
4 Economic impacts of mutual recognition

Key points

- In principle, mutual recognition in the goods market will result in lower compliance costs for businesses operating across jurisdictions.
 - Anecdotal evidence suggests that, where it is effectively applied, the compliance costs avoided or reduced through mutual recognition can be substantial.
- Mutual recognition schemes also promote the development of joint standards between jurisdictions and between Australia and New Zealand, which may result in economic gains.
- Reduced compliance costs can contribute to more open and competitive markets and improved goods mobility, although evidence on these impacts is limited.
 - Increased trade flows are consistent with the proposition that mutual recognition improves the interjurisdictional mobility of goods. However, it is difficult to distinguish between the effect of mutual recognition and other factors that influence trade across borders.
- The costs of registering for an occupation in another jurisdiction have decreased under mutual recognition.
- Problems with equivalence of occupations, differences in registration coverage and regulator expertise limit the realisation of the benefits of mutual recognition.
- The inability of a number of occupation-registration authorities to provide data hampers the assessment of the effectiveness and efficiency of the mutual recognition schemes.
- Available evidence supports the expectation that mutual recognition contributes to more efficient labour markets.
 - Labour mobility of practitioners in registered occupations increased between 1996 and 2006.
 - Wages of people working in registered occupations are less dispersed than they were prior to the introduction of mutual recognition.

The mutual recognition schemes are intended to remove barriers to interjurisdictional trade in goods and the mobility of labour caused by regulatory inconsistencies and duplication across jurisdictions. Their broad application means that the potential impact of mutual recognition is significant. A large number of

firms stand to gain from effective use of these schemes. In 2006-07, there were over 30 000 businesses operating in more than one state or territory, representing roughly 2 per cent of all Australian businesses (ABS 2007a). Moreover, the Commission estimates that multi-state businesses contributed over 20 per cent of the turnover of all businesses nationally in that year.¹ This suggests that a significant proportion of Australia's output may be covered by mutual recognition.

The potential reach of mutual recognition is similarly large for occupations. Around 18 per cent of employed Australians and 16 per cent of employed New Zealanders work in registered occupations.

In order to assess the impacts of mutual recognition, it is first necessary to consider the effectiveness of mutual recognition in reducing compliance costs that arise from jurisdictional variations in product regulation and occupational registration requirements. Section 4.1 examines the available evidence on these direct impacts.

The broader economic impacts on the goods and labour markets of reduced compliance costs through mutual recognition — including changes in interstate and trans-Tasman trade and labour mobility — are then examined in sections 4.2 and 4.3. Other labour market impacts are also explored, including possible wages convergence across jurisdictions over time.

The Commission has used available evidence of impacts on Australian and New Zealand markets, drawing on the views of study participants and, where possible, quantitative evidence of changes in trade and labour flows. However, quantification of the economic impacts is hampered because of difficulties associated with:

- identifying businesses, employers and registered workers using the schemes
- estimating the proportion of businesses' total compliance costs attributable to jurisdictional differences in regulation
- disentangling the effects of mutual recognition from other factors that explain variation in goods and labour mobility.

4.1 Impact on compliance costs

The first section includes evidence of compliance costs associated with product regulation, the views of study participants about regulatory inconsistencies across jurisdictions, and the effect of mutual recognition on standards development. The second section includes a discussion of compliance costs associated with occupational registration.

¹ Businesses include both producers of goods and service providers.

Compliance with product regulation

Mutual recognition provides a means to reduce regulatory impediments to trade by reducing compliance costs and, therefore, the price that firms charge to recover the cost of selling a product in another jurisdiction. There are a number of mechanisms through which effective mutual recognition of product regulation can result in lower compliance costs than would otherwise exist.

- Firms that sell their products in more than one jurisdiction avoid multiple grading, packaging and labelling requirements.
- Firms do not have to meet multiple product safety standards for the same product in different jurisdictions, for example, consumer safety standards for children's toys. This means that the designs, components or technical features of products do not have to be modified by firms in order to comply with multiple standards.
- Firms do not have to comply with various processes for testing, certification or conformance assessment of products or production equipment.
- Firms may enjoy lower storage and depreciation costs when mutual recognition reduces or eliminates delays in regulatory approval to sell goods, resulting in shorter times to markets and, therefore, lower inventory-carrying costs.
- Mutual recognition can avoid the indirect costs of complying with regulation, for example, lost sales or product damage as a result of delays in seeking regulatory approval from regulators in more than one jurisdiction.

The importance of mutual recognition in reducing compliance costs holds more weight for some goods exporters than others. The avoidance of lengthy conformance assessment processes is particularly important for firms wishing to sell products with short lifespans (for example, due to rapid technological development). Additional costs of testing and inspection due to different jurisdictional requirements are likely to be significant for specialist manufacturers that export a large number of small consignments (OECD 2000). Finally, large national retailers will reap productivity gains from being able to warehouse homogeneous products in a central location.

The Commission has obtained only limited evidence on the impacts of mutual recognition on compliance costs associated with product regulation, although a number of study participants expressed general support for the schemes. In those cases where mutual recognition schemes have been used successfully by firms selling interstate or across the Tasman, the impacts of mutual recognition have been substantial. Anecdotal evidence suggests that the costs of complying with different regulations relating to the sale of goods can be high (box 4.1). It is likely that the

bulk of reductions in compliance costs resulting from mutual recognition occurred in the initial period following the introduction of the schemes, with the elimination of requirements to comply with multiple jurisdiction-specific regulations for a large range of goods. In more recent years, reductions in compliance burdens through mutual recognition are likely to have been relatively smaller and more incremental.

Box 4.1 Anecdotal evidence of regulatory costs

The costs associated with pre-sale testing, conformance assessment and product recalls can be substantial. Examples of these are laboratory testing fees, costs of transporting samples interstate or overseas, administration costs and forgone sales resulting from regulatory delays. Submissions to the Commission's review of Australia's consumer policy framework (PC 2008f) indicated that the costs of interstate regulatory differences in consumer policy can be considerable. This is due to costs associated with additional training, legal advice, modifications to information technology systems and deflection of management time. One company pointed out that a single change by a jurisdiction to an apparently 'minor' regulation for just one product cost \$1 million to implement.

