

The Labour Market for Accountants and the Skilled Occupations List

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CPA Australia**



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Executive Summary

This report provides an independent analysis of labour market conditions for accountants and the role played by skilled migrants in addressing current and emerging shortages and gaps and also the medium to long term role of such migrants. It also provides an analysis of immigration policy settings.

The report was commissioned by the CPA Australia for the purpose of providing guidance to the current round of consultations on Skilled Occupations List being led by the Department of Education.

The report updates and integrates separate but related pieces of advice provided last year on the labour market for accountants and the review of skilled and temporary migration and incorporates new material on the skilled migration – education nexus.

The report is in two main parts: labour market issues for accounting and of accountants and the international and policy context.

The main conclusions are as follows.

The labour market for accountants

In the short run there appear to be shortages of accountants in specific cases and for specific skills especially for accountants with more experience. These shortages can be dealt with through employer nominated temporary entry 457 visas.

In the medium term of 10 or so years, total openings for accountants in accountant jobs of around 11,000 per annum appear likely.

In addition there is significant but unquantified demand for persons with accounting qualifications and skills working in management or related financial and other services.

Turning to domestic supply, domestic completions of accounting Bachelor degrees are about 2,500 per annum and not increasing.

Domestic completions of accounting majors in all degrees are averaging about 4,700 per annum. But many of these graduates choose careers other than accounting.

Traditionally immigrants with accounting skills have been running at about 8,000 per annum, including some who do not seek work formally as accountants.

The large gap between the forecast openings for accountants as accountants and other demands for accountants and domestic supply has to be filled by international students staying in Australia and/or by new migrants. The issues are particularly acute in, though not at all limited to, regional areas. Most of those with accounting qualifications find employment relatively quickly in jobs commensurate with their skills.

Policy settings

This report also emphasises that economic growth and employment in Australia is itself a function of the growth in human capital. Accountants are vital to the working of a modern and fast changing service-based economy such as Australia. The skills possessed by accounting graduates are not just valuable in accounting jobs but can be applied to a variety of occupations. People with accounting skills create economic growth through use of these skills.

Migration increases demand for jobs as well as supply and it is crucial to consider the role of skilled migrants in growing the macro economy (as shown in the report by Independent Economics).

Currently there are an estimated 39,200 international students enrolled in degrees with accounting majors (Bachelor and Masters). They contribute over \$1.7 billion to the Australian economy of which over \$967 million is Australian universities' fee income. Additional benefits include the positive contribution made directly to the economy by overseas-born but Australian-trained accountants who choose to migrate to Australia. Global integration with source countries of the skilled migrants can also be enhanced for Australia, a further important consideration as the mining investment boom levels off for this country. If significant changes were to be made to eligibility of foreign accountants for migration to Australia this would have undesirable impacts on universities and the economy.

Currently, immigration policy is in a holding position. Accordingly, the present SOL is still a key factor in influencing the nature of arrivals.

Detailed studies of future occupational requirements put professionals including accountants well at the top of the list for national development benefit.

However, migration policy should aim to encourage skilled migration generally including accountants. This enhances the participation and productivity needed for a stronger economic future. To this end migration policy would focus on a skilled migration policy rather than on trying to estimate the precise numbers of accountants or other specific occupations required at any point in time.

It is important therefore to have a smooth transition to a sliding points scale approach so as to move beyond the present "on-off", short-term SOL approach.

PART I. LABOUR MARKET ISSUES FOR ACCOUNTING

1. The Australian Labour Market

The structure and dynamics of the labour market for accountants can be understood only in the context of changes that are occurring in the Australian labour market. In a modern economy like Australia, technological change and globalisation lead to ongoing dynamic structural change in which both formal accountant skills and flexible business skills are key requirements. Industries have also embraced new technologies and have become increasingly involved in the global economy.

Much of the changing composition of employment can be attributed to changing industry mix. In 1975 the 'soft' services (such as health, finance, retail, education, restaurants etc.) accounted for just over 50 percent of all jobs. By 2015, the sector accounted for over 70 percent of all jobs (ABS 2015). By contrast, the share of manufacturing in total employment almost halved over the same period to less than 10 percent. There were similar reductions in the relative shares of jobs in the 'industrial' services (such as construction, communications, electricity, gas and water). The change in distribution of jobs by occupation has also been remarkable. There has been a relative decline in employment of those with manual skills, such as tradespersons and labourers and considerable growth of occupations requiring high levels of education and 'interactive skills' such as professionals and associate professionals and community and personal service workers – including accountants (Lewis, 2015).

While part of this changing distribution of jobs is no doubt due to the industry changes noted above, particularly the growth in demand for services, part of this is also due to technological change (Kelly and Lewis, 2010). Changes in industry composition have combined with technological change to systematically change the demand for skills and technological change has been the dominant influence (Kelly and Lewis, 2010). It has allowed for, or even driven, a restructuring of occupations within industries. A combination of structural and technological change has significantly changed the demand for labour with respect to part-time employment, gender and skills. Less skilled workers are more vulnerable, as are younger and older workers. More generic and general skills rather than firm-specific skills are required. The overall outcome is a more highly skilled workforce and a more efficient economy.

For most Australians the labour market along with the education and training system has facilitated the adjustment of labour supply to meet those changes in demand. The increased participation of women and students in the workforce has responded to the increased demand for part-time workers and those with interactive skills (Lewis, 2006). In addition the education system has significantly increased the average cognitive and education levels (Kelly and Lewis, 2010). Labour supply has, generally, adjusted well to labour demand due to structural and technological change.

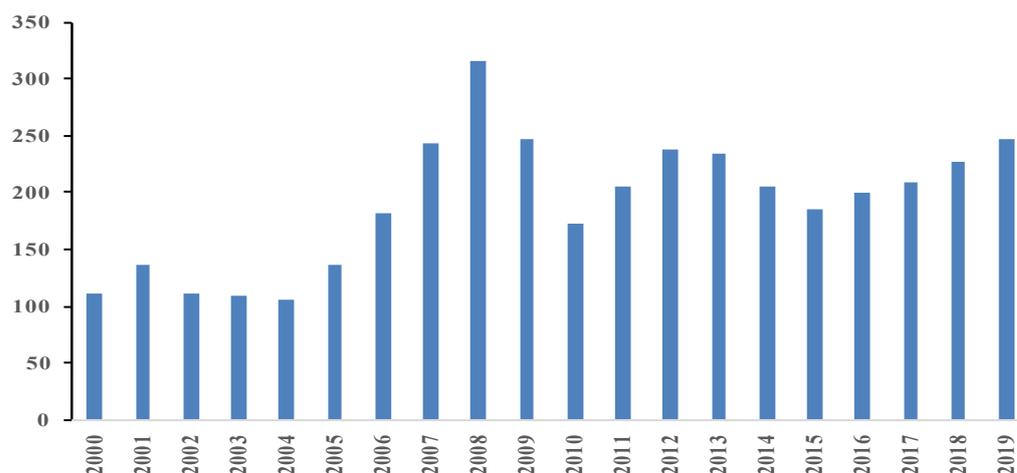
The 'New Economy' demands different skill sets. Structural change and technological change has reduced the demand for routine manual and clerical skills and increased demand for others, most notably cognitive and interactive skills. An accounting degree is ideally suited to providing graduates with the skills in demand in the New Economy. Accounting degrees, as well as providing the requisite occupational training, generally include education in economics, statistics,

information technology and a range of other skills such as written and oral communication skills required by business and government.

In the decade leading up to the ‘Global Financial Crisis’ (GFC) in 2008, labour shortages were a significant problem for the Australian economy. This was reflected in the lowest unemployment rate in three decades and record net migration. Shortages were reported in both the private and public sectors, including for skilled and unskilled labour. Occupations affected included accountants, medical practitioners, nurses, schoolteachers, pilots, economists, tradespersons and engineers through to agricultural workers and shop assistants (Lewis, 2008).

A major response used to alleviate skill shortage is to increase the intake of migrants and temporary residents. In 2006 the net inflow of new migrants was 186,118, up 32 per cent from 2003. This rose further to reach a peak in 2008 to a net inflow of 298,648 (see Figure 1) – making up over 50 per cent of Australian population growth. After two years of decline, in 2011 net migration began to rise again. The Department of Immigration and Border Protection (DIBP, 2015) estimates net migration of 193,100 for the year ending September 2015 and forecasts this to increase to 246,500 for 2019.

Figure 1: Actual and Forecast Net Overseas Migration (‘000)



Source: Australian Bureau of Statistics, *Migration, Australia 2011-12 and 2012-13*, Cat No 3412.0 and DIBP (2015).

In recent years, post-GFC, there has been more concern about unemployment as the national rate of unemployment rose slightly compared to the boom years. However, unemployment has not affected all industries and occupations equally. Most vulnerable are those with low levels of education or who possess specific skills whose demand is in decline. However shortages of skilled labour in some areas still existed. Indeed, these shortages tended to hinder economic growth and make it harder to create jobs for the unemployed. A well-functioning labour market for skilled labour, including accountants is necessary for a prosperous low-unemployment economy.

2. The Accounting Profession

The accounting profession includes two related but different groups of people. These are people qualified and working as accountants and people with accounting qualifications (e.g. majors in accounting in mixed degrees) using their skills other than as an accountant. This paper focuses on the former group for whom there is most data. But we also recognise the important contribution of the latter group to the economy.

Those working as accountants are defined as those working in occupations defined within the Australia and New Zealand Standard Classification of Occupations (ANZSCO, 2006) three digit groups, namely:

- 2210 Accountants, Auditors and Company Secretaries nfd
- 2211 Accountants
- 2212 Auditors, Company Secretaries and Corporate Treasurers
- 2220 Financial Brokers and Dealers, and Investment Advisers nfd
- 2221 Financial Brokers
- 2222 Financial Dealers
- 2223 Financial Investment Advisers and Managers

Individuals qualified as accountants are defined as those with a level of skill commensurate with an Australian Qualifications Framework (AQF) Level 7 or higher qualification (AQF 2009) who nominate their highest qualification as being in the field of accounting.

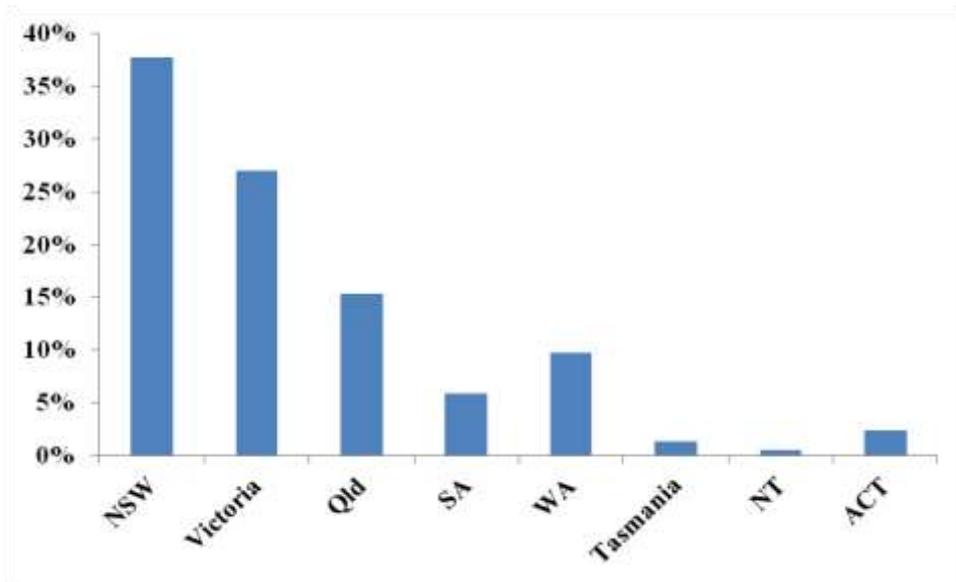
The most comprehensive source of data is the Censuses of Population and Housing (Census). This provides the best data for profiling the profession, although it is of limited use for analysis of trends since it relates to five year intervals, and the latest is for 2011. However changes in the overall distribution of the accounting population since 2011 have most likely been quite small.

According to the 2011 Census, 196,567 people were employed as accountants while 164,613 held a bachelor degree in accounting. Of those employed as accountants almost half (49 percent) are female but women are marginally less represented (43 percent) in the more senior occupations such as Auditors, Company Secretaries and Corporate Treasurers. Clearly the accounting profession is an important source of professional jobs for women. Migration has been a major feature of the accountant's labour market with 42 percent of the accounting profession overseas-born compared with 27 percent for the whole population of Australia.

