growth in the Territory economy and labour demand associated with major projects have exacerbated skills shortages across a broad range of trade and professional occupations, along with a shortage of labour for semi-skilled and unskilled work. In particular, acute shortages have been reported by the Department of Employment, Education and Training (DEET) in most trade occupations, and professional occupations such as engineering, medical practitioners and nursing, education and child care.

During a recent review of the Northern Territory Occupation Shortage List, DEET received responses from industry reporting over 50 new occupations in shortage or experiencing recruitment difficulty. These were largely for professional and associate professional occupations, including librarians and child protection workers. In addition a large number of trade occupations continue to remain on the list. The DEET Workforce NT Report 2006 reports that, of the ten trade occupations forecast to require the highest numbers of additional employees, eight are currently in skills shortage or experiencing recruitment difficulty. National shortages exist for most of these occupations, which are likely to impact on recruitment activities as Territory employers compete with other jurisdictions.

Wages growth Strong wages growth is an indicator of demand for labour. The Labour Price Index (LPI) is an index that measures changes over time in the price of labour unaffected by changes in the quality or quantity of work performed. Changes in wages and salaries resulting from changes in the composition of the labour market are excluded from LPI movements.

The LPI grew by 3.9 per cent in the Territory in 2005-06 and in 2006-07, after reporting a series high of 4.5 per cent in 2004-05. Nationally, the LPI reported average growth of 4.1 per cent from 2004-05 to 2006-07. More information on this

topic can be found in the Prices and Wages chapter.

An available, skilled and plentiful labour supply is crucial to the productivity and economic performance of the economy. There are many factors which both influence and determine the Territory's labour supply. These will be discussed in the following section.

Labour Supply

The Territory's labour market profile differs significantly from that of the rest of Australia, largely as a result of remoteness, transience and seasonality of labour demand and a relatively large Indigenous population. Government strategies to increase employment and the participation rate, and to address skills shortages, play an important role in the Territory. With a relatively young and mobile population, overseas and interstate migration are important sources of labour supply.

Population Growth and Migration

Population growth and employment growth are highly interdependent, and both interstate and overseas migration are valuable sources of skilled labour for the Territory. Population growth has recovered from the 2003 low point, and there is a reported annual growth of 2.2 per cent to the September quarter 2007. A major driver of the increase is the recovery in interstate migration during 2005, recording the first positive net migration figures this decade. In the year to the September quarter 2007, net interstate migration reported an inflow of 381 people after reporting an outflow of 421 persons in the year to the September quarter 2006.

Overseas migration is typically a net contributor to the Territory's population growth, adding an average of 880 people per year to the Territory's population since 1997. Net overseas migration has risen to about 1900 persons in the year to the September quarter 2006 and 1400 persons in the year to the September quarter 2007, well above long-term trend levels. For a more detailed discussion on net overseas migration see the Population chapter.

Category 457 visa holders are a group of employer-sponsored skilled entrants granted visas for up to four years, provided that there are no suitably skilled Australian workers available. There were 1353 Category 457 visa holders in the Territory at 30 June 2007, up 55 per cent from 871 in 2005-06. Primary grants (excludes accompanying family members) to Category 457 visa holders have risen from 690 in 2005-06 to 880 in 2006-07, an increase of 28 per cent. The major sponsoring industries of these new Category 457 visa holders are health and community services 210 (24 per cent), accommodation, cafes and restaurants 140 (16 per cent) and construction 110 (13 per cent).

Participation Rate

The participation rate is a crucial determinant of labour supply. The demographic changes occurring both nationally and in the Territory mean that policies aimed at sustaining Australia's workforce participation rate will become increasingly important. As the Australian population ages and growth in the working age population is exceeded by growth in the older segments of the population, lower labour force participation will place increased pressure on health and aged-care services, and may negatively impact on productivity.