Accord Australasia (2008) noted that one of its members estimated the cost to relabel a product because of a unique Australian requirement at approximately 50 cents per unit. Based on the number of units sold in Australia in 2006, the additional costs to industry in any one year could be as high as \$65 million. Other Accord Australasia members advised that labelling changes can be costed and range from \$25 000 to \$75 000, depending on the type, quality or extent of packaging. The fees for submitting an application as part of new chemical assessments undertaken by Australia's National Industrial Chemical Notification Assessment Scheme, vary between \$2534 and \$14 970, depending on the nature of the application, while the cost of generating data to support the application is frequently of the order of \$100 000–200 000 (PC 2008b).

Although regulations relating to hazardous substances, industrial chemicals and dangerous goods are exempt from the TTMRA, these examples illustrate the magnitude of potential costs for exporters of such products to Australia in the absence of mutual recognition being applied.

A number of participants in this study expressed support for the mutual recognition schemes as a valuable mechanism to avoid unnecessary compliance costs arising from variations in jurisdictional regulation. For example, Accord Australasia stated:

MRA [Mutual Recognition Agreement] and TTMRA [Trans-Tasman Mutual Recognition Arrangement] can be highly effective tools which form a suite of government measures to eliminate costly and unnecessary duplication. This could be particularly effective in areas where there is limited cross-border impact because of the small number of companies operating across more than one jurisdiction. For these areas of regulatory control it may be simpler to mutually recognise individual jurisdictional regulatory controls rather than go down the path of harmonisation. (sub. 39, p. 4)

However, the Coles Group favoured harmonisation over mutual recognition as a means of reducing compliance costs:

Coles supports the use of the MRA and the TTMRA as a short-term alternative way for governments to reduce regulatory impediments on business. However, in the long term, Coles would prefer harmonisation of regulation across all states and territories of Australia and between Australia and New Zealand. This would limit unnecessary compliance costs, reduce the risk of business non-compliance and ensure consumers have uniform rights and product standards across all jurisdictions. (sub. 46, p. 1)

Some study participants provided examples of inconsistencies in product regulation across jurisdictions, suggesting that mutual recognition schemes have not been completely effective or well applied in a number of cases (box 4.2).

Box 4.2 Examples of regulatory inconsistencies

In general, barriers to interstate and trans-Tasman mutual recognition are minimised where there is harmonised regulation, and where approvals or conformity assessments made by regulators (or accredited third-party conformity assessment bodies) are recognised as equivalent across jurisdictions.

A number of submissions provided examples of inconsistent regulation across jurisdictions. The Coles Group (sub. 46) stated that it must contend with regulatory inconsistencies across the states and territories in safety standards for products, such as flammable candle holders and monkey bikes (small motorised children's bikes), and labelling requirements, for example, fire-hazard labels on children's nightwear and limited daywear.

In the context of the TTMRA, mutual recognition of conformance assessment for some electrical appliances has not been effective, due to Australian regulators and retailers favouring Australian approvals over New Zealand certification (Fisher & Paykel, sub. 54 and pers. comm., 4 August 2008). This means that, for New Zealand suppliers of some electrical goods, Australian regulators may require retesting of their products, retailers may not stock them or consumers may be disinclined to buy them.

Cadbury Schweppes (sub. DR61) stated that, although weights and measures regulations are reasonably similar across Australian jurisdictions, there are often significant differences in the interpretation and enforcement of the regulations by each state and territory. These differences, to a large extent, will be overcome as a result of national weights and measures legislation to be implemented in 2010. However, Cadbury Schweppes emphasised that, as part of the national legislation, Australia should adopt the same Average Quantity System model as New Zealand, in addition to compatible weights and measures regulations.

Continued regulatory differences might be justified, in some cases, on the basis of jurisdiction-specific or environmental factors. The Plumbing Industry Advisory Council noted:

With regard to plumbing products, while Australia and New Zealand are harmonising standards, there are still significant differences. Further, because Australia has some unique circumstances, such as water shortages and an increased requirement to use renewable energy, there are regulatory differences regarding hot water services such as solar. These jurisdictional differences reflect different policy objectives and this needs to be considered and accommodated as part of any mutual recognition. (sub. 49, p. 2)

Development of standards

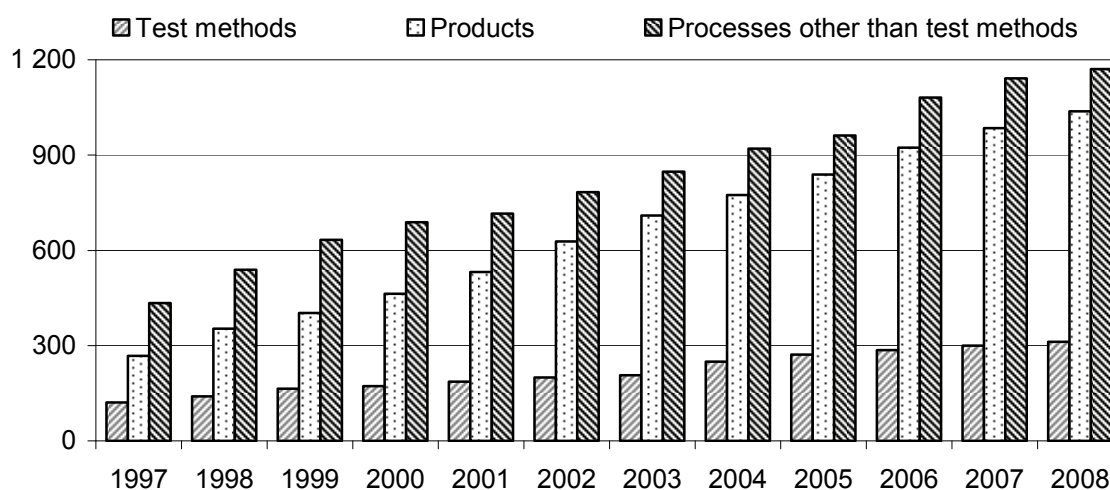
Regulatory competition can drive greater efforts to harmonise regulations through cooperation and dialogue between regulators. This has provided an avenue for mutual recognition to facilitate the development and adoption of joint standards (or the alignment of one country's standards with those of the other). Standards include technical standards (product related) and those relating to conformance assessment procedures (testing and other methods). Examples of joint standards include common compliance marks, such as those approved for electrical products or national product safety standards. Standards Australia and Standards New Zealand commented:

The TTMRA requires a greater discipline on regulators contemplating the introduction of joint Standards, regulations and registration requirements and encourages greater cooperation between regulatory authorities ... AS/NZ Standards are allowing for trade to take place effectively across the Tasman — they are an essential, but sometimes overlooked, mechanism to drive progress towards a SEM [single economic market]. (sub. 47, pp. 3–4)

The number of joint or aligned Australia–New Zealand standards has grown by over 200 per cent from 1997 to 2008 (figure 4.1), which includes a large increase in product-related standards.²

² The Australia–New Zealand standards include those that are cited in Acts or regulations making them either legally mandatory standards, or an acceptable means of compliance with legislation, but not the only method of meeting specified legislative criteria (voluntary standards).

