

Enterprise and Innovation

The Supply of Accounting Graduates in New Zealand

Paul Wells

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Paul Wells

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Paul Wells
Faculty of Business
Auckland University of Technology
Private Bag 92006
Auckland 1020
New Zealand
Tel: +64-(0)9-917-9999 x5750

Fax: +64-(0)9-917-9884 e-mail: paul.wells@aut.ac.nz

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AUT AUTHORS

Paul Wells

Paul is a Senior Lecturer in Accountancy at the Faculty of Business of Auckland University of Technology, where he teaches Accounting Information Systems. Prior to his appointment at AUT, Paul held academic, and management positions at the Waikato Institute of Technology. He has presented a number of conference papers on accounting education, published an information systems teaching case study and co-authored 3 tertiary level, introductory accounting textbooks.

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ABSTRACT

Declining enrolments in accounting programmes in the United States of America and United Kingdom have been well documented for over a decade and it is suggested that accounting as a career choice is becoming less attractive to domestic students. An Australian study supported this conclusion but further noted that the trend is being masked by an increasing level of enrolments in these programmes by international students. Collectively these studies highlight the vulnerability of accounting programmes to fluctuation in the recruitment and enrolment of international students and further, a potential decline in the number of domestic graduates seeking employment in the accounting profession.

This study reports the collection and analysis of data from 8 of the 14 approved tertiary education institutions that provide a recognised academic programme to meet the CA requirements of the Institute of Chartered Accountants of New Zealand (ICANZ). Its objectives are to identify graduation trends for the period 1997-2002 and to consider the impact of international student enrolment on these trends.

The findings suggest that there have been significant fluctuations in the number of accounting graduates since 1997, with domestic graduate numbers rising between 1999 and 2001 and then declining in 2002. During this time the total number of business graduates has remained constant. The decline in graduate numbers coincides with the introduction of the four-year programme of study. As a consequence the findings reported here have implications for the tertiary education institutions, ICANZ and employers.

INTRODUCTION

There is widespread concern that academic programmes are not retaining and attracting high-aptitude students in sufficient numbers to meet the future needs of the accounting profession.

Declining enrolments in accounting programmes in the United States of America and the United Kingdom have been well documented for over a decade. In 1989, Arthur Andersen et al. identified declining enrolments as an indication that the profession was becoming less attractive to students. In 1997 Garner and Dombrowski found that, while the *more able* students were enrolling in introductory courses in accounting, they were not advancing in the discipline and that introductory accounting courses may be discouraging potential accounting students. This same trend was also identified in the United Kingdom (Santinelli 1993) and Australia (Mathews, Brown and Jackson 1990; ICAA 2002).

Through the efforts of the Accounting Education Change Commission (AECC) (Sundem 1999) and the academic community (May, Windal and Sylvestre 1995), the curricula was revised in a bid to recruit the best and the brightest students.

Despite these efforts, Albrecht and Sack (2000) confirmed that the changes implemented were insufficient to stem the flow of high achieving students away from the discipline in the USA.

Conclusions drawn from US data (Garner and Dombrowski 1997; Albrecht and Sack 2000) and Australian data (Mathews et al. 1990) suggest that the decline in the number and quality of students choosing to major in accounting might be due to:

- misinformation or the lack of information about what accounting is and the nature of the duties performed by accountants (Garner and Dombrowski 1997; Albrecht and Sack 2000),
- 2. the perception that the accounting curriculum was predictable, routine and boring (Mathews et al. 1990),

3. student perceptions of accounting as not compatible with the '...creative, rewarding, people oriented careers that many students envision for themselves' (Albrecht and Sack 2000, p. 29).

Albrecht and Sack (2000) suggest that misconceptions about the activities and roles of accounting professionals are caused by four factors: misunderstanding of accounting careers by high school teachers and career advisors; a mismatch between the perceived skill set and the actual skill sets required for accounting careers; the emphasis on bookkeeping in the high school accounting curriculum, and the narrow focus on *scorekeeping* in tertiary level introductory accounting courses. This final factor was considered to be a major issue in 'turning off potential accounting majors' (Garner and Dombrowski 1997, p. 307).