As shown in Figure 2, most accountants work on the eastern seaboard with 80 per cent located in New South Wales, Victoria and Queensland. New South Wales has the largest share of accountants, with more than 38 per cent. This is to be expected given the concentration of service sector activities in New South Wales, particularly Sydney. The ACT has the highest ratio of accountants to the population of any state or territory.

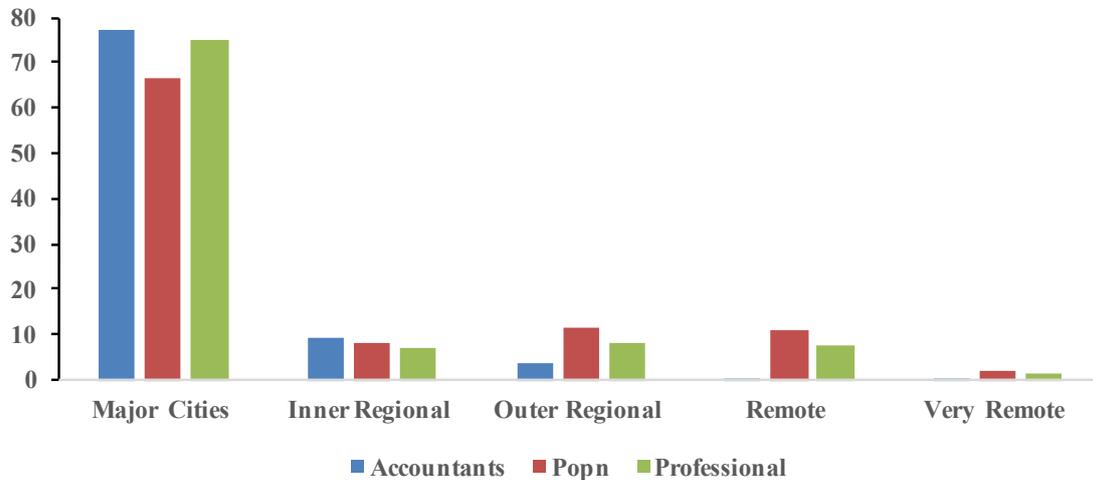
Figure 3 shows the regional distribution of employed accountants. Over 80 percent work in the eight capital cities. The rest are divided equally between other metropolitan centres with populations over 100,000, coastal towns within 80km of the coastline and inland (non-remote) areas.

Figure 2: Employed Accountants by State/Territory of Residence



Source: 2011 Census of Population and Housing, unpublished.

Figure 3: Employed Accountants by Region, percent



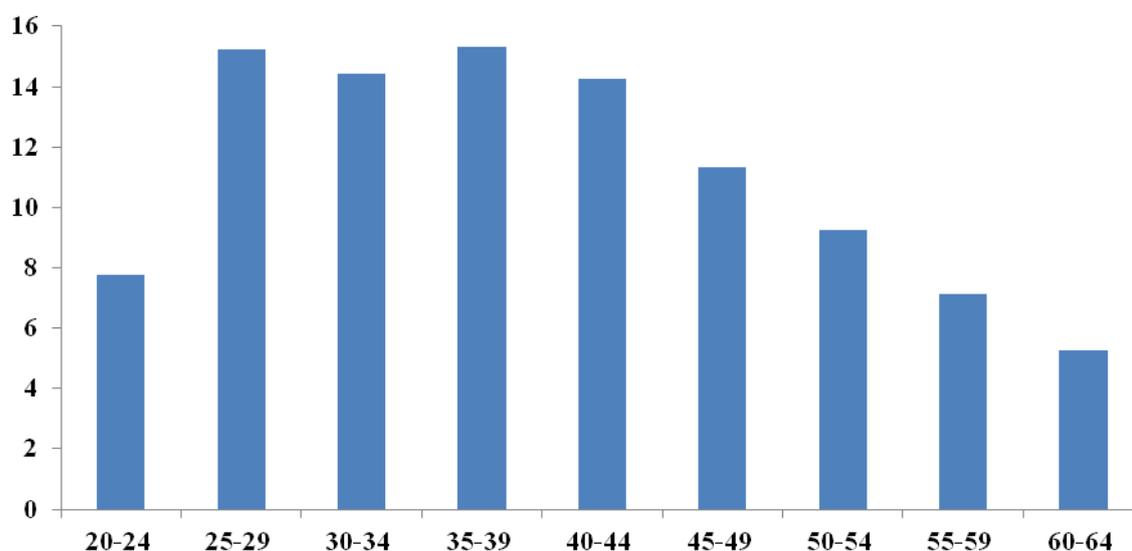
Source: 2011 Census of Population and Housing, unpublished.

The concentration of services, particularly financial services, and the head offices of major companies in the major cities, means that most accountants live in the major cities. A significantly higher percentage of accountants live in major cities than does the population generally and even somewhat greater percentage than for all professional employees. Even in the industries where production is concentrated in rural and remote Australia, such as agriculture and mining, the

accounting activities associated with these industries are mainly located in the cities. Nevertheless, accountants provide valuable services to rural communities and the provision of these services is important for the survival of rural businesses and families.

For persons qualified as accountants, the median age is 37 years (see Figure 4). From the age group 35-39 years and older we see a continuous decline of those age groups represented in the accountants workforce. This suggests a major influx of accountants, through expansion of student places and/or migration in the mid to late 1990s.

Figure 4: Persons Holding an Accounting Qualification by Age, percent

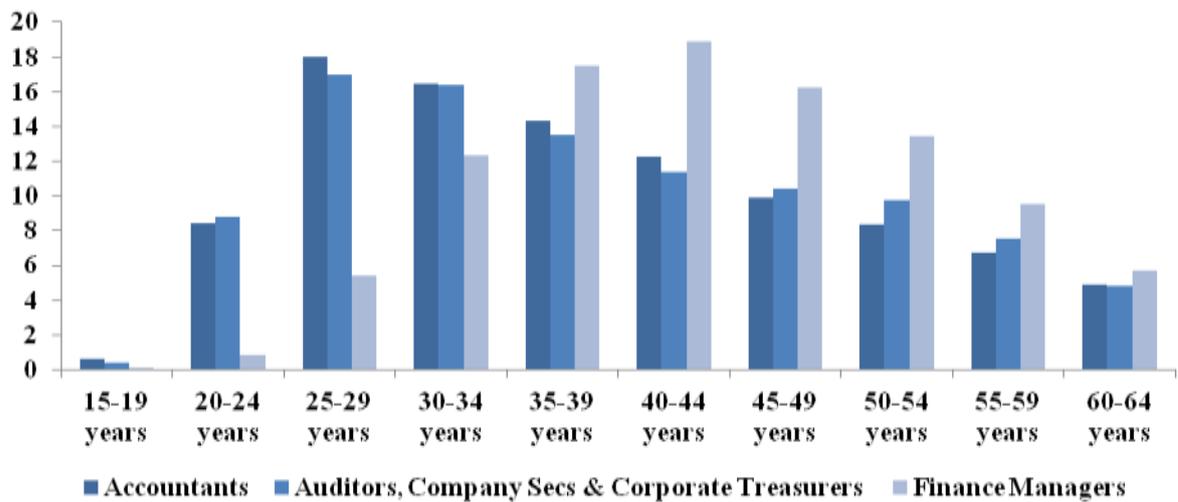


Source: 2011 Census of Population and Housing, unpublished.

As shown in Figure 5, the age distribution for qualified accountants employed in more senior positions is quite different. While the percentage employed in accounting jobs decreases with age employment, in occupations such as Auditors, Company Secretaries, Corporate Treasurers and Finance Managers the percentage increases with age. This demonstrates the importance of experience for many sub-categories of occupations employing accounting graduates. Demand for qualified accountants is not uniform and for many jobs experience is very important.

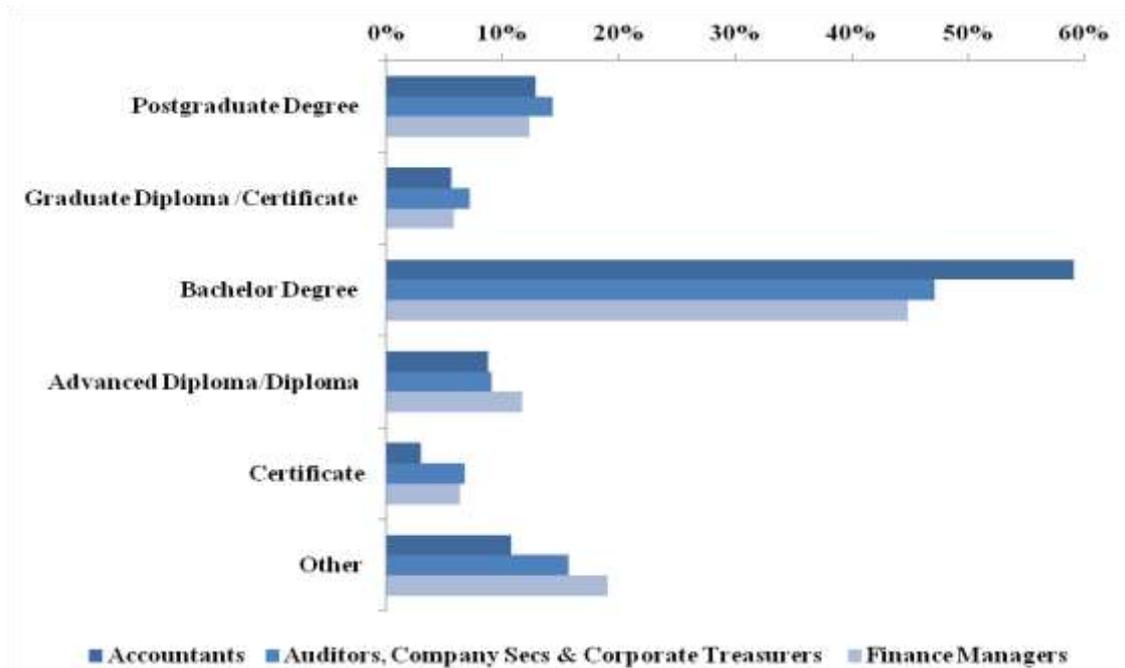
Figure 6 shows qualifications. Persons employed as accountants are generally highly qualified. This is particularly so for those in the more narrowly defined accounting jobs. In the more senior sub-groups there is a greater percentage of less (formally) qualified persons suggesting some more experienced, older accountants entered the profession when a university degree was not required. Although not picked up in the data, many go on to pursue a professional designation – CPA or CA – involving a Masters equivalent program of study and practical experience.

Figure 5: Employed Persons by Age, percent



Source: 2011 Census of Population and Housing, unpublished.

Figure 6: Employed Accountants by Highest Level of Qualification

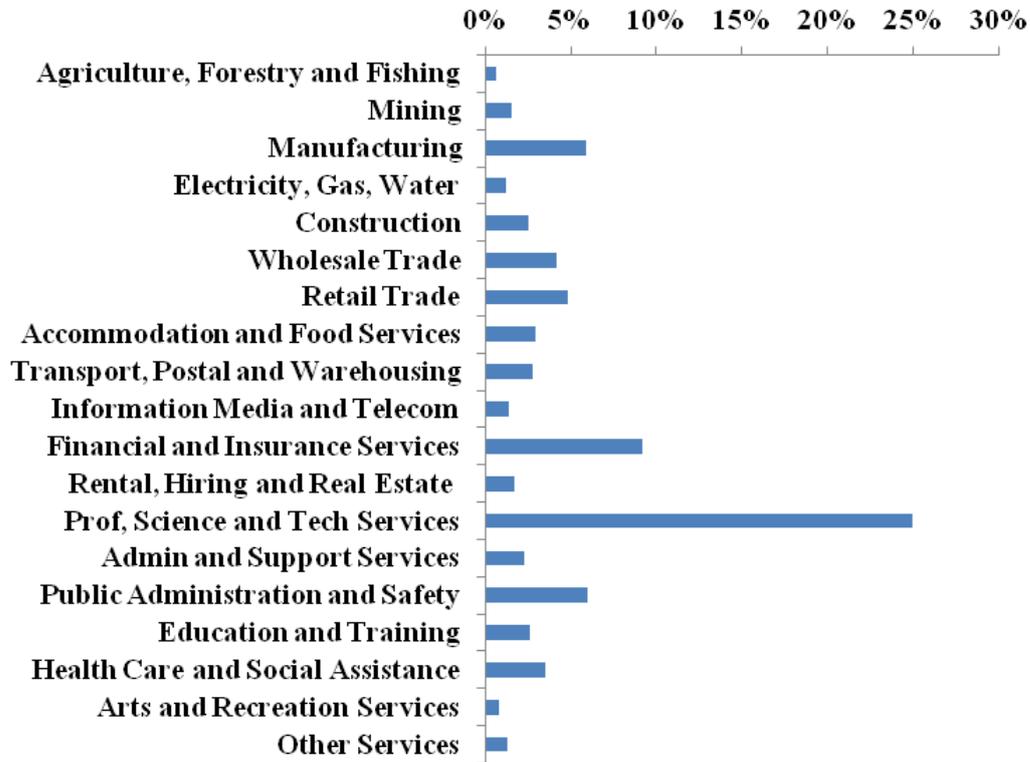


Source: 2011 Census of Population and Housing, unpublished.