In the Territory, labour force participation is a particularly challenging issue. Although the Territory has the highest participation rate of the jurisdictions, this is largely a product of the population's age profile, with a higher proportion of people in the 20 to 40 year age bracket. However, the Productivity Commission, in a report to the Council of Australian Governments in 2007, stated that in age-standardised terms, the Territory's labour force participation is the lowest of the jurisdictions, reflecting

to a large extent the lower rates of labour force participation in remote Indigenous communities.

Remoteness About 25 per cent (or 52 000) of the Territory's resident population live outside major regional centres and are therefore considered to live in a 'remote' area. Of this total, 42 000 (81 per cent) people are Indigenous, and 10 000 (19 per cent) are non-Indigenous. The lack of training and employment resources available locally, and distance from major employment markets, mean employment opportunities may be limited in many of these areas. Developing local economies and creating links between residents of remote areas and existing employment markets is a major challenge. It also means that a significant proportion of the Territory's potential labour supply is distant from major employment opportunities.

Seasonality Consistent with other jurisdictions, a proportion of the Territory's economic activity and demand for labour is seasonal, in particular, activity and employment in the tourism and agricultural industries. However, these seasonal effects can be exacerbated in the Territory due to the relatively small size of the resident population and pool of available labour. These two industries have historically supplemented their workforce using backpackers and other non-resident labour to fill vacancies. However, maintaining a reliable labour supply can be difficult in these circumstances and is a major challenge for many Territory horticultural producers (such as mangoes and forestry), retail outlets and tourism operators.

Young and Mobile Workforce Compared to the rest of Australia, the Territory attracts a disproportionately large number of young, mobile workers who often view their stay as short to medium term. Employment created from a large number of construction, mining and infrastructure projects in the Territory contributes to the trend whereby non-Territory skilled workers are engaged for the life of the project before returning to their resident jurisdiction.

These trends are reflected in large interstate migration flows, whereby about 8 per cent of the Territory's population relocates interstate each year, around four times the level of other jurisdictions (apart from the ACT). This leads to a high rate of employee turnover which imposes significant recruitment and training costs on employers. It also results in a loss of expertise and skill shortages, which can be accentuated by large projects requiring specialised labour.

Ageing of the Population In 2005, the Productivity Commission released a publication that analysed the economic implications of an ageing population in Australia over the next few decades. The report found that the proportion of working-age persons (people aged 15-64 years) in Australia is expected to decline against the number of people aged 65 and over in Australia as the 'baby boomer' generation reaches retirement age. In other words, there are currently 5.2 persons in the potential workforce for every person aged over 65; by 2044-45 it is expected that only 2.4 persons will be in the potential workforce for every person aged over 65.

The report indicates that the Territory, however, is unique amongst the jurisdictions whereby an increase in the proportion of both Indigenous and non-Indigenous working-age persons is projected between 2004 and 2024. DEET reports that this expectation goes against the national trend and will have important implications for expanding the Territory labour force, provided adequate education and training, and opportunities to participate in the labour force and economic development are made available to all Territorians.

Government Strategies

A number of major initiatives are currently under way aimed at reducing skill shortages in key industries in the Territory. The Territory Government's policy, Jobs Plan – Building the Northern Territory Workforce, aims to create a highly skilled and flexible workforce, address skills shortages, and maximise employment opportunities for all Territorians. Jobs Plan is an initiative covering a range of strategies including the expansion of pre-vocational training for apprentices and trainees, provision of financial incentives for employers to take on apprentices and increasing the number and range of school-based apprenticeships.

In the 2005-06 Budget, as part of the Jobs Plan strategy, the Territory Government committed to a training program intended to see 10 000 apprentice and trainee commencements over four years. The commitment is to be achieved using the strategies outlined above, with employer incentives offered to businesses in skills shortage areas and small businesses with ten employees or less. In 2007, almost 2800 Territorians commenced an apprenticeship or traineeship, bringing the total number of trainee and apprentice commencements to over 8000 in the last three years. Among all trainee and apprentice commencements since 2005, more than a third were apprentices in traditional trades, almost 40 per cent were women and just over a quarter were Indigenous

In early 2005, to address the immediate skilled labour shortages, the Territory Government introduced a Territory Skilled Worker campaign that featured a national, as well as New Zealand, advertising component designed to attract skilled workers and their families to the Territory. As a possible indicator of the success of this campaign, the Department of Immigration and Citizenship reports that between 2004-05 and 2006-07 the number of skilled migrants arriving in the Territory with permanent visas doubled from 154 to 308.

