



DECEMBER 2006

ACCOUNTANT: OCCUPATIONAL SKILL SHORTAGE ASSESSMENT

Current Situation: Genuine skill shortage

Short-term Outlook: Genuine skill shortage

1 Executive Summary

1.1 Findings from the 2005 Survey of Employers who have Recently Advertised suggest that employers have had difficulty in filling accountancy vacancies. Only 60% of accountancy vacancies included in the survey were filled within ten weeks of advertising. This report considers these survey results in the context of trends in the demand for and supply of accountants.

Table 1: Employer Survey Indicators, 2005

	Fill Rate	Average Number of Suitable Applicants
Accountants	60%	2.5
All Professionals Surveyed	54%	2.0

Source: Survey of Employers who have Recently Advertised, Department of Labour.

1.2 Demand for accountants has grown strongly (in the order of 5.3% per annum) between 2002 and 2005 on the back of a buoyant economy and a strong increase in the number of enterprises in New Zealand. Also contributing to demand growth has been changes in financial-related legislation and standards. As a result of these changes, there is increased scrutiny of company finances and the demand for accounting services has risen.

1.3 The number of people graduating with a degree majoring in Accounting has increased by 200, or 23%, in the five years to 2005. Net migration of Business Professionals (the broader category into which accountants are classified) has also been positive over this period. However, the supply of accountants, as measured by membership with the New Zealand Institute of Chartered Accountants, only grew by 1.2% between 2000 and 2005 and has not matched growth in demand.

- 1.4 Due to the on-going disparity between the levels of supply and demand, the Department of Labour has assessed the accountant occupation as experiencing a **genuine skill shortage**.
- 1.5 While the economy is not predicted to grow as fast as in recent years, strong growth in demand for accountants is expected to continue in the short-term due to new reporting standards. All entities which have not already done so are required to adopt the New Zealand equivalents to International Financial Reporting Standards for annual reporting periods commencing on or after 1st January 2007. In addition, New Zealand will face a constant struggle to retain and attract accountants as global demand is high. Although supply through training has shown some growth in recent years, new supply will not be sufficient to eliminate the current shortfall of accountants. Consequently, the Department of Labour foresees the shortage of accountants persisting in the short-term.

2 Introduction

- 2.1 This report investigates skill shortages for accountants in New Zealand.
- 2.2 The following section presents key findings from the Department of Labour's (the Department's) *Survey of Employers who have Recently Advertised* (SERA). This survey provides an indication of employer's success in filling advertised vacancies for accountants as well as other information on their recruiting experiences. The next two sections investigate trends in the demand for, and supply of, accountants. The penultimate section presents some of the issues that arise from the matching of demand and supply in the labour market, such as wage rates. Finally, the 'Assessment' section considers all the information presented in the report and provides a view on whether the occupation is in shortage, and if so, the type of shortage being experienced. A short-term outlook for the shortage situation is also offered.



- 2.3 Further background to this occupational report, including a discussion of the methodology; a glossary of terms; and an overview of the Department's *Survey of Employers who have Recently Advertised*, including the survey questionnaire, can be found in the 'Background and technical note' at <http://www.dol.govt.nz/publications/jvm.asp>.
- 2.4 ***Accountants in New Zealand***
- 2.4.1 Accountants (code 24111 in the New Zealand Standard Classification of Occupations 1999) plan, administer and advise on accounting services for enterprises and individuals. More specifically, accountants can undertake a variety of duties such as assisting in the formulation of budget policies, advising on financial matters, preparing and certifying financial statements, preparing tax returns, monitoring expenditures, and conducting financial investigations.

2.4.2 In this report 'Accountants' include both 'Chartered Accountants' and 'Associate Chartered Accountants'. It excludes 'Accounting Technicians'. There were 21,296 accountants¹ registered with the New Zealand Institute of Chartered Accountants (NZICA) and located in New Zealand at June 2005. According to information from NZICA, 66% of the registered members are male and 43% of members are below 40 years of age.

3 Survey of Employers who have Recently Advertised

3.1 This section presents the key SERA findings of employers' experiences in recruiting accountants.

3.2 The SERA provides a measure of employers' success in filling advertised vacancies for accountants through the calculation of a fill rate. This rate is the proportion of vacancies included in the SERA sample which were filled with an adequately qualified and experienced person within ten weeks of advertising. Occupations with fill rates lower than 80% are typically regarded as being in shortage, while fill rates lower than 40% usually indicate that the occupation is in acute shortage.