Figure 4.1 Australia–New Zealand joint or aligned standards, 1997–2008^a



^a The number of aligned standards is generally small, relative to joint standards. The number of standards in each year includes both mandatory and voluntary standards issued that year. Some standards may have come into force subsequent to the date of issue. The number of standards in each year may contain a small number of duplicate standards, that is, standards that are cited in more than one regulation.

Source: Standards New Zealand (unpublished data).

Harmonisation of regulations through the adoption of common standards improves the feasibility of applying mutual recognition and, therefore, the capacity to reduce regulatory burdens due to jurisdictional differences. As well as reducing such burdens, standards may have broader benefits (box 4.3). However, the development and application of joint standards does not necessarily reduce compliance costs overall (discussed further below).

Box 4.3 **Broader benefits of standards**

Standards define the characteristics of products that make them suitable for use or consistent with offerings from other producers (Swann 2000). Standards applied to goods and production systems can produce benefits including:

- improved consumer confidence and lower search and transaction costs by providing consumers with benchmarks for the quality of products
- reduced costs through economies of scale where standards facilitate mass production of certain goods (PC 2006b)
- greater interoperability or compatibility between different parts of a product (Temple, Witt and Spencer 2004)
- the removal of technical barriers to trade between jurisdictions that adopt common standards.

Another potential benefit of standards, when developed efficiently — such that they achieve their purpose at minimum compliance cost to industry — and implemented in a timely way, is that they contribute to the diffusion of knowledge and encourage innovation. This is because standards provide information to producers about how to make better products or improve production systems or processes. Swann (2000, p. 24) argued that, as well as limiting variety by defining norms for technologies in markets, standardisation helps to achieve credibility, focus and critical mass in markets for new technologies thus supporting ‘innovation-led growth’. On the other hand, standardisation might impede innovation if it reduces a producer’s ability to maintain exclusive property rights to new products or processes for a period sufficient to recoup the effort and investment necessary to produce the innovation.

Evidence on trans-Tasman regulatory cooperation

The New Zealand Government (sub. 53) commented that close regulatory cooperation generated by the TTMRA continues to facilitate mutual recognition and the alignment of regulatory regimes. Effective regulatory coordination has been achieved in the areas of electrical safety and gas appliances, including the development of trans-Tasman Minimum Energy Performance Standards (MEPS) and Mandatory Energy Performance Labels that are compatible with both Australian and New Zealand markets. That said, concerns have been raised about delays in standards development imposing unavoidable costs on industry, particularly those to do with MEPS (PC 2008a).

By 2003, standards for consumer goods were aligned, with the exception of child restraints for motor vehicles. This was achieved through the development of joint Australia–New Zealand standards, and in other cases by mutual recognition (PC 2003).

The Australian Communications and Media Authority (sub. 13) noted there has been considerable progress in harmonising technical standards and regulatory requirements for electromagnetic compatibility and radiocommunications devices, which are subject to a special exemption from the TTMRA. This has been facilitated by cooperation between Australian and New Zealand authorities as part of the TTMRA cooperation program (chapter 7). In contrast, there are examples of divergence of standards, such as those applied to road vehicles either imported into or manufactured in Australia, and those applied in New Zealand. This has created obstacles to achieving mutual recognition of standards and, hence, realising potential trade benefits.

The extent of harmonisation or uniformity of standards for some products has meant that regulatory cooperation has, in a sense, moved beyond mutual recognition. Nonetheless, where trans-Tasman standards apply, mutual recognition can coexist with and complement those standards. Adherence to the standards — even those cited in legislation — is often not the only means of compliance with the legislation (Standards New Zealand, pers. comm., 19 August 2008).

Complementarity of standards and mutual recognition make it difficult to ascertain whether increased trade flows are a reflection of the former or the latter. Trans-Tasman trade data do not distinguish between standardised goods and mutually recognised ones. In the European Union, 75 per cent of products traded embody harmonised standards (appendix C). This proportion is likely to be lower for trans-Tasman trade. However, based on the observed growth in the number of joint or aligned Australia–New Zealand standards (figure 4.1), the proportion of trans-Tasman trade involving standardised goods is probably growing.

Challenges in developing joint standards

As discussed, development of joint standards can assist in reducing the regulatory burden due to jurisdictional differences in regulation. However, harmonisation of regulations in some instances involves a ‘race to the top’ among jurisdictions, which results in the most onerous and costly regulatory regime being uniformly applied. It is often the case that standards cite other standards, so that to comply with one standard, producers may have to comply with one or more other standards. Further, where joint standards do not replace multiple existing sets of standards, but rather simply add to the overall stock of standards, then this is likely to have the effect of increasing compliance costs for those businesses operating across jurisdictions.

In general, increases in the volume of joint Australia–New Zealand standards, as illustrated in figure 4.1, will result in lower regulatory burdens that arise from jurisdictional differences only if these standards:

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- remove the need to comply with separate Australian and New Zealand standards
 - do not combine the trade-restrictive elements of both Australian and New Zealand standards.

Increases in the volume of standards are also likely to reflect the emergence of new products and technologies, as well as improvements in risk analysis and testing methods (Standards Australia and Standards New Zealand, sub. DR88). As such, they may not be associated with a greater burden.