A more recent explanation for the decline in accounting enrolments in the USA has been the implementation of the 150-hour requirement for licensing and membership to the American Institute of Certified Public Accountants (Boone and Coe 2002). The motivation for the implementation of this admission requirement was to develop 'versatile and intellectual CPA's' (Abels 2004) and was in part a response to the recommendations of the AECC. Although most research endorses the increased educational requirements (Rankin and Cumming 1998; Cumming and Rankin 1999; Donelan 1999; Read, Raghunandan and Brown 2001), Bierstaker, Howe and Seol (2004, p. 212) argue that unless students understand the benefits of these new requirements and 'perceive the benefits to exceed the costs, the accounting profession may not succeed in attracting the best and the brightest'.

More recently the Institute of Chartered Accountants in Australia (ICAA) (ICAA 2002) undertook research to ascertain whether these same trends were occurring in Australia. The purpose of this project was to assist the ICAA in planning appropriate strategies for marketing the profession to secondary schools and tertiary institutions and to provide data to the profession for graduate recruitment.

The research data showed that, while the growth in enrolments by students majoring in accounting was attributable to a significant increase in full-fee paying overseas students, there had been a 2.7% decline in enrolment by domestic

students. The researchers also found that the proportion of students majoring in accounting in business degrees was declining quite significantly (ICAA 2002, p. 7).

The future supply of accounting graduates has been identified as a potential area of concern by members of Public Practice Committee of ICANZ. A search of the literature by the author, failed to identify the availability of data relating to graduate trends within the New Zealand context.

BACKGROUND

Following an international review in 1992 of the Admission Policy by Lothian and Marrian (1992), the Council of the then New Zealand Society of Accountants (NZSA) approved a new admissions policy in March 1994 (NZSA 1994). This new policy sought to 'generate a positive public perception of the professional body and its members' (Cox 1997). It articulated three distinct components, academic, practical experience/training and demonstration of professional competence (NZSA 1994, p. 4; ICAA 2002). Key elements of the academic policy included, the completion of, a degree programme, and four years' full-time equivalent study at an approved tertiary institution. In addition the approved programme of study was to include 35-40% accounting studies, 35-40% business-related studies and 20-30% liberal studies. Most Approved Tertiary Education Institutes (ATEIs) responded to these additional academic requirements by developing one year graduate diplomas in accountancy to be undertaken at the completion of a three-year baccalaureate level degree.

The intention of this new policy was to define a significantly more rigorous admission process with a broader curriculum requiring a six to seven year training period for intending members of the Chartered Accountants (CA) College. While this new policy was approved for implementation in July 1995, the academic component (four years tertiary study) was introduced in January 1996 but with transitional arrangements in place for existing students until 2002 (NZSA 1995). Since then, there has been debate regarding the effect of these changes on the number of graduates seeking membership of the CA College (Mackay 1997).

PROJECT AIMS

With the increased demand for qualified accountants in the workforce, it is of great importance to identify opportunities to target students early in their studies in order to encourage them to major in accounting. As a consequence this research project sought firstly to ascertain the enrolment trends of accounting graduates in New Zealand degree-awarding institutions from 1997 – 2002. Secondly, it sought to determine whether New Zealand trends are consistent with those observed in Australia and the United States of America. Finally, it sought to ascertain whether the implementation of the new NZSA admissions policy had influenced these trends.

These results will assist the profession to adequately plan appropriate strategies for marketing the profession to secondary schools and tertiary institutions and provide data to the profession for graduate recruitment.

METHOD

Procedure

This study replicated the Australian study by surveying all 14 ATEIs which provide recognised academic programmes to meet ICANZ Chartered Accountant requirements for admission.