The major industries of employment of qualified accountants are professional services and financial and insurance services (see Figure 7). Clearly, accounting and finance businesses will heavily affect the demand for accountants. These would have been expected to have been particularly hit in the wake of the GFC. However, qualified accountants can be found in all

industries and their demand is determined by the general state of the Australian economy and changes to employment mix due to structural and technological change.

Figure 7: Persons Holding an Accountancy Qualification by Industry, percent

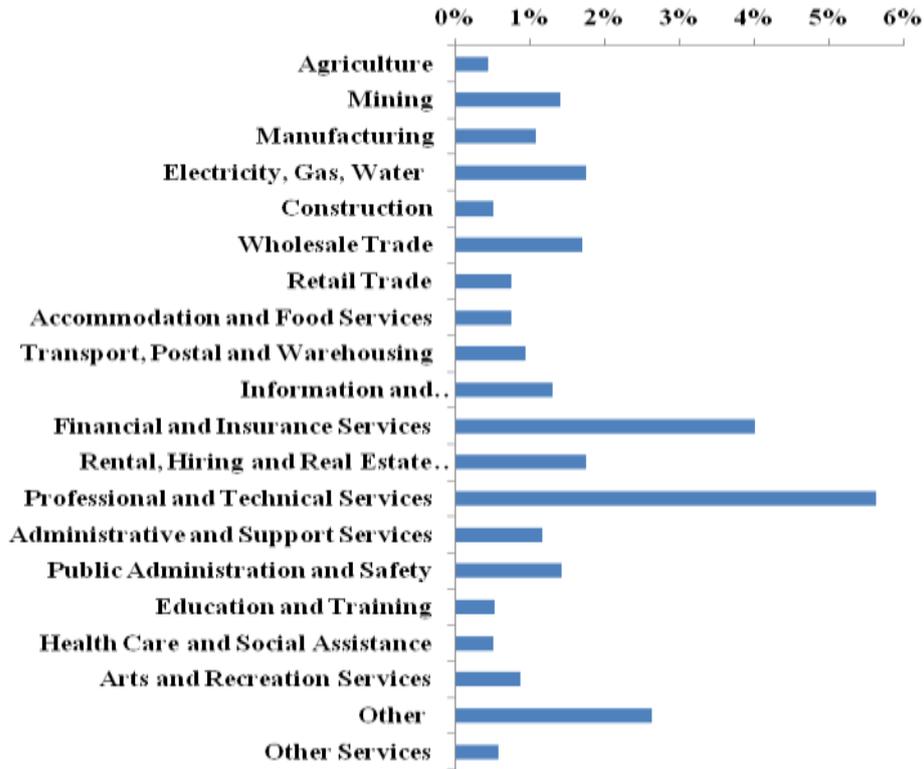


Source: 2011 Census of Population and Housing, unpublished.

Another way of looking at employment of accountants is to examine their share of total employment in each industry (see Figure 8). The data are illuminating. While Professional, Scientific and Technical Services and Financial and Insurance Services are the biggest employers of qualified accountants, accountants make up only 4.0 percent and 5.6 percent respectively of total employment in those industries. Every industry employs qualified accountants and they make up above average shares of total employment in industries as varied as manufacturing and mining.

In addition, as noted at the outset, most people holding an accounting qualification are employed in professional or managerial occupations (see Figure 9). Evidently accounting qualifications generally lead to responsible and skilled jobs. Accountants have skill resilience. Their skills are widely useful in roles such as managers and administrators, not just accounting.

Figure 8: Accountants as a Percentage of Industry Employment



Source: 2011 Census of Population and Housing, unpublished.

Figure 9: Occupation of Accounting Degree holders, percent



Source: 2011 Census of Population and Housing, unpublished.

3. Trends in Demand and Supply

We begin this section by providing estimates of the stock of accountants defined by occupation of employment broadly defined and estimates of changes in the size of this stock over time. We will then examine employment flows and their sources.

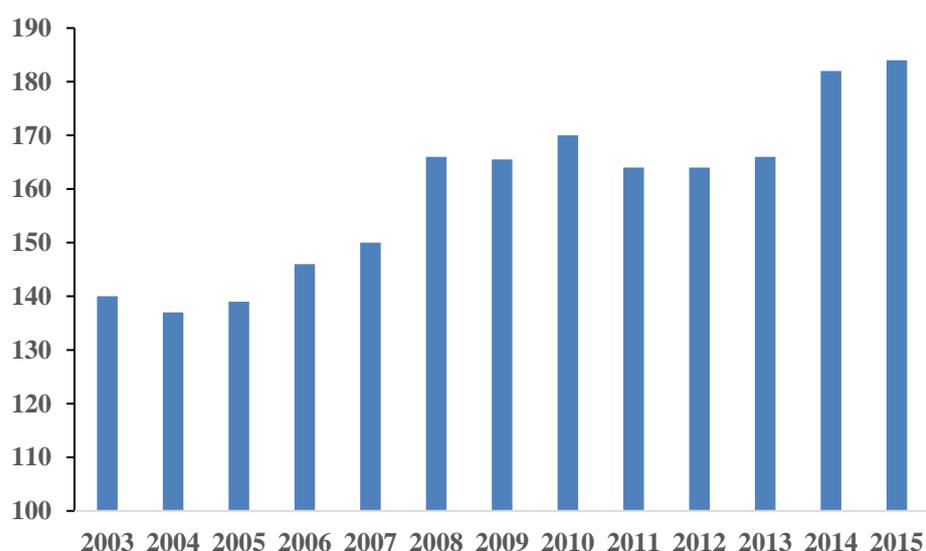
Employment

The most accurate measure of the stock of accountants is from the Census. Although limited to every 5 years, it provides a benchmark for other measures. As noted, the Census indicates that 196,567 people were employed as accountants in 2011. Given a rise of 11 percent over the period to 2015 (as indicated by the Labour Force Survey), this would put the current stock at about 218 thousand.

The Department of Employment (DoE 2014a) and the Australian Workforce Productivity Agency (AWPA 2014) draw on quarterly estimates from the Labour Force Survey to analyse the demand and supply of accountants and any shortages of accountants. Estimates based on the Labour Force Survey estimates are unlikely to be very accurate. This Survey is a sample of 0.33 percent of households and is suitable for estimating employment of broadly defined groups such as total employment of professionals but not for more detailed occupations such as accountants. This is evident in the volatility of many of the estimates measures derived from it, such as employment.

Estimated historical data on employment from DoE (2014a) are shown in Figure 10. The estimate for 2011 is about 30,000 persons less than the Census.

Figure 10: Employment of Accountants, '000s



Source: ABS *Labour Force*, Department of Employment (2015).

At any point in time employment is driven by demand and supply. In the short run, employment may fall below full potential demand due to shortages in supply. The Labour Force Survey data suggests high growth in employment during the pre-GFC boom, further but slower growth post-GFC, and the level of employment falling then levelling off after 2011. The growth in employment actually occurred when the number of domestic students completing bachelor degrees in accounting was falling and there was little change in completions of degrees specialising in accounting. The DoE estimate for 2014 and 2015 suggests unprecedented growth in employment. This may be due to some measurement error but it could also be a reflection of a lagged post-GFC pickup in employment and expectations of improving conditions.

Demand for people to work as accountants will depend largely on the state of the economy, generally, and on the economic health of those industries employing accountants. In addition, the demand for those qualified in accounting will depend on the state of the economy, particularly the service sector.

Given this largely market-driven demand for accountants, most concern regarding the accountants' labour market has been related to how the supply side of the market can be made to match the demand.

New graduates

New university graduates are the main source of new entrants into accounting. However identifying the numbers of new graduates is not simple. The most straightforward measure is those with a bachelor degree in accounting.

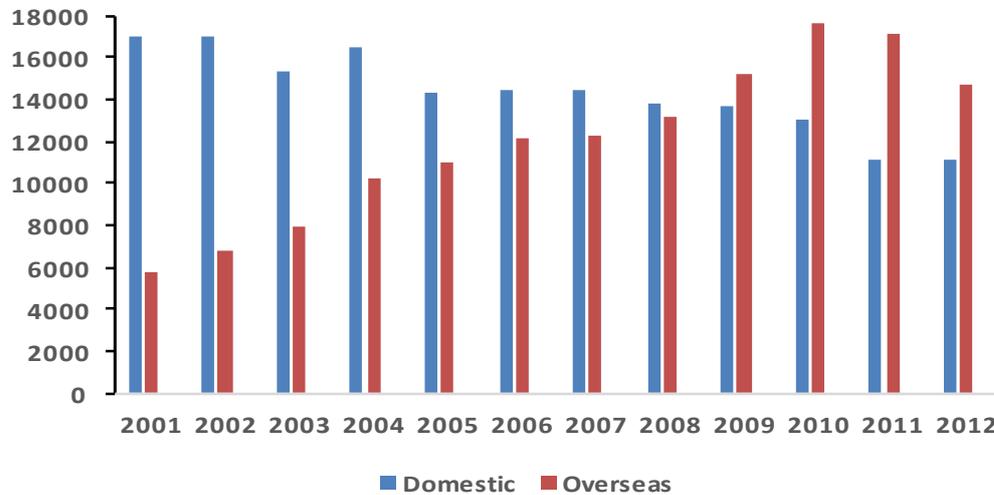
However, many degree courses can be described as 'degrees specialising in accounting'. These include degrees such as Bachelor of Commerce with a major in accounting. Although graduates with these degrees have accounting skills, they may not intend to pursue a career in accounting but have chosen a degree offering a broader range of options. Many commerce students chose two majors, one of which is accounting, and it is not clear which they consider to be primary career-oriented focus. However, although these commerce students may not intend to become accountants they may do so if the salaries and job openings in accounting increase significantly relative to alternative occupations.

An undergraduate degree is not the only route into the profession. People with an undergraduate qualification in another discipline can become a qualified accountant through a postgraduate degree such as the Master of Professional Accounting or by sitting CPA Australia's Foundation Exams. This route is popular with overseas students, particularly given the immigration policy favouring those with Australian qualifications and other measures that were introduced (Rafi and Lewis, 2013). While international students taking a masters route would appear to be motivated by the intention of becoming a qualified accountant, domestic students may be accountants seeking to upgrade their qualifications to a postgraduate degree.

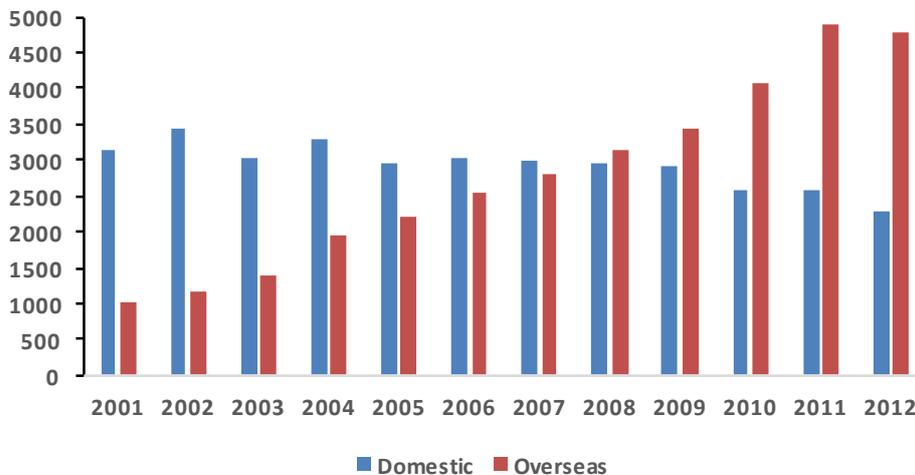
Evidently accurately projecting new entrants into accounting is not easy. Figures 11 (a) and (b) below, provided by the Department of Education, show some interesting changing patterns in domestic and overseas student enrolments and completions

Figure 11: Enrolments (a) and Completions (b) in Accounting Bachelor Degrees.