Concerns have been raised that, increasingly, joint standards incorporate onerous regulatory requirements that are more compatible with one regulatory regime over another, or that create challenges for standard-setting bodies. The New Zealand Government stated that:

Joint (AS/NZS) standards provide a technical underpinning for trans-Tasman regulatory alignment. However, there are some challenges to increasing their use. For example, some joint standards contain large amounts of material defining regulatory requirements, such as enforcement procedures and penalties, which may not be equally applicable in both countries. This has the potential to:

- make New Zealand regulations more difficult to structure and draft because the joint standards may be more focused on the Australian legal and industry environment
- make the processes of updating regulation, including for the purposes of regulatory alignment, slower than necessary because, in some cases, the standard would need to be amended before it could be adopted in full in legislation
- place expectations on standards development committees that they may not be well equipped to deal with (for example, that they have regulation drafting expertise). (sub. 53, p. 7)

However, Standards Australia and Standards New Zealand noted that:

It is not the intention of standards to impose unnecessary costs of onerous requirements on industry: it is the layer applied over the top of standards (the technical regulation layer) that potentially burdens industry with legal and administration requirements which can be onerous and costly. (sub. DR88, p. 2)

The New Zealand Government suggested that standard-making challenges could be overcome by appropriate Australian and New Zealand representation on joint standards development committees, by ensuring that the standards are suitable for use in both countries and the need for country-specific standards is minimised.

Costs associated with occupational registration

The primary rationale for applying mutual recognition to occupational registration is to allow workers registered in one jurisdiction to be registered in an equivalent occupation in other jurisdictions, without the need for further assessment of their qualifications, skills or experience. In doing so, mutual recognition aims to remove impediments to labour mobility caused by regulatory differences, or duplication, in assessment and registration of occupations across jurisdictions.

Registration of an occupation aims to protect the community by ensuring the quality and safety of the services provided by practitioners of that occupation. In any jurisdiction, costs associated with occupational registration faced by individuals, their employers or local registration authorities include:

- direct training costs associated with meeting qualification requirements
- opportunity costs of meeting these and other registration requirements
- assessment and certification of qualifications, experience and training
- application and renewal licensing fees
- time costs associated with completing application procedures.

When registered workers move between jurisdictions (or operate in two jurisdictions), a number of costs may be duplicated. Movement of labour between jurisdictions may be inhibited if these costs are large enough. Mutual recognition aims to facilitate labour mobility by removing some of these costs. In order to gauge the effectiveness of mutual recognition, it is necessary to consider which compliance costs are affected as a result of mutual recognition.

Reduced compliance costs under mutual recognition

There is evidence that mutual recognition removes some compliance costs associated with additional training, time spent on processing of applications, and certification and accreditation costs. It is important to note that application and renewal fees are duplicated for workers registered in more than one jurisdiction but are not affected by mutual recognition.

Effective mutual recognition is likely to reduce costs associated with registered workers moving between jurisdictions, because it removes the potentially significant costs of additional training. Under mutual recognition, additional training requirements cannot be imposed on workers seeking registration who are already registered in an equivalent occupation in another jurisdiction. This removes both the direct costs of additional training, such as tuition fees, and the indirect opportunity costs of training.

The costs of additional training are likely to be high where there are notable differences in training requirements between jurisdictions and there is movement of workers into the jurisdiction with the higher training requirements. For example, there are substantial differences in the training requirements faced by valuers in different jurisdictions. In the absence of the TTMRA, a valuer from New South Wales wishing to practise in New Zealand would be faced with an extra year of full-time study, as well as requiring three years of practical experience.³

Effective mutual recognition can substantially reduce administration and time costs associated with assessment and certification of qualifications and licences, because occupational registration in one jurisdiction is sufficient indication that a worker is qualified to work in another jurisdiction. In its response to the Commission's survey of occupation-registration authorities (appendix D), the Queensland College of Teachers recognised these benefits, stating that 'mutual recognition is a very efficient way of registering an applicant as we are not required to assess their qualifications'.

Similarly, the Medical Practitioners Board of Victoria noted:

The [Mutual Recognition] Act facilitates trans-border registration and expedited transfer of practitioners by not requiring them to wait for Medical Board approval of an application in order to begin practice should they move between States. Further, the expedited transfer of eligible medical practitioners would be unnecessarily impeded/delayed if the provision was not available. (sub. 28, p. 1)

In its survey response, the Podiatrists Registration Board of Victoria stated that 'registration through mutual recognition for this Board is less cumbersome'. While the majority of survey comments referring to the administrative workload associated with mutual recognition argued that it reduced the administrative burden on regulators, a minority of responses explicitly stated otherwise. For example, the NSW Psychologists Registration Board stated that the mutual recognition process 'is labour intensive for staff'.

Mutual recognition is likely to lead to substantial savings with respect to the validation and accreditation of qualifications for interjurisdictional migrants. Claiming registration in one jurisdiction as a valid basis for registration in another removes the unnecessary duplication of accreditation and assessment fees that would otherwise apply.

³ The Australian Property Institute (sub. 41) stated that a property valuer in New South Wales requires an Advanced Diploma in Property (Valuation). In contrast, a property valuer in New Zealand requires 'a degree equivalent academic qualification and has at least 3 years practical experience' (Valuers Registration Board of New Zealand, sub. 6, p. 2).

Empirical evidence quantifying these savings is limited, although the costs of accrediting the qualifications of skilled migrants may be broadly comparable. The Joint Standing Committee on Migration (JSCM 2006) reported the assessment fees faced by overseas skilled workers seeking registration in Australia. Examples include:

- total accreditation costs of \$8400 for veterinarians
- assessment fees for physiotherapists entering Western Australia of \$3355 (WA Department of Health 2006)
- costs of licence recognition and registration requirements for electricians of over \$1000⁴
- fees of around \$5000 and \$5310, respectively, for optometrists and dentists.

Using these figures as benchmarks, and based on the fact that mutual recognition removes the need for the accreditation of the qualifications of interstate migrants seeking registration, the potential savings in accreditation costs for these occupations amounted to around \$6.1 million in 2006.⁵

Deemed registration delivers further benefits to interjurisdictional migrants registering under mutual recognition (chapter 5). Using this provision of the mutual recognition schemes, applicants can immediately begin work as a registered worker, thereby reducing the time lost waiting for application approval. The time savings associated with mutual recognition were widely noted among submissions. The Queensland Nursing Council, for example, stated that mutual recognition allows:

... nurse or midwifery applications from other states, territories and New Zealand to be processed in a timely manner and enable practice in Queensland immediately ... there are no delays for employment once a decision is made to apply for a licence in Queensland. (sub. 16, p. 1)

Impediments to reducing compliance costs under mutual recognition

The extent to which reductions in compliance costs are realised under mutual recognition is contingent on a number of factors, including:

- the treatment of licence equivalence across jurisdictions
- the partial regulation of some occupations

⁴ In addition to these fees, the ‘capstone’ test requires electricians seeking registration in Victoria to undertake an examination that takes between six and eight hours (EEOZ 2008).