Table 2: SERA Results for Accountants and All Professionals Surveyed, August 2005

	Number of Employers	Number of Vacancies	Fill Rate ¹	Average Number of Suitable Applicants per Vacancy ¹
Accountants	37	43	60%	2.5
All Professionals Surveyed	791	1,141	54%	2.0

Source: Survey of Employers who have Recently Advertised, Department of Labour.

¹ The 'All Professionals Surveyed' fill rate and average number of suitable applicants per vacancy figures were both weighted to compensate for any under or over sampling of individual professional occupations in the 2005 survey.

3.3 Results from the 2005 SERA show that 60% of accounting vacancies included in the survey were filled within ten weeks of being advertised (see Table 2). Employers are experiencing more difficulty in finding accountants than in 2003 when the fill rate was 78%. The current fill rate for accountants was higher than that for all professional occupations surveyed by the Department (54%). There was an average of 2.5 suitable applicants for each accountant vacancy compared with an average of 2.0 for all professional occupations surveyed.

4 Demand for Accountants

4.1 This section investigates trends in the demand for accountants and the factors underlying them. Demand is measured by the number of accountants required by employers at current wage rates.

¹ Including those provisionally registered.

4.2 *Historical Demand*

- 4.2.1 The demand for accounting services is influenced by the number of enterprises in the economy, economic growth and the financial regulatory environment.
- 4.2.2 There has been strong growth in the New Zealand economy between 2000 and 2005. The number of enterprises grew from 275,000 in 2000 to 334,000 in 2005 (an average increase of 4.0% per annum)², while GDP grew by an average of 3.6% per annum³ over the same period. As the economy has grown and the number of businesses has increased, the demand for accounting services has risen.
- 4.2.3 Household Labour Force Survey data indicates strong employment growth amongst *Business Professionals* (the broad occupational group into which accountants fall) since 2001. The number employed grew by an average of 5.3% per annum in the three years to December 2005 (see Table 3).

Table 3: Annual Average Employment of Business Professionals, 2002-2005, December Years (000's)

	2002	2003	2004	2005	Annual Growth in Employment
Business Professionals	50.5	54.6	52.7	59.0	5.3%

Source: Household Labour Force Survey, Statistics New Zealand. This data is only available at the broad (3-digit) occupational level 'business professionals'. Accountants comprise just below a half (43% in the 2001 Census) of this broader parent group.

- 4.2.4 The amount of compliance work which resulted directly from new legislation in the United States has contributed to demand growth for accountants in recent years, both globally and domestically. The Sarbanes-Oxley Act was introduced in 2002 as a result of recent high profile accounting scandals (for example, Enron and WorldCom). The Act aims to increase corporate transparency through increased compliance measures. Australia also introduced legislation mirroring the Act in 2004. Numerous companies within New Zealand are part of a worldwide or trans-Tasman operation and are therefore affected by the legislation.
- 4.2.5 Demand for accountants has also risen due to the introduction of new reporting standards in New Zealand. Many countries have made a concerted effort towards achieving international harmonisation of accounting practices. The Accounting Standards Review Board announced in December 2002 that all New Zealand reporting entities are required to adopt the New Zealand equivalents to International Financial Reporting Standards (NZ IFRS) for annual reporting periods commencing on or after 1st January 2007. However, entities had the option to adopt NZ IFRS for annual reporting periods commencing on or after 1st January 2005 which has most likely increased the demand for accounting services over the last two years.

² Business Demography data, Statistics New Zealand, 2000-2005.

³ Gross Domestic Product data, Statistics New Zealand, 2005.