Welfare to Work

On 1 July 2006, the Commonwealth introduced Welfare to Work, a series of measures aimed at increasing the Australian labour force participation rate. The legislation specifically addresses the employment requirements associated with the receipt of income support. The Welfare to Work measures seek to increase the participation rate and employment of mature-aged Australians, parents with school-aged children, people with a disability and the long-term unemployed through measures such as increased services to assist people find paid work, while maintaining a strong welfare safety net.

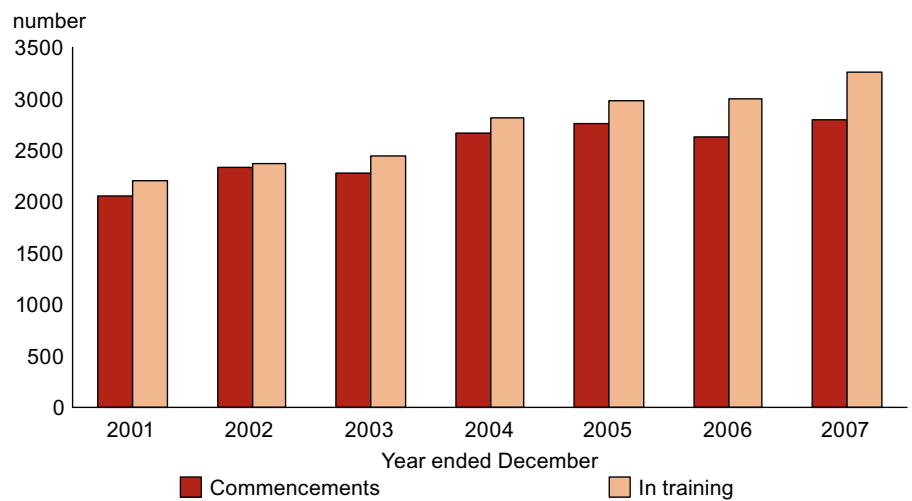
Recent studies indicate that the number of unemployed persons who have transitioned into work over the last decade in Australia has increased significantly. Interestingly, the number of disability support pension recipients is estimated to have increased by a similar figure over the same period.

There is ongoing discussion regarding changes to Welfare to Work in order to reflect current commonwealth attitudes and policies. Comprehensive information indicative of the former and potential impacts of Welfare to Work in the Territory is not currently available, although a long-term increase in the participation rate in the Territory is expected.

Apprenticeships and Traineeships

Apprenticeship and traineeship commencements are a leading indicator of future labour supply. Apprenticeship and traineeship completions in the Territory have increased from 2002 to 2007. Apprenticeship numbers in skills shortage trades also increased over this period.

Chart 4.4: Apprenticeship and Traineeship Commencements and in Training



Source: Department of Employment, Education and Training

In 2007 in the Territory, apprentices and trainees undertaking training increased by 9.0 per cent to 3262 and apprenticeship and traineeship commencements increased by 6.2 per cent to 2790 (Chart 4.4).

Indigenous Employment

Indigenous Territorians are a largely under-utilised labour resource. Increasing the labour supply of Indigenous Territorians is a key government priority. In June 2007 ABS released the latest experimental estimates of the labour force characteristics of Indigenous Australians, based on information collected in the LFS. The estimates indicate substantial differences in unemployment rates and participation rates between Indigenous and non-Indigenous Territorians. In 2006, the unemployment rate for Indigenous Territorians was reported as 15.7 per cent, compared to 4.6 per cent for the Territory as a whole. The Indigenous participation rate for the same period was 44.8 per cent, compared to the total Territory participation rate of 70.1 per cent. However, after reporting a decrease in Indigenous employment from 18 300 in 2002 to 12 800 in 2005, contributing both to an increase in estimated unemployment and a decline in the Indigenous participation rate, Indigenous employment was estimated to increase to 15 300 in 2006.