⁵ This estimate is based on the interstate movement of 495 veterinarians, 280 physiotherapists, 1222 electricians, 66 optometrists and 110 dentists in the year preceding the 2006 Census (ABS unpublished data).

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- problems relating to regulator expertise and public awareness.

Maximising the reduction in compliance costs can be difficult. The greatest overall reductions in compliance costs are achieved by targeting occupations that have both significant potential savings in compliance costs and sufficient interjurisdictional labour mobility to justify pursuing equivalence.

Effective mutual recognition is more attainable with occupations that have smaller interjurisdictional differences in scope and licensing regimes. That is, where occupations are closely aligned, mutual recognition can be relatively straightforward.

However, compliance cost savings are likely to be small in these instances. Indeed, in some cases regulator agreement about equivalence led to the development of mutual recognition without the need for specific legislation. For example, survey responses from both the Surveyors Board of Queensland and the Surveyors Board of the Northern Territory pointed out that the mutual recognition of registered surveyors between states and territories has been operating in some form for over 100 years (appendix D). In this context, the implementation of mutual recognition legislation is not likely to affect compliance costs.

Conversely, the largest reductions in costs through mutual recognition are likely to be in occupations where there are problems in identifying equivalent licences across jurisdictions, thereby restricting the operation of effective mutual recognition. In such cases, achieving effective mutual recognition can be a difficult and costly exercise, but there is potential for greater reduction in compliance costs if it is achieved. Maximum payoff from mutual recognition of occupations is likely to be realised for those occupations with greater differences in licence scope across jurisdictions and have sufficient potential interjurisdictional labour mobility to justify action.

However, achieving equivalence is often a difficult task. For example, the Air Conditioning and Mechanical Contractors' Association (AMCA, sub. 30, p. 2) noted that 'there is no universally accepted definition of what are the skills/competencies required to be a plumber'. One implication of this is that a 'registered plumber in Western Australia cannot be registered in Victoria without additional training' (AMCA, sub. 30, p. 2). As around 1050 plumbers either relocated from New Zealand to Australia or moved between Australian jurisdictions in 2005-06, the benefits of achieving clear equivalence could be significant.

Attempts to align definitions have met with limited success. A recent report by the Allen Consulting Group (ACG 2008) noted that, while equivalence tables for carpenters and joiners are eight pages in length, regulatory differences between

jurisdictions mean that equivalence tables for plumbers are nearly 90 pages in length. This suggests that while there are potential savings in compliance costs through implementation of mutual recognition, regulatory differences prevents these savings from being realised.

Partial regulation of occupations similarly limits the potential for cost savings (chapter 5). For example, motor mechanics and repairers are only required to be licensed in New South Wales and Western Australia, meaning that a mechanic moving from another state may experience difficulty in having his or her qualifications recognised, and is likely to need to undergo full accreditation (PC 2008a). Moreover, this has the potential to impose additional costs to the extent that it encourages the introduction of regulatory requirements in jurisdictions that did not previously register an occupation.

Similarly, the way in which teachers are registered in New South Wales has prevented the effective operation of mutual recognition. In New South Wales, accreditation requirements only apply to teachers who commenced teaching after September 2004. As mutual recognition applies to occupations that ‘may be carried on only by registered persons’, the NSW Government (sub. 55, p. 12) stated that ‘the [accreditation] scheme falls outside of the definition of “occupation”’ as defined under the MRA, and that mutual recognition does not apply to teachers in that state.

In order to achieve mutual recognition of teachers in New South Wales, a series of individual, bilateral agreements with a number of jurisdictions have been put in place. Although the cost of these additional arrangements is not known, they do not have the comprehensive coverage of mutual recognition and are less effective. For instance, although registration of teachers from Queensland is recognised in New South Wales, this is not reciprocated.

Other features of licensing arrangements may also restrict the realisation of compliance cost savings. Auctioneers’ licences, for example, are issued by the courts in New Zealand, meaning that there is no central point of contact to coordinate distribution of licences or information.

A lack of expertise relating to mutual recognition obligations on the part of local registration authorities can also hamper the realisation of reduced compliance costs. This study’s survey of occupation-registration authorities revealed widespread differences in levels of mutual recognition knowledge and expertise, ranging from a lack of awareness of obligations to a willingness to ignore these obligations (appendix D). Problems include:

- not applying mutual recognition where it would be appropriate
- attaching additional qualifications or conditions not required of local applicants.

These problems are discussed in more detail in chapter 5.

It is difficult to gauge the severity of these problems, although the survey of occupation-registration authorities suggested a lack of clear understanding of what mutual recognition involves and when it should be applied. Problems with the record keeping of local authorities impedes their ability to consider mutual recognition as an issue — many organisations had difficulty in completing the survey simply due to the fact that they did not keep records about mutual recognition.

4.2 Impacts on goods markets

The possible effects of mutual recognition on national and trans-Tasman goods markets include lower costs to business, improved goods mobility through trade, greater choice and increased competitiveness.

Goods mobility

It is difficult to isolate the effects of mutual recognition on goods mobility from other factors explaining variations in trade flows over time. Trends in interstate and trans-Tasman trade can provide useful background information, but it is only circumstantial. The analysis of trade flows in this section, therefore, does not attempt to quantify the impacts of mutual recognition on trade independent of other explanatory factors.

Interstate trade

Using estimates of exports and imports by jurisdiction obtained from the Monash Multi-Regional Forecasting (MMRF) model database, the Commission has derived estimates of interstate trade (table 4.1).⁶ Between 2001-02 and 2005-06, interstate trade as a share of gross state product increased for all states and territories. Comparable data for the previous decade are unavailable, which makes the role of mutual recognition in this trend difficult to ascertain.