(a) Enrolments



(b) Completions



Source: Dept. of Education (2014), *Higher Education Statistics*, unpublished.

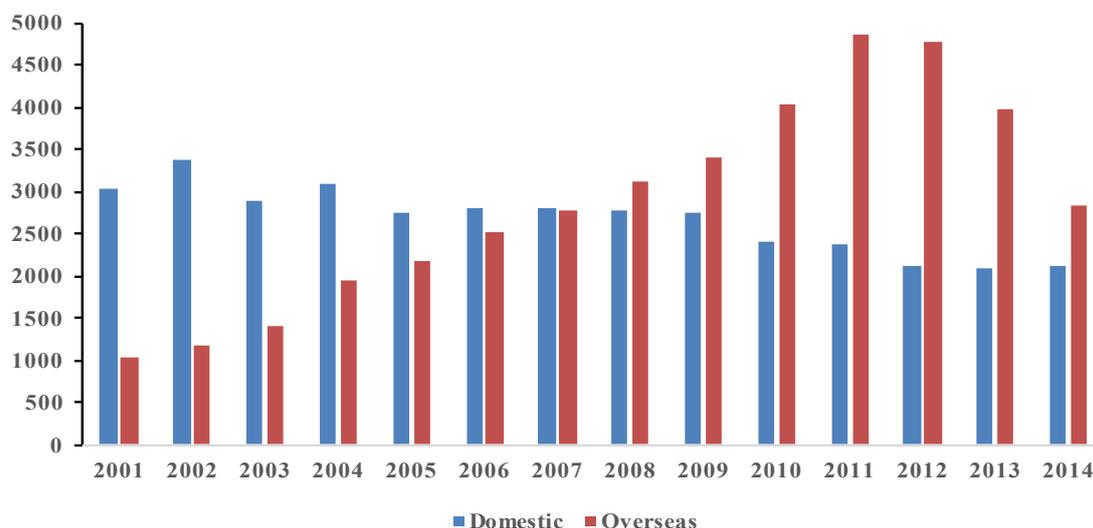
The number of domestic students enrolled in bachelor degrees in accounting has fallen by more than 35 percent since the peak in 2002. This is a period over which enrolments in all undergraduate degrees increased by over 40 percent. This suggests that narrowly defined accounting degrees have become less attractive to Australian students. This is not the case for international students whose numbers increased dramatically, overtaking domestic enrolments in 2009.

Completions in accounting degrees reflect enrolments with a lag. The decline in domestic graduates is accompanied by a large rise in overseas student completions. Now there are almost twice as many international student completions as domestic completions. Overseas students clearly are attracted to degrees specifically identified as being accounting.

In short, potential new entrants from Australia are constant or in decline and any new demand for accountants will have to come from overseas.

As shown in Figure 12, the numbers completing the more broadly defined undergraduate accounting degrees, rather than Bachelor of Accounting degrees are similar to those for the narrowly defined Bachelor of Accounting degrees. This number has been in decline since 2009. The number of overseas students completing degrees with accounting majors has far exceeded the number of domestic students in recent years but has exhibited a noticeable decline since 2011.

Figure 12: Completions of Bachelor Degrees with an Accounting Major



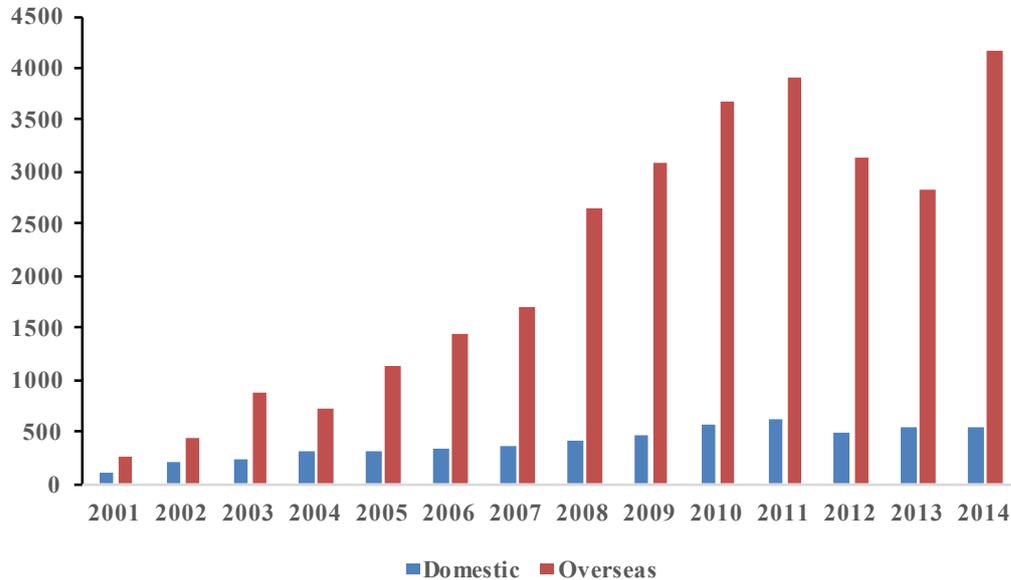
Source: Dept. of Education (2015) *Higher Education Statistics*, unpublished.

The decline in clearly identifiable accounting graduates has implications for estimating potential supply and shortages of accountants and makes workforce planning and occupationally targeted migration more difficult. It is not clear for example whether a graduate with a Bachelor of Commerce degree with majors in accounting and marketing may wish to pursue a career in marketing, accounting or some other career in, say, administration.

In practice people choose jobs according to a range of job characteristics, including salaries. If accounting jobs become more readily available and better paid people who might otherwise choose jobs in, say, marketing will instead choose to enter accounting.

The labour market is characterised by considerable substitution between occupations and mobility of people between jobs which makes trying to match people with qualifications to jobs in demand difficult.

Figure 13: Completions in Masters of Professional Accounting Degrees



Source: Department of Education (2015), *Higher Education Statistics*, unpublished.

Another source of accounting graduates is the Masters of Professional Accounting (MPA) degree. From Figure 13 the MPA clearly attracts mostly overseas students and completions increased rapidly until 2011. The effect of the changes to visa policy clearly had a major impact on completions but there appears to have been a recovery recently.

The above suggests that the potential new entrants from Australian domestic students are constant or in decline and any new demand for accountants will have to come from overseas.

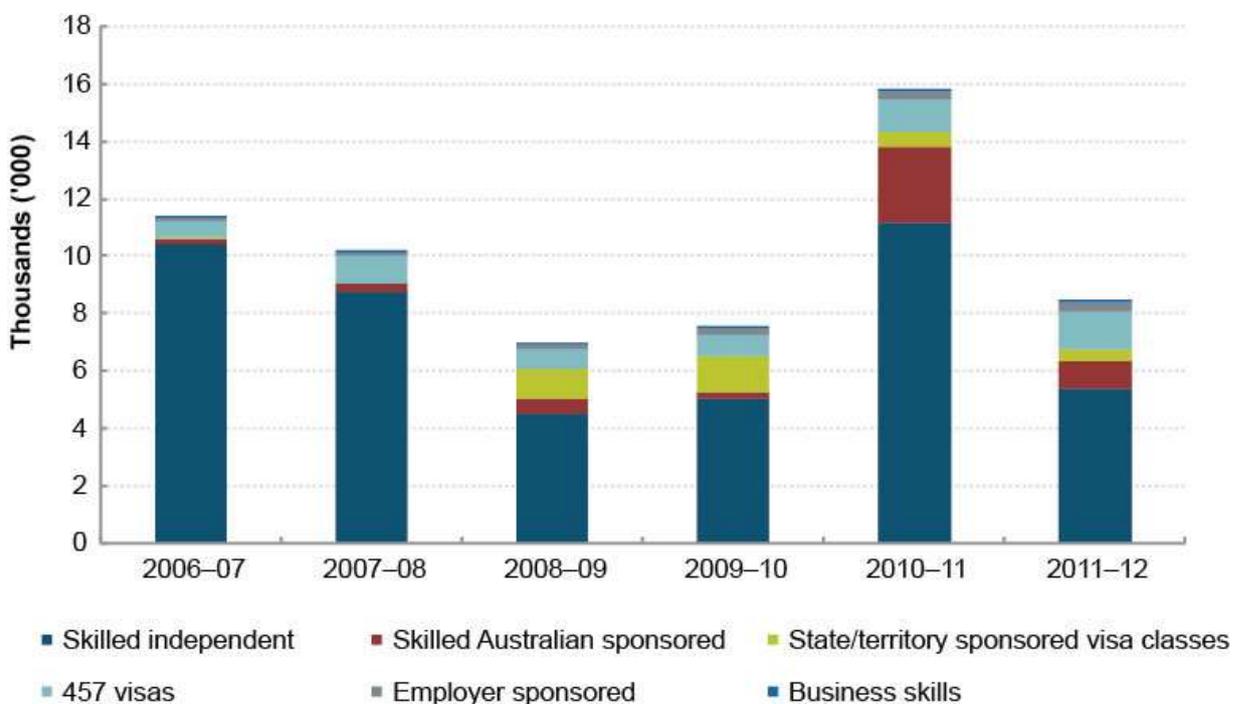
A topical issue with respect to university education generally which may have implications for accounting, are the proposals to deregulate fees for undergraduate degrees. These have not yet been passed by Parliament but there has been much speculation in the media and among academics of the likely impact. While fees for all degrees are likely to rise (by, as yet, unknown amounts) this could reduce demand for university education. However, in commerce degrees, including accounting, domestic students already pay a relatively large proportion of the total cost of their degrees so their fee may rise by less and thus demand for these subjects could increase. The return to an accounting degree has been found to be high (Corliss et al., 2013) but further analysis needs to be conducted on the impact of any fee increase on enrolments in degrees.

Migration

Migration has long been a major feature of the Australian labour market both to seek to meet short term needs and to enhance economic growth through increasing the quantity and quality of human resources. These two issues require quite different consideration.

Figure 14 shows the number of accountants migrating to Australia over the five years to 2012/13 by visa category. The average number of accountants migrating to Australia was 9,380 per year of which, on average, 6,500 were skilled independent migrants to which the SOL applies. However, these averages were boosted by the unusually high intake in 2010/11. This appears to have been due to the expected introduction of a new migration policy on 1 July 2011 that changed migration rules.

Figure 14: Skilled Migration to Australia of Accountants



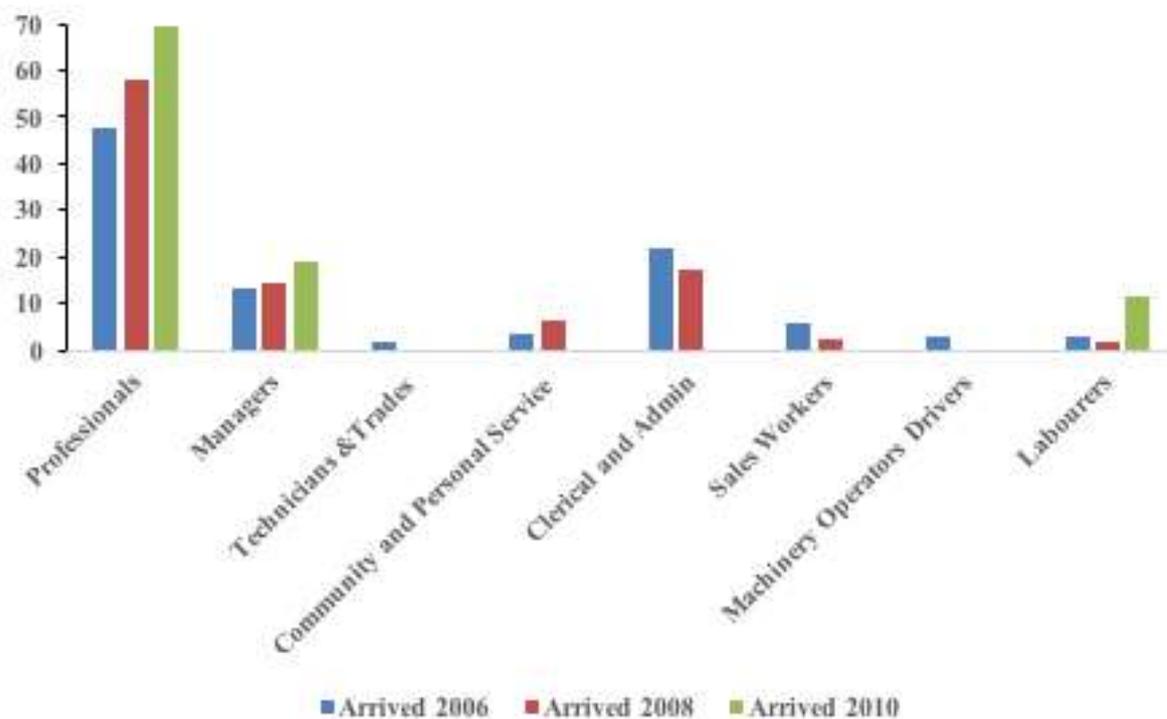
Source: reproduced from Australian Workforce Productivity Agency (2014).