ABS cautions that these estimates are subject to significant non-sampling and sampling error and, as such, are substantially less reliable than the labour force estimates for the Territory as a whole. High standard errors associated with the data indicate that the large confidence intervals significantly limit the value of the estimates, particularly in relation to analysing changes in Indigenous employment over time.

Northern Territory Emergency Response and Community Development Employment Projects

The Commonwealth Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) is the lead coordinating agency in the Commonwealth's Northern Territory Emergency Response (NTER). A FaHCSIA media release stated that the NTER provides opportunities to review the way Indigenous and mainstream employment services and programs are delivered and how they can be improved, with an emphasis on increasing the economic independence of Indigenous Australians.

Part of the NTER has included reform of the Community Development Employment Projects (CDEP) program, intended to transition CDEP participants in the Territory into real jobs, enhance training opportunities and engage mainstream employment services to assist people into work. The reforms have targeted stimulating employment and economic development in Indigenous communities as a stepping

stone to economic independence by reducing welfare dependency, enabling quarantining of income support payments and requiring school attendance.

FaHCSIA reported that the Local Government Association of the Northern Territory recently conducted an audit of job opportunities in 52 Territory communities. The audit identified 2955 real jobs, with only 44 per cent of these jobs held by Indigenous people. Vacant positions were identified within most communities, particularly for Aboriginal health workers, Aboriginal community police officers, groundsmen, cleaners and childcare workers. There were also professional positions available for teachers, nurses and tradespeople (electricians, mechanics, carpenters and builders). Across the Northern Territory, there were opportunities recognised in a range of industries including construction, mining, pastoral, retail, hospitality and tourism.

Of the 50 CDEP contracts in the Territory, 16 have transitioned to new arrangements, including real jobs, transition activities, employment services and income support, accounting for some 2400 of the approximate by 8000 CDEP participants. The remaining 34 contracts will continue until their expiry on 30 June 2008. The Commonwealth is currently considering reforms to the CDEP program and will provide advice on contractual arrangements after 30 June 2008.

Up to 1670 CDEP positions supporting Commonwealth service delivery are expected to be converted into real jobs by 30 June 2008, with over 600 of these jobs created and filled by participants as at April 2008. The Commonwealth is working closely with the Territory Government to assist many CDEP participants to move into municipal services jobs. People are also being supported to take up work in other locations with stronger job opportunities through mobility assistance.

Composition of Territory Employment

The Territory's labour market has quite a different composition to the Australian labour market, reflecting its unique industry structure.

Government Administration

Based on 2006 Census data, employment in government administration in the Territory accounted for about 13.1 per cent of total employment compared to only 4.7 per cent nationally. The high share of employment attributed to public administration in the Territory reflects the diseconomies of providing public services to a small and widely dispersed population. Compared to the 2001 Census, employment in government administration increased as a proportion of total employment by 1.3 percentage points in the Territory and by 1.0 percentage point nationally (Table 4.2).

Defence

Since the 1990s, the Commonwealth has continued to relocate substantial defence resources to the Territory. This resulted in the number of defence personnel, including civilians, stationed in the Territory increasing from about 2300 in 1990 to around 5400 in 2006. The proportion of Territory residents employed in defence was 6.2 per cent in 2006, an increase of 1.7 percentage points from 1996 and well above the national level of 0.7 per cent (Table 4.2). Although employment growth in defence has been significant in the Territory, it is important to note that defence personnel are not captured in LFS figures.