⁶ Although these estimates are imputed rather than observed, they appear to be robust. Estimates of gross state product based on the MMRF database are similar to those calculated by the ABS. Moreover, ABS estimates of interstate trade for Queensland — the only jurisdiction for which such estimates based on survey data are available — are reasonably close to those extracted from the MMRF database.

Table 4.1 **Interstate trade, Australia, 2001-02 and 2005-06^a**

Per cent

	<i>NSW</i>	<i>Vic</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas</i>	<i>NT</i>	<i>ACT</i>
Interstate trade as a share of GSP								
2001-02								
Exports	9.4	18.8	12.6	27.1	13.0	31.4	19.5	4.2
Imports	13.6	9.1	17.3	15.5	16.4	32.4	32.8	30.4
Total trade	23.0	27.9	29.8	42.6	29.4	63.8	52.3	34.6
2005-06								
Exports	11.9	21.4	12.3	33.5	15.8	37.2	26.6	4.0
Imports	15.3	10.2	19.6	16.8	19.5	40.3	37.0	39.7
Total trade	27.2	31.6	31.9	50.3	35.2	77.4	63.6	43.8
Average annual growth in interstate trade^b								
2001-02 to 2005-06	5.3	5.0	5.2	5.3	7.7	6.7	6.8	7.1

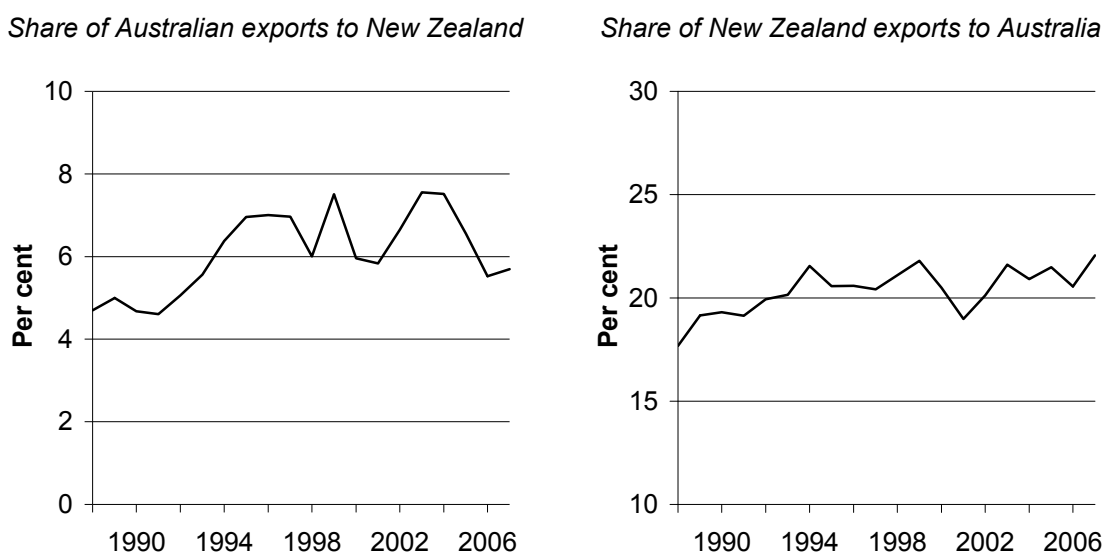
^a Estimates of interstate trade are derived using the MMRF model database. Total interstate trade is exports plus imports (to and from other jurisdictions, not including New Zealand or overseas). Ratios have been multiplied by 100 to express them in percentage terms. ^b Data for 2001-02 are adjusted to 2005-06 dollars using GSP deflators.

Sources: ABS (2007b); MMRF model database; Productivity Commission estimates.

Trans-Tasman trade

Since the Australia New Zealand Closer Economic Relations Trade Agreement (ANZCERTA) came into force in 1983, the value of trans-Tasman trade in goods has increased at an average annual rate of 9 per cent (Austrade 2008). Under ANZCERTA, both countries have sought to harmonise a range of non-tariff measures that impede the free flow of goods and services, including quarantine, customs arrangements, standards and business laws. The TTMRA, as just one aspect of this trade agreement, is not an exclusive mechanism through which trade barriers have been lowered and, consequently, not the only reason trade volumes have increased over time. The value of Australia's exports of goods to New Zealand as a proportion of total Australian goods exports (similarly for New Zealand) has fluctuated over time (figure 4.2). Nonetheless, both shares have been on a slight upward trend.