Each of the 14 approved ATEIs was contacted by email and asked to complete a short questionnaire. Each institution was asked to collate and aggregate data for all campuses under their umbrella. The representatives from each ATEI were then requested to fax, mail or email the completed responses to the researcher. Results were then collated, tabulated and graphed. One follow-up reminder was sent to all non-responding institutions.

Survey Instrument

Each institution was asked to report, for each year between 1997 and 2002, on the number of final year students who have completed, or are completing:

- 1. An accounting single/double major,
- 2. A business or commerce degree

In addition the ATEIs were asked to distinguish between domestic and full fee paying overseas (international) students and exclude offshore enrolments.

Respondents

Responses were received from 8 ATEIs representing a 57% response rate. These were from 4 universities and 4 polytechnics/institutes of technology. For 2001, the 4 respondent universities represented 46.8% of the business graduate population (NZVCC 2001). The results of the survey are shown in Table 1.

Accounting		Bus	siness
Domestic	International	Domestic	International
366	114	2035	361
443	88	1998	262
613	118	2189	319
667	129	2158	342
669	77	2142	293
611	90	2174	331
	Domestic 366 443 613 667 669	Domestic International 366 114 443 88 613 118 667 129 669 77	Domestic International Domestic 366 114 2035 443 88 1998 613 118 2189 667 129 2158 669 77 2142

Table 1: ATEI Graduates 1997 – 2002

RESULTS

The study found that the proportion of business students majoring in accounting increased from 20% in 1997 to 31.8% in 2000. Since then there has been a decline in the proportion of accountancy graduates to 27.98% in 2002. This trend is illustrated in Figure 1.

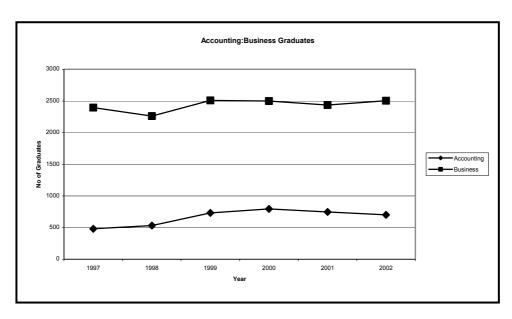


Figure 1: Overall Trends in Accounting vs Other Business Majors 1997-2002

The number of business graduates at the responding institutions has remained constant between 1999 and 2002 for both domestic and international students. This trend is illustrated in Figure 2.

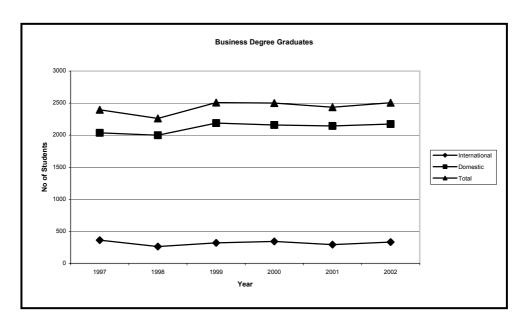


Figure 2: Business Graduate Trends

This same trend is not reflected in the number of accounting graduates. The number increased by 37.6% between 1998 and 1999 and then by 8% the following year. This was followed by 6% declines in both 2001 and 2002. Further analysis of

this trend shows a different pattern for graduating domestic and international students in accounting. While graduating domestic student numbers peaked in 2001, the graduating international student numbers peaked in 2000. These trends are illustrated in Figure 3. Of particular note is a 14% increase in international graduates in accounting in 2002. This has the effect of masking the 8.7% decline in domestic accounting graduates in that year which produced a net decline of 6%. From these findings it is unclear whether this growth in international students will continue as there are many factors affecting the level of international student enrolment which are beyond the control of the educational institutions. These include, volatile swings in exchange rates, the impact of epidemics such as Severe Acute Respiratory Syndrome (SARS), economic downturns and terrorist activity.