Qualified accountants who migrate to Australia are generally well matched to jobs. This is demonstrated by Census data which show the occupations of those with accounting qualifications at intervals since they migrated to Australia. Figure 15 indicates that most migrants with accounting qualifications find employment in highly skilled occupations and this is particularly so for more recent migrants.

Only among more recent migrants is the percentage of those in unskilled labouring jobs greater than 10 percent. This might be attributable to recently qualified overseas students finding it

difficult to get employment commensurate with their qualifications. However, most migrants appear to have successful labour market outcomes.

Figure 15: Occupation of Qualified Accountants in 2011 by Year of Entry into Australia



Source: 2011 Census of Population and Housing, unpublished

These conclusions are supported by recent work by Rafi (2015) for recent Indian migrants (a large component of Australian-trained accountants from overseas). This shows that, contrary to popular myth, most former Australia-trained students who migrate have occupations which match their formal qualifications.

In recent years Australian skilled migration policy appears to have influenced the choices of some international students, particularly from India (Rafi and Lewis, 2013). This issue is discussed in Section 6.

Importantly, many migrant accountants are not fresh out of university and crowding out roles that would otherwise be available to Australian graduates. Consultations with employers indicate that employers often struggle to fill mid to senior roles, given the propensity of bright young accountants to move on. Many employers look explicitly to skilled migrants in their recruitment strategies.

Also, relevant here, although not so great in magnitude is the departure of accountants overseas, either permanently or on long term temporary visits. Highly skilled professionals, such as accountants, are in demand internationally and their movements would be expected to be responsive to employment opportunities not just in Australia but throughout the World. The most

recent example of this was the flow of professionals to Australia following the fallout from the GFC in the UK.

Retirees

In addition, persons retiring represent an important flow out of the stock of accountants. While most attention has focussed on new graduates and migration the retirement of accountants is emerging as an issue with respect to meeting gaps in the market.

There has been much discussion in recent years regarding the implications of population ageing (Treasury 2014) and this will affect the accounting profession. The 2011 Census provides the distribution of accountants by age.

Given the current age distribution the number of retirees is estimated to be about 1,900 in 2015 and on conservative assumptions expected to rise each year to reach about 3,600 per year by 2025. This is further discussed below.

4. Imbalances in the Accounting Labour Market

Identifying a labour market shortage or surplus for a particular occupation is not straightforward. While high unemployment suggests an oversupply, for skilled professionals widespread unemployment is rare. With respect to accountants, particularly with respect to migration policy, the concern is usually with shortages.

Richardson (2007) suggests four forms of labour-related shortages.

Skill shortages exist when employers are unable to fill or have considerable difficulty in filling vacancies for an occupation, or specialised skill needs within that occupation, at current levels of remuneration and conditions of employment, and reasonably accessible location.

Skill gaps occur where existing employees do not have the required qualifications, experience and/or specialised skills to meet the firm's skill needs for an occupation. Workers may not be adequately trained or qualified to perform tasks, or may not have upskilled to emerging skill requirements.

Labour shortages occur when there are not enough appropriately qualified candidates (employees) to fill needed jobs.

Recruitment difficulties may be due to characteristics of the industry, occupation or employer, such as: relatively low remuneration, poor working conditions, poor image of the industry, unsatisfactory working hours, location hard to commute to, inadequate recruitment or firm-specific and highly specialised skill needs. They can also be due to a lack of appropriately qualified people (i.e. labour shortages or skills gaps).

Employers are likely to be well aware when they are experiencing any of the above. And meeting these shortages by temporary migration based on employer nomination might well be the best

way to adjust to these shortages. However these shortages cannot be readily estimated from generally available data.

Firms can, and do use, other adjustment mechanisms to cope with skill shortages by rearranging the work within the firm. For instance, work which might normally be done by a qualified professional is done by less qualified persons under supervision. Larger firms might invest in training to get inexperienced graduates up to scratch. These alternative adjustment mechanisms are costly, involve delays and reduce efficiency in production of services.

In a paper prepared for AWP, Mavromaras et al (2013), suggested using a range of indicators to identify labour shortages. These involve analysis of data on a whole set of variables, including employment, vacancies, salaries, unemployment and student outcomes. However, the data on many of these variables are unreliable at the four-digit level required for this analysis. Other variables are not reliable because they do not measure what they are supposed to. For instance, the DoE vacancy series is based on internet vacancies whereas most graduate accountants are directly recruited by employers. Vacancies advertised over the internet are at best a secondary means of recruitment. In any case, the data only provides mainly a retrospective view of the accountant labour market. We can make a judgement on whether there was a surplus or shortage last year but not whether there will be in two years' time, although the data might alert us to trends which are developing.

Much media attention focuses on the labour market for new graduates and particularly on the difficulties that new graduates face in getting their first job. While oversupply may manifest itself in employment of recent graduates it provides a distorted view of supply and demand in what is a segmented labour market. For many tasks new graduates are poor substitutes for those with specialised skills and experience. Basing labour market policy on new graduate employment/unemployment is fraught with problems. For instance, migrants are most likely to be those with skills and experience and will fill jobs for which new graduates are not a very good match. They do not take jobs which would go to new graduates but allow firms to reach their full potential and thus create jobs.

Despite these concerns regarding the use of graduate outcomes, indicators on new graduates are still used to identify general labour market imbalances. The major source of data on graduate outcomes is the Graduate Destination Survey. The survey data are based on two reference dates: 31 October for graduates completing in the first half of the preceding year, and 30 April for graduates completing in the second half of the preceding year.

The survey results have been subject to criticisms, the major ones being the short length of time after graduation (about four months), the small sample size and limited coverage of students who are overseas at the time of the survey. Higher education providers are required to conduct this survey on behalf of the government and to meet certain response rates for domestic students. However, there is no required response rate for international students. There is no incentive for higher education providers to 'chase' these students and, as a consequence, their response rates are low (CPA Australia /ICAA, 2014). There is thus minimal data available on the graduate outcomes of the international students who make up the majority of the cohort for accounting students.

There are also concerns in relation to the survey methodology. The survey requires students to self-select their profession. The difference between the number of students who are known to have graduated as accountants from a given institution and the number who identify themselves as accountants in the survey responses varies by up to 100% from year to year.

The limited evidence suggests that the proportion of accounting students obtaining full-time employment within the first four months after graduation has been declining since 2007 but has picked up somewhat since 2014 (see Table 1). It is not known whether graduates do get jobs but after longer job search. Also, new graduates may take more time off between graduating and entering an accounting career. The downwards trend for accounting graduates is no different to that all graduates from all fields. Also, the outcomes for accounting graduates over time have been consistently better than for all graduates. There does not appear to have been a decline in salaries relative to all graduates.

Table 1: Selected Indicators for New Accounting Graduates

INDICATOR AND YEAR	2007	2008	2009	2010	2011	2012	2013	2014
Per cent employed full-time	84.5	85.2	79.2	76.2	76.3	76.1	71.3	73.9
Per cent employed part-time or casual	10.5	9.6	13.4	15.1	14.9	15.3	18.1	13.6
Per cent not employed	5.0	5.2	7.4	8.6	8.7	8.6	10.6	12.5
All grads- mean F/T salary (\$'000s)	43	45	48	49	50	52	52.5	52.5
Accounting - mean F/T salary (\$'000s)	40	44	45	45	47	49	50	50
Ratio accounting salary/all grads	0.93	0.98	0.94	0.92	0.94	0.94	0.95	0.95

Source: Graduate Careers Council, <http://www.graduatecareers.com.au/>

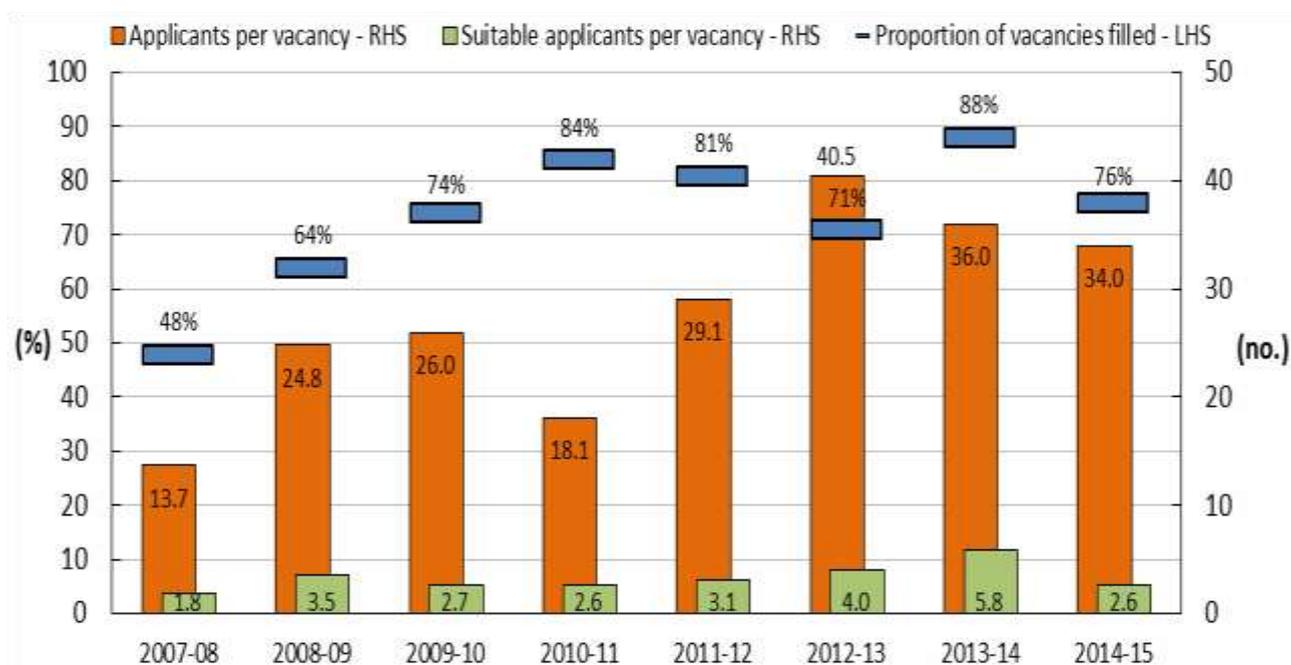
The data above identify only where at a national and general level conditions are relatively soft or whether there are general shortages or oversupply of new entrants, and not where particular difficulties are being encountered.

A measure of imbalances in the labour market is employers' experiences with filling vacancies. When there is excess supply of labour employers will be easily able to fill vacancies and if there is excess demand then we will observe employers finding it more difficult to fill vacancies with suitable applicants. The Department of Employment surveys employers of accountants as to the number of vacancies, applicants and suitability of applicants.

Figure 16 indicates that there have always been far more applicants than vacancies for accounting jobs. The number of applicants per vacancy had risen up to 2012/13 but recently this has declined. Currently the average number of applicants regarded by employers as suitable is estimated to be 2.6 per vacancy (close to the pre-GFC average). This compares to 34 applicants per vacancy. The proportion of vacancies filled is relatively high, 76 percent. There were, on average, around 22

applicants per vacancy (this may include double counting) who had a relevant qualifications (bachelor degree or higher), but just 2.6 per vacancy were assessed as being suitable.