Figure 4.2 Trans-Tasman trade, 1988–2007^a



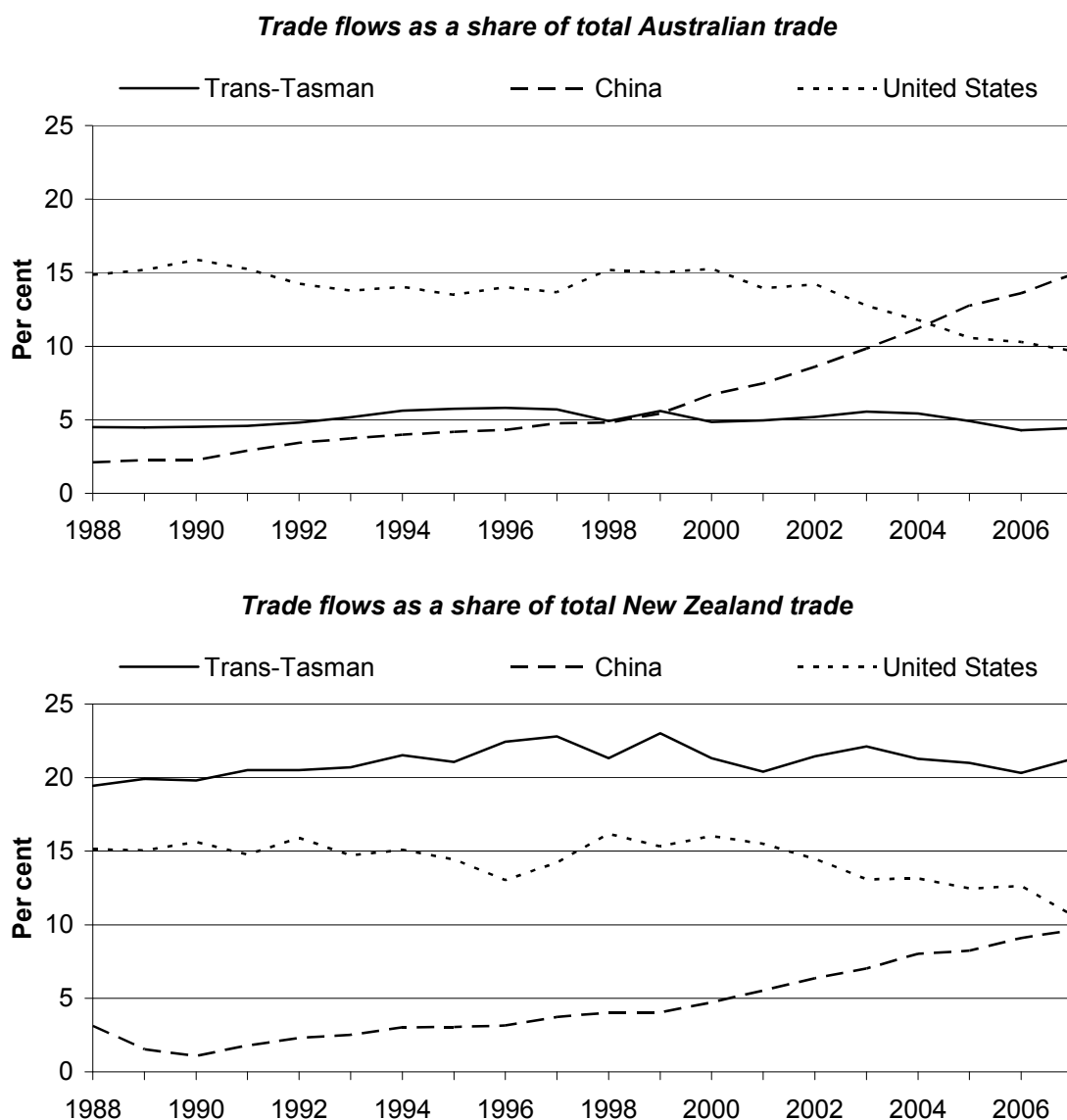
^a The figures represent the value of trans-Tasman exports as a proportion of the total exports of each country by Standard International Trade Classification (SITC) revision 3.

Source: WITS (World Integrated Trade Solution) database.

The importance of trans-Tasman trade relative to other bilateral trade flows is depicted in figure 4.3. Trans-Tasman trade as a share of total trade for both Australia and New Zealand has remained relatively constant over time. It represents a higher share of New Zealand’s total trade compared with its trade with either China or the United States. However, both Australia’s and New Zealand’s bilateral trade flows with China have increased substantially over the last five years.

Of the top five traded goods between Australia and New Zealand, some are subject to exemptions under the TTMRA (table 4.2). Motor vehicles, which are subject to a special exemption, have consistently been one of New Zealand’s largest imports from Australia. Growth in motor vehicle imports is facilitated by New Zealand’s acceptance of various international standards for motor vehicles, including Australian standards (chapter 7). In other words, New Zealand has unilaterally applied mutual recognition to car imports from Australia.

Figure 4.3 **Comparison of trans-Tasman and other bilateral trade flows, 1988–2007^a**



^a The figures represent the value of bilateral trade (gross exports plus gross imports by SITC revision 3) as a share of total trade.

Source: WITS (World Integrated Trade Solution) database.

New Zealand cheese exports have also increased in trade value over recent years. In addition to demand factors, this might reflect the elimination of some certification arrangements due to Australian and New Zealand regulators agreeing on equivalence of both countries' export dairy systems (chapter 8).

Table 4.2 Top five trans-Tasman exports in 2000, 2003 and 2007^a

<i>Exporting country</i>	<i>2000</i>		<i>2003</i>	<i>2007</i>
	<i>Rank</i>	<i>Product</i>	<i>Product</i>	<i>Product</i>
Australia	1	Petroleum oils	Motor vehicles	Petroleum oils, not crude
	2	Motor vehicles	Petroleum oils, not crude	Motor vehicles
	3	Aluminium oxide	Aluminium oxide	Petroleum oils, crude
	4	Crude oil	Medicaments ^b	Medicaments ^b
	5	Medicaments ^b	Petroleum oils, crude	Aluminium oxide
New Zealand	1	Crude oil	Petroleum oils, crude	Petroleum oils, crude
	2	Timber	Timber	Gold
	3	Gold	Gold	Cheese
	4	Chemical wood pulp	Cheese	Wine
	5	Live horses	Refrigerators, freezers	Timber

^a List of commodity items classified by the Harmonised System (HS) 4-digit level, ranked by value of trade.

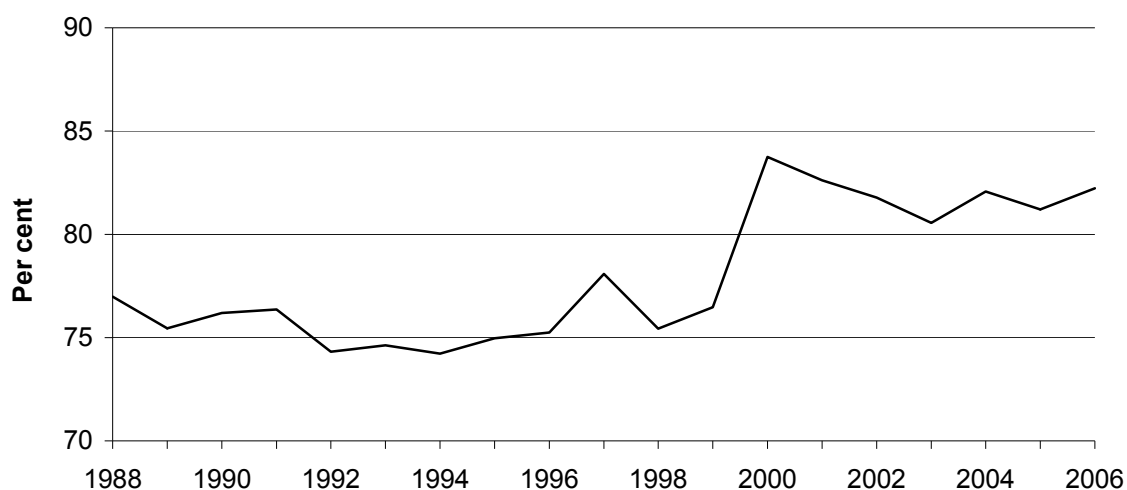
^b Medicaments refer to medicinal substances used to treat or prevent disease.