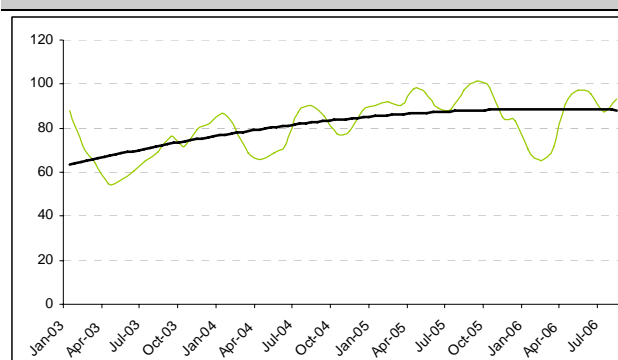
4.3 **Future Demand**

4.3.1 As the economy and the number of businesses continue to grow, the demand for accounting services will persist. While the economy is expected to slow in the short-term after a period of above average economic growth, New Zealand Institute of Economic Research Consensus Forecasts⁴ show that growth is still forecast to be moderate (1.5% in the year to March 2007, before rising to 2.2% in the year to March 2008). However, in the near future, increased accounting regulation will have the greatest impact on the demand for accountants' services. In 2007, all entities which have not already adopted the NZ IFRS will be required to do so. Greater regulation and new accounting standards will lead to increased scrutiny of company finances and significantly increase the demand for accountants, both in New Zealand and globally.

4.4 **Changes in Market Conditions⁵**

4.4.1 The Department's Job Vacancy Monitor suggests that recruitment conditions for employers have remained relatively steady over the last year. After appearing to trend upwards between 2003 and 2005, a sudden drop in late 2005 resulted in the average number of monthly advertised vacancies for accountants remaining at around 80.

Figure 1: Number of Advertised Vacancies for Accountants



Source: Job Vacancy Monitor, Department of Labour

5 **Supply of Accountants**

5.1 This section investigates the various sources contributing to the supply of accountants. Supply is measured by the number of people willing and able to work as accountants at current wage rates.

5.2 **Accounting Graduates**

5.2.1 A degree majoring in Accounting is required to become an accountant. To become qualified as a Chartered Accountant, however, *four* years of degree level study and three years of practical experience is required. To become qualified as an Associate Chartered Accountant, *three* years of degree level study and two years of practical experience is required.

⁴ Consensus Forecasts, New Zealand Institute of Economic Research, September 2006. Consensus Forecasts are the average projections of 10 leading forecasting agencies.

⁵ Analysis of the Job Vacancy Monitor suggests that it is an indicator of change in labour market tightness, or change in the degree of difficulty of recruiting staff. An increase in vacancies typically indicates increasing difficulty in recruiting staff and vice versa. While changes in demand usually dictate changes in labour market tightness, it can also be affected by changes in supply conditions, such as a rise in net migration.

5.2.2 In 2005, the number of people awarded a bachelor's degree majoring in accounting rose to 1,052 (see Table 4). This is an increase of nearly 200 (or 23%) since 2000.

Table 4: Number of Trainees Achieving a Bachelor's Degree with Accounting major

Year	Degree Achievements
2000	853
2001	801
2002	839
2003	1,002
2004	1,006
2005	1,052*

* Figure was estimated by the Department of Labour because of incomplete data.
Source: Tertiary Education Commission.

5.2.3 The training rates for accountants and all professionals are presented in Table 5. This indicator provides an approximate measure of the rate at which the supply of accountants can potentially grow through training. The training rate is calculated by expressing the number of trainees achieving the relevant qualification as a percentage of total employment in the occupation. The training rate for accountants was estimated to be 4.9% in 2005, up from 3.9% in 2001. The training rate for accountants in 2005 is lower than the average training rate of 6.6% for all professional occupations.

Table 5: Training Rate for Accountants, 2000-2005

	Accountants	All Professionals ⁶
2000	4.2%	7.9%
2001	3.9%	8.1%
2002	4.0%	6.9%
2003	4.7%	7.0%
2004	4.7%	7.2%
2005	4.9%	6.6%

Source: Department of Labour.

5.4 Migration

5.4.1 New Zealand has experienced an annual net migratory inflow of 308 *business professionals*, on average, in the five years to December 2005 (see Table 6). As accountants comprise about 40% of this broader occupational category it is likely that there has been a positive net inflow of accountants over this period. These inflows are more substantial than the net migratory losses incurred between 1998 and 2000.

⁶ The training rates for 'all professionals' were calculated by expressing the total number of bachelor degrees achieved in New Zealand, as a proportion of total employment in all professional occupations.

Table 6: Permanent and Long-term Arrivals, Departures and Net Migration of Business Professionals, 2000-2005 December Year End

	1998	1999	2000	2001	2002	2003	2004	2005
Arrivals	1061	1105	1103	1491	1619	1507	1192	1171
Departures	1274	1206	1326	1459	1043	907	1029	1000
Net Migration	-213	-101	-223	32	576	600	163	171

Source: External Migration, Statistics New Zealand.