Figure 16: Vacancies for Accountants



Source: reproduced from Department of Employment (2015) *Labour Market Research – Accountants, Australia*

Somewhat strangely, the report of the survey (DoE, 2015a) concludes that there is no shortage of accountants. However, these data suggest that, while the aggregate number of those with accounting qualifications might exceed the number of jobs, there are considerable shortages of people with the right mix of skills and experience that employers require.

The survey asked employers about the unsuitability of applicants. Key reasons applicants were not considered by employers to be suitable were:

- insufficient experience (employers reported that they often attracted large numbers of graduates for positions which required significant years of experience)
- lack of specific experience (such as in the provision of strategic taxation advice, commercial or business or in a particular sector)
- inadequate knowledge of Australian accounting (some were overseas qualified and had little Australian experience)
- inadequate written and oral communication skills
- not being CA or CPA accredited

- inability to liaise face-to-face with a diverse client base
- lack of understanding of the employers' business needs.

Department of Employment (2015a)

This view of the labour market for accountants is supported by a recent report by Hays (2015) which found that:

‘Australia’s professional practice market remains incredibly candidate short, which has led to greater flexibility from employers. The best example of this is the willingness of employers to consider candidates with not only differing levels of experience, but also qualifications.’

Hays (2015) also reported that good quality business services and intermediate accountants are in greatest demand, particularly candidates who can engage and communicate confidently with clients. There is high demand for senior accountants with strong technical skills and good knowledge of technologies. Many practices are also looking for high quality intermediate accountants with experience. Again the focus is on excellent communication skills so that they can interact directly with clients. Firms are a shortage of suitable candidates.

While recently arrived migrants (from Figure 15) are highly successful in fitting into the Australian labour market, many recently qualified former overseas students and domestic students are not fully suitable immediately for jobs available. The employer responses point to inadequacies in Australian new graduates for jobs requiring experience or specific skills. This suggests that overseas trained experienced accountants with specific skills fill a very important gap in the Australian labour market.

5 Medium to Long Term Issues

Turning to the medium to long term demand, most of the discussion on forecasting demand for accountants is based on the growth of economy requirements for accountants. In other words, analysts forecast the growth of the Australian economy by industry and the implications for occupations including accountants. It is also possible to view causation in reverse, namely that the growth of the economy is a function of the growth in qualified and educated labour.

Based mainly on the former approach, various forecasts and projections have been carried out for accountants. For example the Department of Employment (DoE 2015b) forecast that demand for accountants would increase by 13.7 percent between 2014 and 2019. IBISWorld (2014) has projected growth in employment of 15,240 in the accounting services industry between 2014/15 and 2019/20 (though this is not quite the same as the market for accountants). Both estimates imply a significant role for migration in the accounting labour market.

The Australian economy has proved quite resilient during the upheaval in the World economy following the GFC, the aftermath of which is still being felt among the economies of North America and Europe. Nevertheless economic commentators are divided on the prospects for the economy. Some point to the strength of the Chinese economy, the low level of government debt, low inflation and relatively low unemployment. Others point to Australia’s reliance on China as

a major risk, the two-speed economy (a booming primary sector, a struggling export and import competing sector due to the high Australian dollar) and a sluggish domestic household consumption sector. Strong doubts also remain regarding the ability of the Eurozone to solve its financial problems and the consequent international implications of failure.

Deloitte Access Economics (DAE, 2011) produced a major report for AWPA with projections of demand for the major industry and occupation groupings. The projections are based on four economic scenarios which reflect the range of uncertainty among economic commentators.

The 'long boom' scenario is based on a steady growth view of the Australian economy. Under this scenario China's growth rate falls somewhat over time, the terms of trade decline moderately but are still high in historic terms and there are no shocks to the World economy arising from another crisis in, say, Europe. Under this scenario Australia's economic and employment growth continues steadily over the forecast horizon to 2025.

In the 'smart recovery' scenario, Australia's low growth continues to 2015, but then the global economy improves and Australia's growth returns to its potential growth rate. New technology adoption and productivity improvements occur after a period of relative contraction in growth.

The 'terms of trade shock' scenario, assumes good growth in the World economy, as with the long boom, but there is a substantial reduction in Australia's terms of trade.

Under the 'ring of fire' scenario, the rate of growth in the World economy is low and subject to significant volatility. In Australia low trend growth rates are accompanied by cycles around this trend. Terms of trade are lower due to increased protection which also lowers productivity.

Projections are made of employment by occupation, among other variables, and the highly aggregate level, under each scenario. In addition, detailed projections of demand for those employed as accountants have been calculated under each of the above scenarios. The patterns of employment growth are quite different under the different scenarios. However, the DAE estimates for total job openings by 2025 are very similar, ranging from 9,054 to 10,926. The estimates of job openings by 2020 have greater variability ranging from 9,054 to 11,850.

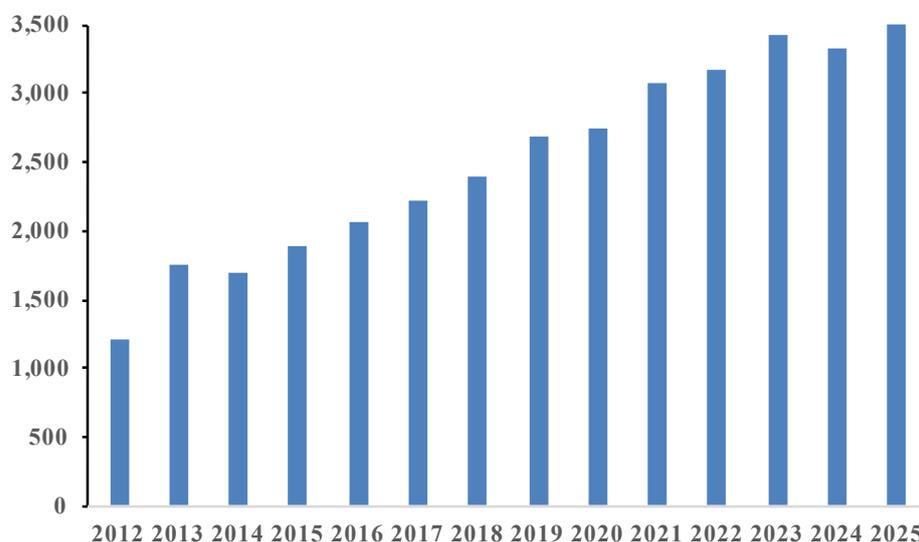
Job openings equate to net replacement demand. This equals jobs made available through growth in demand and from workers leaving an occupation (e.g. via retirement or accountants emigrating) after accounting for those re-entering the occupation. Thus, net replacement demand can be taken to be the number of new entrants (new graduates or new migrants) needed to meet demand.

Whatever scenario is chosen, they all suggest significant potential shortages given the lack of growth in new graduates. The projections also do not take account of the differences in demand for new graduates and for those with experience. Given the importance experience to employers of accountants, identified in this report, ageing and retirement of accountants is a major issue.

As part of this report we separately estimated the number of retirees given the current age distribution of accountants (see Figure 17). As noted above, using conservative assumptions that all those currently employed who are under the age of 65 will retire at age 65, we estimate the

number of retirees to be about 1,900 in 2015 rising each year to reach about 3,600 per year by 2025. This is consistent with the Deloitte estimates.

Figure 17: Projected, Retirements per year, 2012-2025



Source: Authors' estimates based on Census of Population and Housing unpublished

Retirements are expected to rise because, although accounting is generally a young profession there are increasing numbers of older accountants approaching retirement age. Importantly also, these retirees are the most experienced accountants and, therefore, in high demand.

The above scenarios suggest that the medium to long term outlook for the accounting labour market is for shortages. The identification of the particular need for senior and experienced accountants with particular skills, suggests that migration will continue to be vitally important in meeting demand in the labour market for accountants.

Moreover, skilled people wishing to migrate permanently to Australia, with recognised qualifications and English language competency, usually have good career prospects in Australia even if they do not achieve exactly the work that they wish for on arrival. There is not a one-to-one matching between qualifications, skills and occupations, apart from certain exceptions such as medicine. In most of the skilled occupations many do not pursue a lengthy career in their field of qualification. The labour market is characterised by a great deal of substitution between occupations and mobility of people between jobs which makes trying to match people with qualifications to jobs in demand difficult even if the projections of demand are right. This analysis suggests that policy with respect to permanent migration should move away from concern with meeting short term cyclical labour market conditions.

It is also relevant to consider that supply creates its own demand for employment, both local and immigrant. That is migrants who arrive and fill jobs create over time demand for more through the spending they undertake or induce. Permanent skill entry allows for wider human capital development of the workforce which raises productivity and medium and long-term employment.

PART II. INTERNATIONAL AND POLICY CONTEXTS

6. The Migration/Education Link

In recent years there has been a strong relationship between Australian skilled migration policy and the choices made by a significant number of international students. The principal Key Message found by the then Department of Immigration and Citizenship in research it commissioned from the University of Queensland was that:

‘ More than half of the surveyed Student visa holders planned to stay in Australia at the conclusion of their studies and almost all Skilled-Graduate (Temporary) visa (Subclass 485) holders planned to seek permanent residency’ (Institute for Social Science Research, 2010)

So the two are closely interconnected and this applies even more for some countries of origin than others, as with the case of India (Rafi and Lewis, 2013).

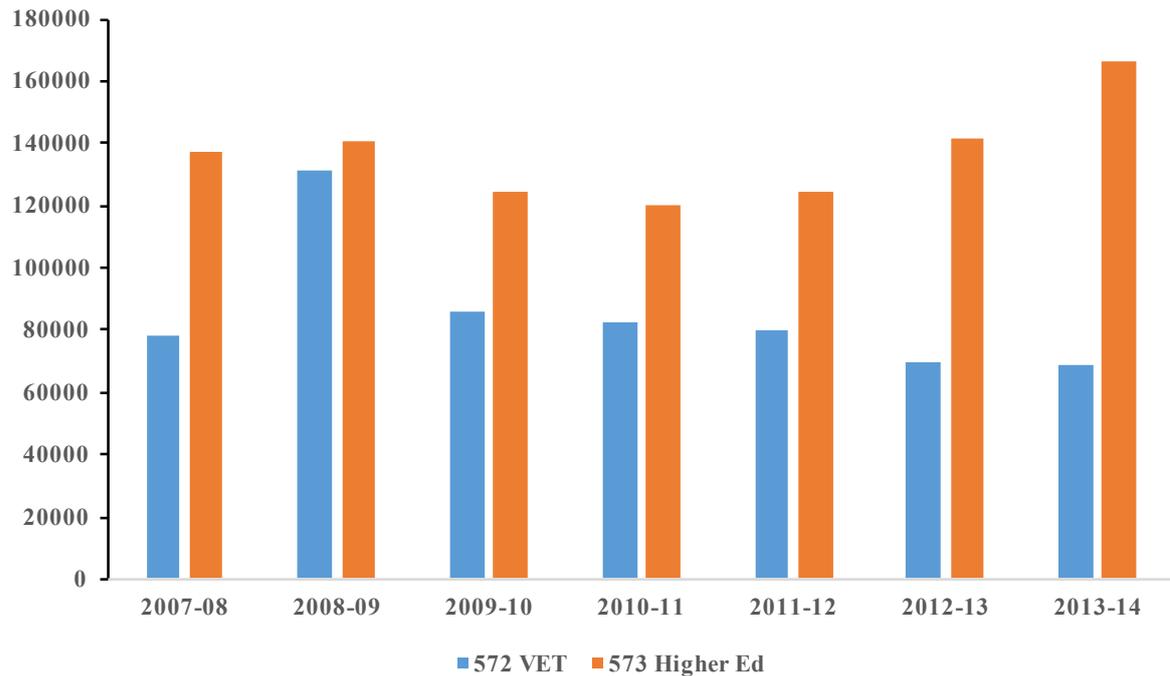
At the same time there is also a preference for some education courses over others. In the case of university students, there has long been a strong preference for commerce and computer science courses, especially accounting and information technology (IT). This was no doubt partly due to priority processing and preferential treatment of immigration applicants graduating from Australian universities with qualifications in these fields.

Immigration policy pre-2008 awarded extra points to accounting and IT graduates and other professions that were on the then Migration Occupation in Demand List (MODL). This made it relatively easier to cross the threshold of 120 points required at that time for a permanent residency visa. As advised then by Skills Australia, accounting skills were deemed critical to the Australian economy and were in short supply (DIAC 2010a).