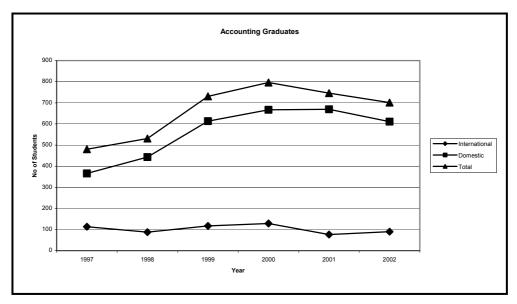


Figure 3: Accounting Graduate Trends

When trends for domestic business and accounting students are compared, it is noted that while graduate numbers in business have remained static between 1999 and 2001, the percentage growth rate in accounting graduates has declined each year. A further point of note is that in 2002 domestic business graduate numbers increased by 1.5% while accounting graduate numbers decreased by 8.7%; suggesting that accounting is becoming a less attractive major within a business degree. This trend is illustrated in Figure 4.

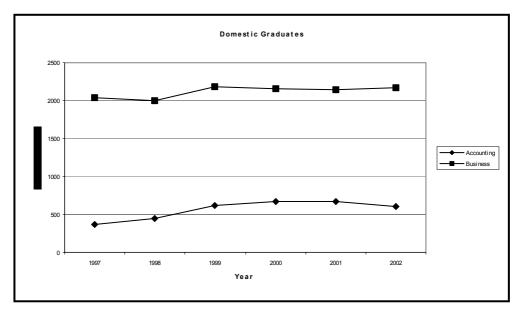


Figure 4: Domestic Student Graduate Trends

The international student graduate trends are illustrated in Figure 5. These results suggest only minor differences in the trends for accounting graduates compared to the overall business cohort, with accounting graduates comprising 26-31% of all business graduates during the period 1999-2002.

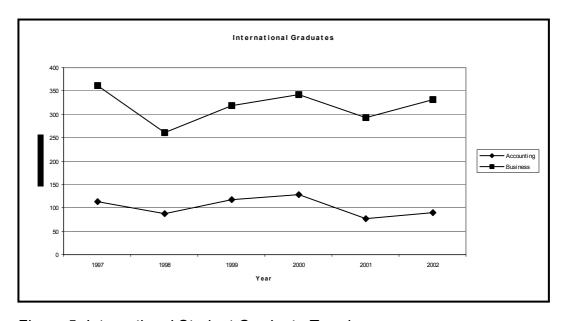


Figure 5: International Student Graduate Trends

DISCUSSION

The number of international business degree graduates has remained constant from 1997 to 2002 while the number of accounting graduates has fluctuated. This would suggest that the fluctuations in the accounting major have impacted on international enrolments in the other business majors.

The decline in domestic accounting graduates in 2002 when overall business graduates is rising suggests that accounting may be losing its appeal to domestic students. Whether this trend continues remains to be seen although it should be noted that changes in domestic graduation trends have been less dramatic than those for international students.

Possible causes for this decline in domestic accounting graduates when the overall number of business graduates is increasing are first, the misconceptions about the activities and roles of accounting professionals and second, the implementation of the new ICANZ admissions policy which requires four years of full-time tertiary study. Interestingly a key motivation for the new admissions policy was to create a more 'positive public perception' of the profession.

Studies in the USA (Cohen and Hanno 1993), United Kingdom (Fisher and Murphy 1995), Australia (Smith and Briggs 1999) and New Zealand (Tan and Laswad 2005) all confirm the negative perceptions of accounting and hence the misinformation which exists about the discipline. It is therefore not surprising that students are encouraged into what are perceived to be more creative, rewarding and people oriented careers and as a consequence, the profession is unsuccessful in recruiting the brightest and best students.