5.4.2 Higher overseas pay rates are a major cause of the large numbers of accountants migrating overseas. Many countries are experiencing a shortage of accountants and often offer salaries higher than those available in New Zealand. These higher overseas salaries, along with the opportunity to travel, are attracting many New Zealand born and trained accountants who are highly valued overseas. In 2005, NZICA data showed 21% of its 28,285 members were overseas. However, NZICA believe the percentage of its members located overseas has been fairly static recently as there appears to be a regular rotation between those returning and those who are going overseas.

5.4.3 Employers' comments from the 2005 SERA indicated that many New Zealand accountants migrate overseas soon after completing their accountancy studies. Employers mentioned that many New Zealanders travel to the United Kingdom, North America and Australia as part of their OE or in search of more lucrative opportunities (for example higher remuneration, lower taxation and the chance to work in large companies). Given that the NZICA has reciprocal agreements with the United Kingdom, Australia, South Africa, USA, and Canada, the movement of skilled labour in and out of New Zealand is easily facilitated.

5.5 Retirements

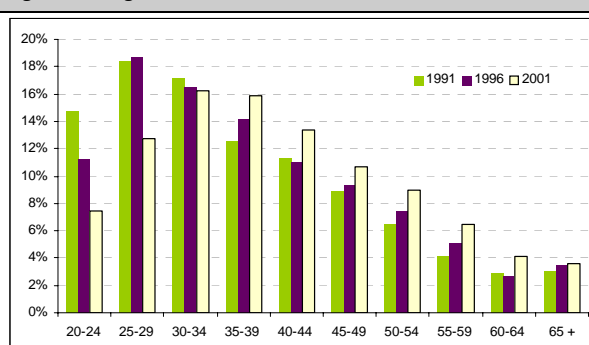
5.5.1 Based on 2001 Census data, it is estimated that

approximately 1.6% of the accountant workforce retires each year (assuming a retirement age of 65). This is the equivalent of about 450 accountants per annum. Census data shows that an ageing of the accountant workforce occurred between 1991 and 2001 (see Figure 2).

The percentage of accountants

under 35 years of age decreased from 51% in 1991 to 37% in 2001, while the proportion in all age groups over 35 increased. As the accountant workforce ages, the number of accountants retiring each year will increase.

Figure 2: Age Profile of Accountants, 1991-2001



Source: Census of Population and Dwellings, Statistics New Zealand.

5.6 *Registration*

5.6.1 While it is not compulsory to register as a Chartered Accountant with the NZICA to work in New Zealand, a high proportion of the accountancy workforce does. Furthermore, members enjoy reciprocal membership rights with many overseas Chartered Accountant institutes and so membership is essential if accountants want to have their qualifications recognised in other countries. Therefore, membership trends for the NZICA have been examined to provide a measure of growth in supply.

Table 7: Registration of Accountants with the NZICA, 2000–2005

Year	Total No. of Registered Accountants	Growth in Registered Accountants	Total No. of Registered Accountants Situated in NZ	Growth in Registered Accountants Situated in NZ
2000	25,545	-	20,243*	-
2001	25,860	315	20,492*	250
2002	26,330	470	20,865*	372
2003	26,638	308	21,109*	244
2004	26,838	200	21,267*	158
2005	27,167	329	21,528*	261

* Figure was estimated by the Department of Labour.
Source: New Zealand Institute of Chartered Accountants.

5.6.2 There were 27,167 accountants registered with the NZICA in 2005. The Department estimates that around 79%, or 21,500, of these registered members are situated in New Zealand. The number of NZICA members located in New Zealand, grew by only 1.2% per annum on average between 2000 and 2005.

5.7 *Occupational Detachment*⁷

5.7.1 Employers were asked in the SERA if they thought accountants left the occupation to go and do something different more or less than in other occupations. Of the eight employers who answered this question, two thought they left at about the same rate as in other occupations, two thought they left at a higher rate, and four thought they left at a lower rate. This may mean that occupational detachment may not have a large impact on the supply of accountants. Most employers interviewed felt that the majority of accountants tend to stay within the accountancy profession once trained, although some move on to management positions as they get older or set up their own businesses.

⁷ 'Occupational detachment' refers to individuals who choose not to continue practising in their occupation but retain a connection to the occupation (e.g. move into a management or supervisory role, or retain professional registration), or who leave the occupation entirely (e.g. by changing occupation or withdrawing from the labour market).