According to Birrell and Healy (2010), however, a new surge of international students occurred in 2008 and this was principally due to immigration changes implemented between 1999 and 2001 by the Howard government. These especially reflected a broadening of the skills and associated occupations considered important for migration. Revisions to skilled migration policy were announced in 2008 and the repercussions from this continued to shape Australia’s skilled migrant intake, for some time.

In particular there was realisation that there was a mismatch between the skills and competencies of graduating international students and the skills and competencies being demanded by Australian employers. To respond to this, changes included a refined points test that emphasised strong English language skills and relevant work experience, rather than the possession of a particular qualification (DIAC, 2010b). At the same time the more frequently revised and narrower skilled occupation list (SOL) replaced the much wider and generic MODL. These revisions together sought to ensure that no one factor alone would determine the migration outcome but rather a combination of skills, qualifications and work experience would be required to clear the new pass mark (DIAC, 2010a)

Figure 15: Overseas Student Visa Applications by Sector



Source: Department of Immigration and Border Protection (2015), *Student visa and Temporary Graduate visa programme trends 2006-07 to 2013-14*, <http://www.border.gov.au/ReportsandPublications/Documents/statistics/student-visa-programme-trends-2013-14.pdf#search=%20Student%20Visa%20Program%20Trends>

In reaction to the sequence of revisions, the course preference of Indian students, for example, had begun to exhibit a trend towards VET courses in lieu of higher education courses. Post 2007/08 the popularity of vocational courses such as hairdressing and cookery spiked dramatically with many overseas students enrolling in a vocational course rather than commerce or an IT degree) as this became the most cost effective and assured pathway to permanent residency (Rafi and Lewis, 2015). This explains the dramatic surge in applications for subclass 572 VET study visas in Figure 15. The total number of subclass 572 VET visas granted increased dramatically while subclass 573 higher education visas levelled or fell around the same time. However, due to quality concerns regarding the provision of VET services in some jurisdictions, and the realisation that the VET sector was being utilised as a migration loophole to access unrelated occupations post-residency, the link between vocational training and migration was promptly de-emphasised as well.

It is also evident from DIPB data that changes to the student visa and skilled migration program had their largest impact for a time on offshore applicants (Table 2). This suggests that demand from new international students was moderated given changes to skilled migration policy, again illustrating the link and inter-dependency in this sphere.

Table 2. Student Visa Applications by Offshore/Onshore location and Visa Sub-class, 2008-14

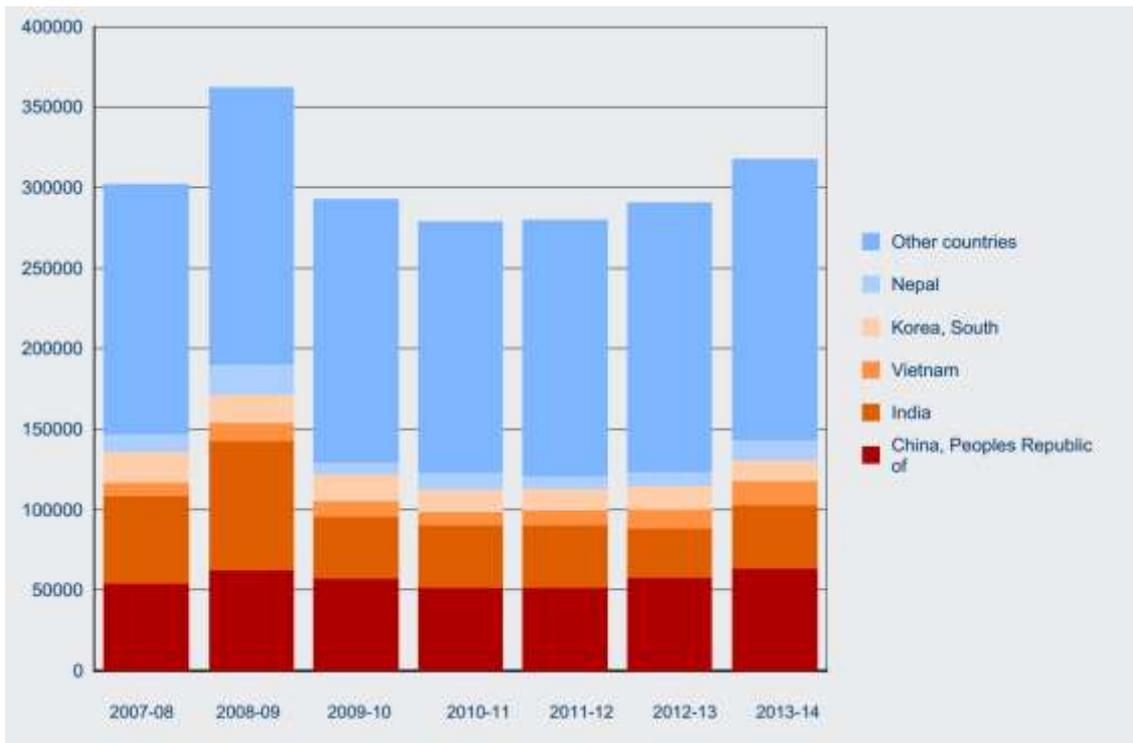
Visa Subclass	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Offshore							
570 Independent ELICOS Sector	27 239	33 086	27 598	23 467	22 279	21 695	23 483
571 Schools Sector	18 279	13 473	11 077	9 368	8 831	8 734	10 359
572 Vocational Education and Training Sector	49 496	92 464	38 343	21 652	23 324	19 061	21 738
573 Higher Education Sector	98 907	95 169	72 305	60 187	65 595	83 849	112 110
574 Postgraduate Research Sector	4 590	5 572	5 538	5 488	5 980	6 583	6 815
575 Non-Award Sector	19 629	18 319	17 270	16 475	15 702	17 167	18 949
576 AusAID or Defence Sponsored	4 268	4 002	3 907	4 538	5 705	6 704	6 735
Sub-total Offshore	222 408	262 085	176 038	141 175	147 416	163 793	200 189
Onshore							
570 Independent ELICOS Sector	5 128	8 208	10 010	9 193	9 374	11 523	9 790
571 Schools Sector	2 263	2 413	2 201	1 809	1 492	1 254	1 113
572 Vocational Education and Training Sector	28 673	38 755	47 505	60 642	56 817	50 244	46 816
573 Higher Education Sector	38 531	45 899	51 691	60 189	58 561	57 818	53 786
574 Postgraduate Research Sector	2 798	3 302	3 942	4 357	4 923	4 853	4 803
575 Non-Award Sector	1 714	1 176	1 009	924	753	685	591
576 AusAID or Defence Sponsored	574	479	443	529	667	591	482
Sub-total Onshore	79 681	100 232	116 801	137 643	132 587	126 968	117 381
Total	302 089	362 317	292 839	278 818	280 003	290 761	317 570

Source: DIBP 2014e

The appreciation of the Australian dollar was also important in reducing new overseas demand as were safety issues that arose too at the time, especially for Indian students. The Indian impact in particular is seen in Figure 16. The subsequent currency depreciation and action to reaffirm community and campus security has evidently boosted demand again over time (Rafi and Lewis, 2013).

Looking at the significance in these changes of the adjustments made to visa rules, as an approximate estimate, changing eligibility cut applications for higher education visas by 15 percent (Access Economics, 2009). Since a large percentage of students are studying accounting degrees most of this fall would have been among these potential students. For accounting student numbers fell by between 15 and 30 percent at that time when more restrictive visa conditions were imposed.

Figure 16. Student Visa Applications lodged by Citizenship Country, 2008-14



Source: DIBP 2014e.

Thus, it is evident that skilled migration policy changes are closely related to demand for Australian education as illustrated by decreasing enrolment numbers and student visas granted when adverse changes are made, and vice versa.. To counteract the recent experience of decline after 2009, new settings were put in place based on the recommendations of the Knight Review (2011). DIAC responded by reducing the financial requirements for student visa candidates, and it accepted proposals from bodies such as Universities Australia for changes to work restrictions to make them more flexible and introduced post study work visas from 2013 onwards that let international students work up to 4 years in Australia after graduation.

These steps by DIAC (now DIPB), have resulted in a rebound in overseas student numbers, reinforced by exchange rate depreciation too. Applications for 573 higher education visas increased significantly from 2011/12 while applicants for 572 VET visas have not yet returned to earlier levels, no doubt due to recognition that vocational qualifications do not provide the same access to permanent migration as higher education.

Overseas students trained in Australia will continue to be a major source of new accountants. DIBP unpublished data on resident visa applications by accountants this year show that about 80 percent have a current address in Australia suggesting they have trained in Australia. About half are male, and half female. Of the total, about 25 percent were born in China while the largest other single countries of birth are India (12 percent), Pakistan (7 percent), Vietnam (5 percent) and Nepal (5 percent). Over 75 percent are under 30 years of age.

The availability of skilled migrants from the diverse cultural backgrounds provided by overseas students also provides opportunities for employers seeking to do business with clients in growing markets such as those in Asia. There is, to date, all too limited research on whether Australian businesses are doing enough to harness these skills and potential opportunities, though the work by Booth et al (2010) does indicate that many employers have yet to see the full value of cultural diversity. Likewise the extensive research by Gribble and others (2015) shows how much work-integrated learning initiatives for international students could do to redress this.

At a time when China, for example, is courting other nations to integrate and co-operate through policies such as the One Belt One Road Strategy, so as to build inter-action across cultures for economic advance (backed by initiatives such as Asian Infrastructure Fund and the Silk Road Fund), Australia may need its international assets not to fall back. Mining investment-based advance is levelling off. Migration helps offset this as it gives participation and productivity advantages (Migration Council of Australia 2014), and it also can super-charge these further in the Asian Century/Knowledge Century. International student links to migration ensure that both immediate export value and longer term national development can be enhanced. More care than has sometimes been the case in the past must be exercised, so as not to compromise this by insufficiently considered visa policy changes and management.

The export of higher education is a \$12 billion industry and changes to visa regulations need to consider the impact on education exports. International students have been a major source of revenue which has allowed universities to remain of high standing despite reductions in government funding per Australian student.

It is important to note that many of these policy measures are independent of, and outside the control of, Australian universities themselves, despite the fact that they have such important impacts on student demand and much needed international fee income. That said, they have mutual responsibility to work with government sensitively and constructively to inform such policies - and to ensure they do well what is in their domain and remit, ranging from quality of education through to campus safety.

Value of overseas accounting students

A recent survey (HSBC 2014) found that on average international higher education students contribute, adjusted here to 2015 prices, \$42,934 per head to the Australian economy. Of this, \$24,562 was the average expenditure on universities fees. At the end of 2014 there were 14,480 students enrolled in Bachelor of Accounting degrees, 10,160 students enrolled in other undergraduate degrees with accounting majors and 14,560 students enrolled in Masters of Professional Accounting degrees. On this basis, there would be 39,200 students currently enrolled in degrees with accounting majors (Bachelor and Masters) contributing over \$1.7 billion to the Australian economy of which over \$967 million is Australian universities' fee income.

Clearly, international students in accounting degrees is a very important source of much needed non-government income to Australian universities and to the economy more generally. These benefits do not include the positive contribution made to the economy by overseas-born but Australian-trained accountants who choose to migrate to Australia.

If significant changes were to be made to eligibility of foreign accountants for migration to Australia this would have undesirable impacts on universities and the economy. On the basis of the impacts of past changes in migration rules have had on student enrolments, the cost to the economy could be between \$165 and \$330 million. Fee income would fall by between \$91 million and \$182 million.

7. Policy Implications of SOL Determination

The outcomes of the Department of Immigration and Border Protection's *Review of Skilled Migration and Temporary Activity Visa Programs* are awaited. These will no doubt be informed by the Productivity Commission's separate inquiry into *The Migrant Intake into Australia*, with the Commission due to release a draft report in November 2015 and final report in March 2016.

In the meantime the extant arrangements for the role to be played by the Skilled Occupations List (and the related Consolidated Sponsored Occupation List) will remain in operation.

The SOL will therefore continue to constitute a key factor in influencing the nature of skill outcomes for arrivals into Australia, through its significance in the visa categories to which it applies (independent, family sponsored and 485).

For these visas it is necessary for an applicant's occupation to be on the list and for a specified assessment authority to affirm that the requirements for practice of that occupation can be met by the applicant, before associated points for skill can awarded under the points test for such entry.