Table 4.2: Employment by Industry

	Australia			Northern Territory		
	Proportion of total employment (%)			Proportion of total employment (%)		
	1996	2001	2006	1996	2001	2006
Agriculture, forestry and fishing	4.2	4.0	3.1	2.9	2.7	2.4
Mining	1.1	0.9	1.2	3.5	2.2	2.0
Manufacturing	12.6	12.2	11.0	4.4	4.2	4.9
Services (including defence)	78.6	80.6	82.1	85.5	88.1	87.5
Electricity, gas and water supply	0.8	0.7	0.8	0.6	0.9	0.4
Construction	6.3	6.7	7.7	7.4	6.2	7.0
Wholesale trade	5.8	5.3	4.8	3.7	3.5	2.8
Retail trade	13.6	14.6	14.3	11.0	12.4	11.5
Accommodation, cafes and restaurants	4.7	4.9	4.8	6.1	6.1	5.4
Transport and storage	4.3	4.3	4.4	4.9	5.2	4.8
Communication services	2.0	1.8	1.5	1.5	1.1	0.9
Finance and insurance	3.9	3.8	3.8	2.0	1.6	1.6
Property and business services	9.8	11.1	10.7	7.6	8.4	8.3
Government administration	4.2	3.7	4.7	10.6	11.8	13.1
Defence	0.7	0.8	0.7	4.5	5.9	6.2
Education	7.1	7.2	7.4	7.4	8.1	8.5
Health and community services	9.5	9.7	10.7	11.0	8.8	10.1
Cultural and recreational services	2.3	2.4	2.2	3.0	3.0	2.7
Personal and other services	3.6	3.6	3.6	4.0	4.9	4.2
Non-classifiable economic units	1.4	0.6	1.2	1.1	0.9	1.2
Not stated	2.0	1.7	1.4	2.7	1.8	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Note: Due to the very high standard errors associated with the ABS estimates of Territory employment by industry derived from the LFS, the above Census data is considered to be a more reliable measure.

Source: ABS 2006 Census of Population and Housing

Manufacturing

Historically, the manufacturing sector has employed a relatively large proportion of the national workforce in a diverse range of industries. In the Territory, however, remoteness from major markets and a small population base has resulted in a relatively small manufacturing sector and a much lower proportion of people employed compared to the national proportion (less than half the national figure) (Table 4.2).

Mining

Reflecting the Territory's abundant mineral and energy resources, the proportion of people employed in the mining industry is almost twice as high as it is nationally, at 2.0 per cent, although much lower than in 1996 when mining accounted for 3.5 per cent of Territory employment. Given record commodity prices and exploration expenditure in the Territory in the past three years, further growth in mining activity and employment is expected in the future.

Full-time and Part-time Employment

The recent strong growth in ABS-reported employment has been driven by growth in full-time positions, which increased by an average of 3.0 per cent in 2005 and 2006 and by 7.0 per cent in the year to March 2008. Full-time employment growth was partially offset by declining part-time employment, down by an average of 5.8 per cent in 2005 and 2006 and a further decline of 0.5 per cent in the year to March 2008. This has resulted in an increase in full-time employment as a percentage of total employment, up from an average 78.5 per cent in 2005 and 2006 to 79.8 per cent in the year to March 2008.

The increasing proportion of full-time employment in the Territory varies from the national employment trends, where the proportion of full-time employment nationally has been declining over the past 20 years, and now stands at 71.7 per cent. The growth in full-time employment in the Territory may reflect the high level of business confidence and a willingness and need to convert part-time jobs to full-time jobs.

Data Reliability

The strong growth in economic activity in the Territory, as reported by the ABS, for the four years to 2006-07 has not been consistently reflected in ABS-reported resident employment levels or the resident unemployment rate over the same period. It remains Treasury's view that data quality issues associated with the ABS LFS, including survey sample size and the high degree of volatility in survey estimates, are the cause of the inconsistency and continue to be a concern.