The second possible cause of the decline in domestic accounting graduates is consistent with the US experience where increasing academic requirements coincided with a 'precipitous' decline in accounting enrolments (Boone and Coe 2002). In the United States of America, Albrecht and Sack (2000, p. 30) concluded that the 150-hour academic requirements were 'universally seen as a mistake' and in turn this has implications for ICANZ when reviewing the success of the new

admission policy (ICANZ 2004). A further concern based on the US experience is that the 'best and brightest' students may in fact be the students deflected to other majors which require only three years of study. Bierstaker et al. (2004) found that students elect to take shorter programmes of study because the costs exceed the benefit of the programmes with the longer study commitment. The NZ data supports these findings as evidenced by the different timeframes for the decline in domestic and international graduates. Most international graduates' study visas require full-time study, which means that those who commenced study prior to January 1996 should have graduated by 2000 (allowing for the repeat of some courses). As a consequence many of the graduating students in 2001 would be from the first cohort of admissions seeking to satisfy the new academic requirements implemented in January 1996.

This would not have been in the same timeframe for domestic students because of the large cohort of part-time students who commenced their studies prior to 1996 and who were taking full advantage of the opportunity to complete the academic requirements, through part-time study, under the old regulations by 2002. This is highlighted by the sudden increase in ICANZ provisional membership figures for 2002 (ICANZ 2004) which are illustrated in Figure 6.

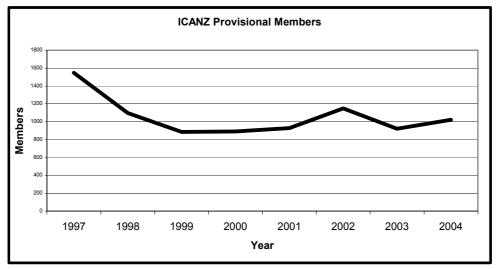


Figure 6: ICANZ Provisional Memembership Trends

The New Zealand results would suggest that, as in the US (Cohen and Hanno 1993), accounting is becoming less attractive as a major within business degrees and that an increasing number of students are electing to take other majors in

business. While the findings are consistent with those from the Australian study (ICAA 2002), this study did not show the significant increases in the proportion of international student graduates in accounting or business found in Australia. Enrolment evidence collected from New Zealand Diploma in Business providers (Wells 2003) would suggest that international student enrolment is a much more recent phenomenon in NZ and that this growth has only occurred with students yet to graduate.

Information supplied by two institutions would suggest that a larger number of international students are seeking to study accounting within the NZ Dip Bus and then transfer to an accounting degree programme after two years of study. If this trend continues there is likely to be a significant change in the proportion of international students graduating from accounting degree programmes.

Despite these external influences it would appear that the new admissions policy has had a greater effect on domestic than international graduate trends. One possible explanation for this is that a smaller proportion of international accounting graduates apply for membership of ICANZ. This is turn will further mask the impact of the declining number of domestic student graduates in accounting degree programmes and hence the supply of accounting graduates to the domestic labour market.

CONCLUSION

With increasing demand for qualified accounting staff in the workforce, it is vital to identify the reasons for the declining popularity of choosing accounting as a major over the other business options.

First, this study has found that for domestic students accounting is declining in popularity relative to other business majors and this has implications for employers. Second, recent increases in international student enrolments in accounting programmes are masking the decline in domestic students and a significant increase in international students will have implications for the teaching strategies used by tertiary teachers. Third, that the timeframe for the decline in accounting graduates corresponds with the timeframe for the implementation of the new ICANZ admissions

policy and so it is likely to have contributed to the decline. It is therefore somewhat ironic that the revised admissions policy which sought to 'generate a positive public perception of the professional body and its members' (Cox 1997) may in fact be a barrier to the recruitment of the best and brightest students.

Two limitations exist in this study. The first, is the inherent weakness in survey research of non-response bias, particularly as only 50% of the Approved Tertiary Education Institutes responded to the survey. Secondly, given the changes in the trends detected in the last year under study it, there is insufficient data to reliably predict future trends from these changes.

A further research opportunity arises from this study to extend the study for a further three years to ascertain whether changes detected in 2002 are part of a longer-term trend.

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