Skilled migration generally has progressively increased its role in Australian immigration, so the selection mechanisms used are central to success. Skill has come to occupy a growing share of a growing intake. In addition onshore visa issuance has also grown, indicating that the skills obtained may also be more Australian-linked. Table 3 shows the annual outcomes (and current trends) in the recent several decades:

Contemporary labour market needs and conditions are the basic consideration in determination of the SOL arrangements that contribute to the skill selection outcomes. This is in spite of much uniform evidence in the global and Australian research literatures that migration in industrial countries broadly creates as many jobs as it fills (Jocquier et al., 2010). It is not the simple solution to job shortages that it often is assumed to be. A focus on the direct supply of more labour through a substantial migration program ignores the indirect but also equally substantial effects on the demand for more labour.

Indeed a recent natural experiment with allocation of a large influx of refugees across regions in Denmark according to public housing provision and without reference to labour market matters, found that even for this group the impact was neutral for unskilled wages and unemployment rates in each area, and also that it did not have hidden offsetting effects through internal migration, a question that had bedevilled earlier regional analyses (Foged and Peri, 2013). Like results have been commonly been found for skilled workers too (e.g. for Australia see Islam and Fausten, 2012).

Table 3. Migration Program and Skills, Australia 1997-2014.

Year	Total Program	Skilled (%)	Onshore (%)
1996-97	73,587	47.1	22.5
1997-98	66,840	51.5	22.9
1998-99	67,821	51.5	22.2
1999-00	70,237	50.3	24.8
2000-01	80,597	55.5	28.1
2001-02	93,054	57.5	33.9
2002-03	108,072	61.1	29.0
2003-04	114,362	62.3	32.1
2004-05	120,064	64.9	33.0
2005-06	142,933	68.1	30.3
2006-07	148,200	66.1	33.6
2007-08	158,630	68.4	34.3
2008-09	171,318	67.0	37.0
2009-10	168,623	64.0	37.7
2010-11	168,685	67.4	48.1
2011-12	184,998	68.0	42.9
2012-13	190,000	67.9	49.9
2013-14	190,000	67.7	50.4

Source: DIBP, *Outlook for Net Overseas Migration*, September 2014.

Thus bringing in many accountants does not necessarily lead to any ongoing oversupply of accountants, since the demand created by migrants includes a major component of demand for accountant services. A mass skilled permanent migration program directed at short-term skill shortages may be almost be an internal contradiction, despite public perceptions focused on the more obvious supply side effects.

For this reason, it is to be hoped that where wider and longer-term considerations can also be incorporated within SOL determination, as well as more widely in permanent migration selection determination, this will be pursued. It is equally the case that short-term changes that can damage long-term gains, will not be carelessly instituted.

CPA-CAANZ have drawn attention to such considerations in their submissions to the DIBP *Review of Skilled Migration and Temporary Activity Visa Programs* eg CPA-CAANZ, 2015. And they have emphasized how much the accounting profession contributes to medium and long-term national development, both through professional accounting and through wider contributions in other deployments of persons skilled through accounting.

Of course some persistent labour shortages may remain in some areas where domestic training and mobility and temporary migrant entry is unresponsive or undesirable. It is here that labour shortage as such can still play a role in SOL. But broader national development factors should be the dominant concern in permanent entry. If this is not well understood because of supply perceptions, then it is the job of the public service and political leadership to inform public perceptions of the true objective realities.

At the broadest level, such national development benefits have been the subject of recent analysis of the economic effects of Australian migration undertaken for the Migration Council of Australia by Independent Economics (*The Economic Impact of Migration*, 2015). This is significant because it uses what is now the most advanced model for analysing such effects available for Australia.

The model improves significantly upon earlier more limited models. It does so by using the same so-called “computable general equilibrium” strengths at the core of all such models used for policy analysis in Australia. But it moves beyond purely linear and market settings, that serve well for analysing matters such as tax and tariff changes, to in addition allow for such factors as scale economies and knowledge spillover (“endogenous”) effects. These latter can be of the essence for population, education and immigration matters.

If trend migration settings are compared with, say, a strongly contrasting hypothetical zero net migration scenario to 2050, the study projects:

- a GDP gain of 40.7% ;
- a 9.7% gain for after tax real wages ;
- a greater proportionate benefit to mid and low skilled workers.

Other scenarios can be examined. But the clear general conclusion is that migration is seen to carry the potential to drive a huge change in the scale of the Australian economy and significantly improve per capita income. In the process, the share of population in skilled work increases but with enhanced wage benefit to mid and low skill workers. The economy improves and so does the distribution of income.

So, overall, the projections indicate some compositional effects in these broad skill categories. Of course more detailed occupational analysis is possible with this modelling and could be commissioned. But it is also notable that the more skilled labour supply through migration also increases labour demand across the economy as argued, and that this is captured so that the balance of effects is reviewed

And, on balance, and as intended by the migration skill focus, the Australian migration program is seen to deliver fully on high skill labour as its focus, so underpinning a major increase in per capita GDP as well as total GDP. At the same time the skill focus has meant that the wage position of lower skill workers in the country is actually relatively advantaged in the process. By most judgements, in national development terms this is a win-win outcome for efficiency and equity. The skilled migration program “lifts all boats”, but especially the less skilled along the way while the economy overall moves to a higher skill profile.

However the Independent Economics work itself does not analyse the more detailed specific occupation effects in the published work, though the model is capable of doing this, and such work could well be used in future to help guide specific occupation matters in migration selection.

To use only backward looking data to determine future skill supply is too narrow a focus, and future-oriented information is needed - including information that can look at both labour demand

patterns (including as these arise from migration) and labour supply patterns (including as these arise from migration).

More on occupational areas can be found instead in earlier work from the former Australian Workplace Productivity Agency (Barnes and Spearritt, 2014). Since AWPA has been abolished, such work needs a new auspice to help inform immigration specifications for Australia. This work suitably looked both at past patterns and future possible circumstances.

At an AWPA convened meeting (with the Academy of the Social Sciences in Australia), then Treasury Deputy Secretary David Gruen provided a picture of the past trends as follows in Table 4:

Table 4. Change in Employment Shares by Industry

	1996	2011	% change
1 Managers and administrators	708626	877325	23.8
2 Professionals	1306709	2091565	60.1
3 Associate professionals	860501	1237677	43.8
4 Tradespersons and related workers	995523	1174805	18.0
5 Advanced clerical and service workers	329673	272064	-17.5
6 Intermediate clerical, sales and service workers	1222762	1763988	44.3
7 Intermediate production and transport workers	660330	784406	18.8
8 Elementary clerical, sales and service workers	677190	912194	34.7
9 Labourers and related workers	666221	741896	11.4
Total	7427535	9855920.3	32.7

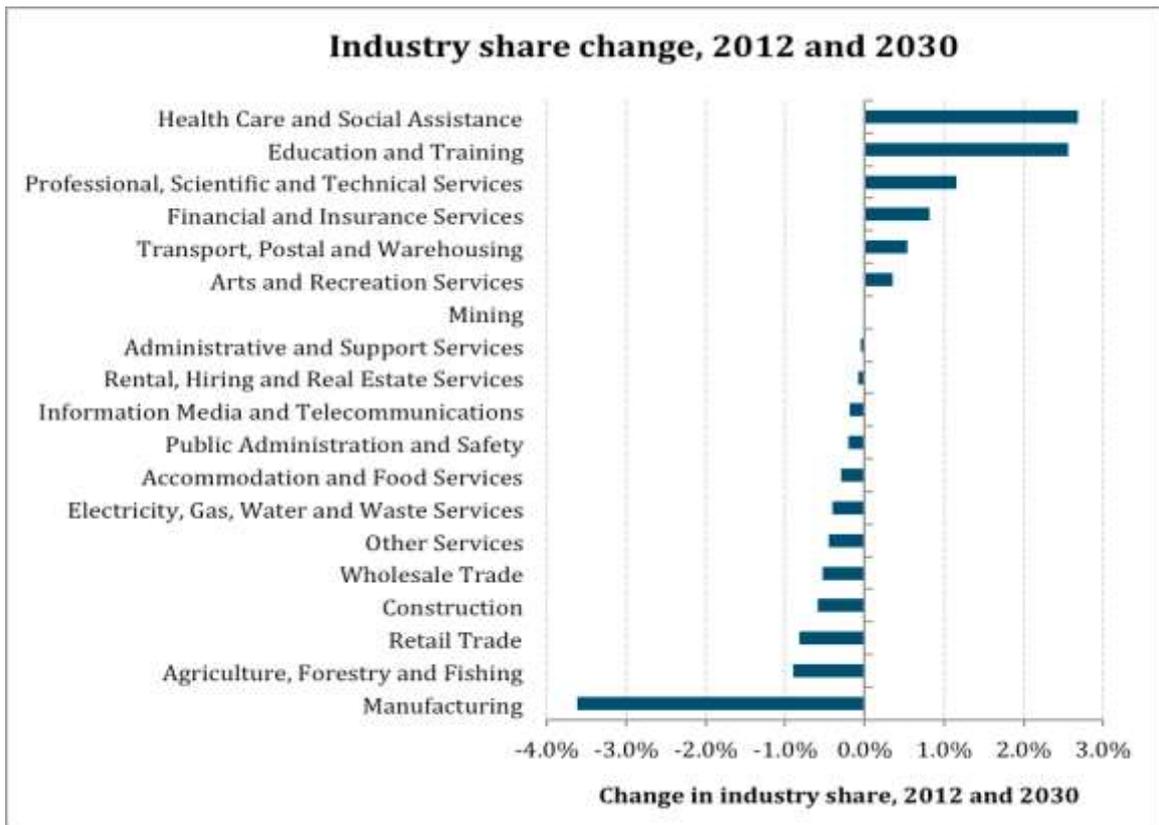
Source: Gruen, 2014.

AWPA itself provided future scenario projections as seen in the following chart from the Introduction to the AWPA volume with the Academy of the Social Sciences in Australia (Figure 17):

It is evident from this trend analysis of longer term national development in broad occupational terms that professional services, of which accounting is a very substantial component, has been and will be a major source of employment growth ahead of most others.

Given such longer term drivers of change, a focus on current marginal labour market balance issues may be quite misleading in terms of the ongoing national interest, especially for a flexible profession that accommodates various related occupations and activities outside the formal professional training, as again is the case for accounting.

Considerations of this kind make a strong case for conservatism and caution in application of current SOL assessments, while awaiting the prospect of improved approaches as may emerge from the DIBP Review of Skilled Migration. As indicated, CPA-CAANZ have made suggestions as to how that should proceed (CPA Australia and CAANZ, 2015)



Source: Barnes and Spearritt, 2014.

The basic desired direction is to avoid a simple “on” or “off” specification in SOL which has a range of adverse consequences for planning by all parties and for administration, where occupations may be deleted or added to the list from time to time according to current labour market circumstances.

Instead a smoother and more forward looking approach based on a sliding points scale approach is to be preferred. This could allow for averaging across relevant past and present time periods and also incorporate a rating for the likely future growth requirements for the occupations (as determined, say, from the AWPA style longer-term analysis).

The politically convenient current vacancy element can at least be complemented in a new approach by future employment and human capital development considerations, such as in the manner indicated and in a more light-handed system.

Possible resolution of these issues awaits the outcome of the DIBP *Review of Skilled Migration and Temporary Activity Visa Programs*. The Phase Two visa reform draft proposals that have emerged in this Review process are very much in the right direction. But they can be taken further for final specification. The CPA-CAANZ submissions for this Review process have provided useful guides to what such further enhancement might look like.

But the danger evident in too many reviews and reports is that drafters are very reluctant to change much after all the incredible mental effort that goes into producing a thorough and coherent draft report.

PART III

8. Conclusions

This report has covered a wide range of issues including a profile of the profession, major changes over time, domestic student numbers, immigration of experienced migrants, the link between migration and international student demand and the wider context of setting migration policy.

It establishes that in the short run there appear to be shortages of accountants in specific cases and for specific skills especially for accountants with more experience and specialist skills. These shortages can be dealt with through market adjustments and, where unduly persistent, through employer nominated temporary entry visas.

However, this report has also emphasised the medium and long-term and how accountants are central here too, reflecting the core workings of a modern service-based economy such as Australia.

The skills possessed by accounting graduates are not just valuable in accounting jobs but can be applied to a variety of occupations. People with accounting skills create economic growth through use of these skills.

Australian permanent migration settings should therefore continue to centrally emphasise high value add skills, and accounting must continue to be a core contributor to meeting this requirement.

Failure to validate this imperative, and failure to manage it carefully in immigration selection, will cost Australia dearly in the short term and broader national development. The contribution of accountant education and migration is a central one for Australia's future.

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