6 Matching of Supply and Demand

6.1 This section considers some of the issues that arise from the labour market matching of the supply of accountants with the demand for accountants.

6.2 *Salaries*

6.2.1 Accountants earn above the average wage rate of all professionals. The Labour Cost Index (LCI) measured an average hourly wage of \$38.13 for accountants in December 2005 compared with an average wage for all professionals of \$33.63 (see Table 8). According to the LCI, wages of accountants have increased by 5.6% between December 2004 and 2005, compared with 4.5% for all professionals.

Table 8: Average Hourly Wage Rates for Accountants⁸

	Dec 2004	Dec 2005
Accountants	\$36.12	\$38.13
All Professionals	\$32.18	\$33.63

Source: Labour Cost Index, Statistics New Zealand.

6.2.2 Further evidence of strong wage growth is available from the annual Momentum Remuneration Survey of NZICA members. The average salary for a Chartered Accountant rose from \$101,300 in 2003 to \$119,100 in 2005, an increase of 17.6%.

7 Assessment

7.1 This section considers all the information presented in this report on employers' recruiting experiences, supply and demand trends, and matching issues, and offers a view on whether there is a shortage of accountants and the type of shortage. A short-term outlook for the shortage situation is also offered.

7.2 Demand for accountants has grown strongly (in the order of 5.3% per annum) between 2002 and 2005 on the back of robust economic growth and a strong increase in the number of enterprises in New Zealand. Also contributing to demand growth has been changes in legislation and financial reporting standards. Some entities have decided on early adoption of the NZ IFRS and as a result the demand for accounting services has risen.

7.3 In contrast to the strong growth in demand, the growth in supply of accountants has been slow. Although the number of students graduating with accounting degrees has increased since 2002, the supply of accountants, as measured by NZICA membership, only grew by 1.2% between 2000 and 2005. Above average wage growth provides further evidence that demand growth has exceeded supply growth and that recruiting conditions have been difficult for employers. This is also reflected in the low fill rate of 60%. The disparity that has developed as

⁸ The data shown from the LCI are unadjusted mean hourly rates. Caution should be taken with interpreting this information due to the relatively small sample sizes, particularly at the occupational level. Furthermore, the LCI is designed to measure changes in, rather than the actual level of, wage and salary rates.

demand has outgrown supply indicates that the shortage of accountants is a **genuine skill shortage** (see Box 1 for definition).

- 7.4 While the economy is not predicted to grow as fast as in recent years, strong growth in demand for accountants is expected to continue in the short-term as all enterprises are required to adopt NZ IFRS for annual reporting periods commencing on or after 1st January 2007. In addition, New Zealand will face a constant struggle to retain and attract accountants as global demand is high. Although supply through training has shown some growth in recent years, new supply will not be sufficient to eliminate the current shortfall of accountants. Consequently, the Department foresees the shortage of accountants persisting in the short-term.

Box 1: Skill Shortage Definitions

Genuine Skill Shortage

Occurs when employers have difficulties filling their job vacancies because there are not enough individuals with the required skills in the potential labour market to fill the positions on offer.

Recruitment and Retention Difficulty

Occurs when there is a considerable supply of individuals with the required skills in the potential labour market but they are unwilling to take up employment at current levels of remuneration and conditions of employment. Retention problems are often a major contributor to this condition.

For queries regarding this report please contact simon.hall@dol.govt.nz or info@dol.govt.nz.

Disclaimer: The Department of Labour has made every effort to ensure that the information contained in this report is reliable, but makes no guarantee of its accuracy or completeness and does not accept any liability for any errors. The information and opinions contained in this report are not intended to be used as a basis for commercial decisions and the Department accepts no liability for any decisions made in reliance on them. The Department may change, add to, delete from, or otherwise amend the contents of this report at any time without notice. The material contained in this report is subject to Crown copyright protection unless otherwise indicated. The Crown copyright protected material may be reproduced free of charge in any format or media without requiring specific permission. This is subject to the material being reproduced accurately and not being used in a derogatory manner or in a misleading context. Where the material is being published or issued to others, the source and copyright status should be acknowledged. The permission to reproduce Crown copyright protected material does not extend to any material in this report that is identified as being the copyright of a third party. Authorisation to reproduce such material should be obtained from the copyright holders.