Issues with the ABS Labour Force Survey

A number of characteristics of the design and methodology of the ABS LFS limit its accuracy for the Territory. The scope of the ABS LFS, combined with issues of volatility and reliability of the resident employment series, can sometimes create a contradictory picture of the state of the Territory economy when resident employment is analysed in conjunction with other economic activity data.

The disparity between the LFS employment estimate and other economic indicators, in particular SFD, is due to a number of data quality issues including:

- the very large standard errors for Territory labour force estimates;
- the scope of the LFS being limited to the 'usually resident' population, while SFD captures all economic activity of workers in the Territory, regardless of whether the workforce is resident in the Territory; and
- the potential for SFD to include large items that do not have a direct impact on employment numbers in the Territory.

Scope of the LFS

The ABS LFS reports on those parts of the currently economically active population defined as employed, unemployed or not in the labour force. It does not measure the total number of people working or the total number of jobs in the Territory, as is sometimes presumed. The scope of the LFS is limited to the civilian, usually resident, population of the Territory aged 15 years and over, and does not include:

- fly-in fly-out (FIFO) personnel who are usually resident in other jurisdictions;
- full-time Australian defence personnel;
- personnel usually resident overseas and temporarily residing in Australia; and
- diplomatic personnel of overseas governments and non-Australian defence personnel (and their dependants) stationed in Australia.

Nationally, these excluded groups have a negligible impact on the number of jobs in the economy, as they make up a relatively small percentage of the Australian population. However in the Territory, due to its relatively small and transient

population, these groups can account for a significant proportion of employed persons. The exclusion of these groups from the scope of the ABS LFS leads to a significant differential between resident employment and the number of Territory jobs.

Large Sampling Error

The LFS is a sample survey and does not directly measure the whole population. The size of a sample can significantly affect the integrity of the survey results as indicative of the total population. Although there have been improvements in ABS sample sizes in the Territory and a high sampling fraction (the proportion of the population in the sample) compared to other jurisdictions, the sample is still relatively small due to the Territory's relatively small population. This results in volatile estimates with very large standard errors. Standard errors are even greater for estimates of the Territory unemployment rate.

Volatility in the estimates is increased by the:

- heterogeneous nature of the Territory's population;
- constraints imposed on sampling design as a consequence of many dispersed remote communities; and
- transient nature of the population.

In addition, and consistent with the method used for other jurisdictions, the ABS adjusts the survey results to ensure that the resulting estimates conform to the characteristics of the total population. While this is essential for generating representative results, in the Territory it can sometimes exaggerate the effect of outliers in the sample.

Table 4.3: ABS LFS Redesign Sampling Fractions

Year	1976	1981	1986	1991	1996	2001	2006
Sampling fraction	1 in 100	1 in 100	1 in 115	1 in 75	1 in 85	1 in 86	1 in 54

Source: ABS Labour Force Survey Sample Design, ABS Cat. No. 6269.0, November 2007

With large improvements in sampling fractions (Table 4.3), more recently as a result of changes instituted to the survey in 2006, recent survey data may now provide a more consistent picture of labour force statistics. However, due to budget cuts imposed on the ABS from 2008-09, these improvements will be partially offset by a reduced sample size and consequently increased standard errors.

Outlook

Understanding the Territory labour market requires analysis of several economic indicators and related data sources. Nonetheless, forecasting is based on LFS data and the reader should be aware of volatility and accuracy issues.

Resident employment growth of 2.5 per cent is forecast for 2008-09, underpinned by residential construction and work on major projects and continued migration and tourism growth.

A number of larger projects, such as the Darwin Waterfront and construction of the Blacktip pipeline, may have a significant impact on employment demand in the medium term.

The ability of Territory employers to attract and retain suitable skilled workers will continue to be a critical factor in determining employment growth in the Territory, as will the effectiveness of Territory Government training initiatives aimed at alleviating skills shortages.

In the longer term, increasing Indigenous employment and labour force participation represents a significant challenge, and will be an important factor in maintaining and improving the Territory's long-term participation rate and employment growth.