Source: Statistics New Zealand (2007a).

Trade in goods not subject to permanent or special exemptions as a share of total trade value is depicted in figure 4.4. The share increased significantly between 1999 and 2000, reflecting the reclassification of a number of consumer goods, previously subject to special exemptions, which were made non-exempt after 1999 due to the alignment of standards for most products (as noted in section 4.1). It is not possible to infer from this that the TTMRA has independently caused higher trade flows for non-exempt goods. However, the consistently large value share of trans-Tasman trade that is non-exempt serves to illustrate the importance of maximising the effectiveness of the TTMRA in reducing costs to exporters. The New Zealand Ministry of Economic Development also commented that the large share of trans-Tasman trade in goods not subject to exemption is a strong indication of the importance of the TTMRA for bilateral trade:

Notwithstanding the difficulty of determining a counterfactual, in the context of a bilateral trade relationship worth \$16 billion per year, it can reasonably be inferred that the low cost solution to regulatory differences which the TTMRA provides is acting as an important enabler of trade. (sub. DR89, p. 2)

Figure 4.4 Trans-Tasman trade in goods not subject to exemption^a



^a The figure represents the value share of total trans-Tasman trade (exports and imports from Australia to New Zealand) in commodity groups not subject to exemption from the TTMRA. This excludes commodities in the following exemption categories: chemicals; gas appliances; risk-categorised food; firearms and explosives; radiocommunications devices; road vehicles; therapeutic goods (including pharmaceuticals, medicaments and therapeutic devices); and specific consumer goods which were subject to an exemption until 1999.

Source: Productivity Commission estimates based on WITS (World Integrated Trade Solution) database.

Other impacts on goods markets

In theory, mutual recognition should promote price convergence, all things being equal, by reducing regulatory impediments to trade. Prices charged for similar goods in different jurisdictions might both converge and decline over time if:

- businesses pass on reductions in compliance costs to consumers
- greater trade opportunities lead to economies of scale being achieved
- removal of impediments to trade leads to more competitive markets resulting in downward pressure on average prices.⁷

However, similar effects could be expected from other forms of deregulation, so that it is not possible to apportion any price variations to mutual recognition. Further, observed variations in prices reflect demand as well as supply shifts, which makes causal analysis difficult. In any event, there is a paucity of information on average retail prices of goods, which rules out isolating the effects of mutual recognition on price convergence. For example, investigation of price convergence

⁷ However, as noted in chapter 3, convergence might involve a price increase in the 'low cost' jurisdiction and a price fall in the 'high cost' jurisdiction.

using available price indices is not realistic, because indices include the prices of both tradeable and non-tradeable goods.

Another potential impact of mutual recognition is that, by reducing regulatory impediments to trade, it opens up markets and potentially increases the number of competing businesses or suppliers. More competitive markets spur innovation and product differentiation, thereby providing consumers with greater product choice. Little information is available on the extent of these potential impacts of mutual recognition.

4.3 Labour market impacts

The impact of mutual recognition on labour markets is limited by the extent to which it reduces compliance costs; the use of it as a means of registration; and by the mobility of labour. This section examines the importance of mutual recognition in the context of occupation registration in Australia and New Zealand. It goes on to consider the possible impacts that mutual recognition has had on the mobility of labour and the convergence of wages.

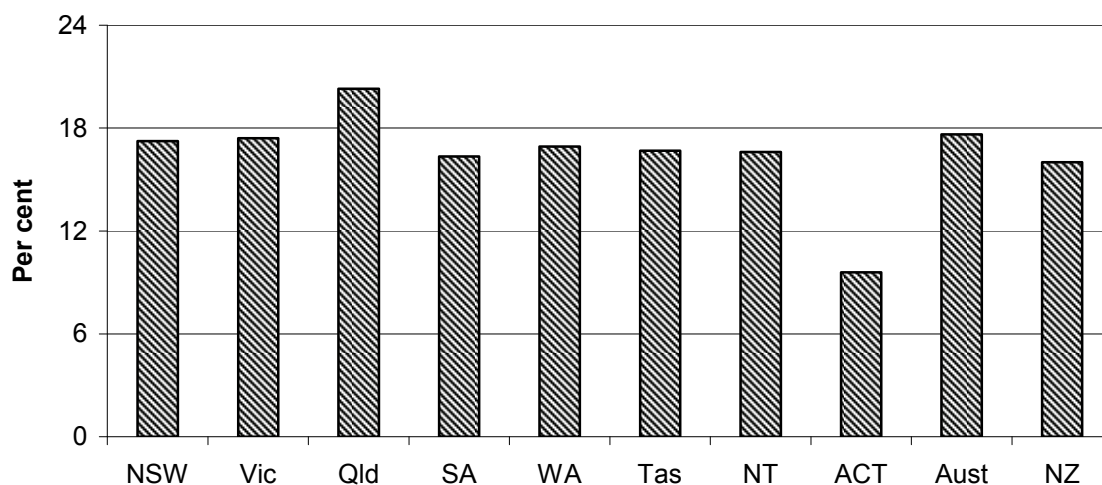
How important is mutual recognition?

An indicator of the potential importance of mutual recognition in facilitating movement of labour is the proportion of people employed in registered occupations. Across Australia, around 18 per cent of employed people work in occupations (identified in appendix F) that are subject to registration requirements (figure 4.5). In New Zealand, the percentage of employed people potentially affected by the TTMRA is slightly less than Australia at 16 per cent. Mutual recognition has little, if any, direct implications for those working in occupations for which registration is not required.

While registered occupations account for a reasonable share of employment, data on the actual use of mutual recognition as a means of obtaining registration are limited. In order to address this deficiency, the Commission conducted a survey of occupation-registration authorities across Australia and New Zealand so as to:

- quantify the use of mutual recognition
- obtain views from regulators on the importance and effectiveness of mutual recognition.

Figure 4.5 **Employment in registered occupations as a percentage of total employment, 2006^a**



^a Registered occupations include occupations licensed nationally or in individual jurisdictions.

Sources: ABS (*Census of Population and Housing, 2006*, unpublished data); Statistics New Zealand (2006).

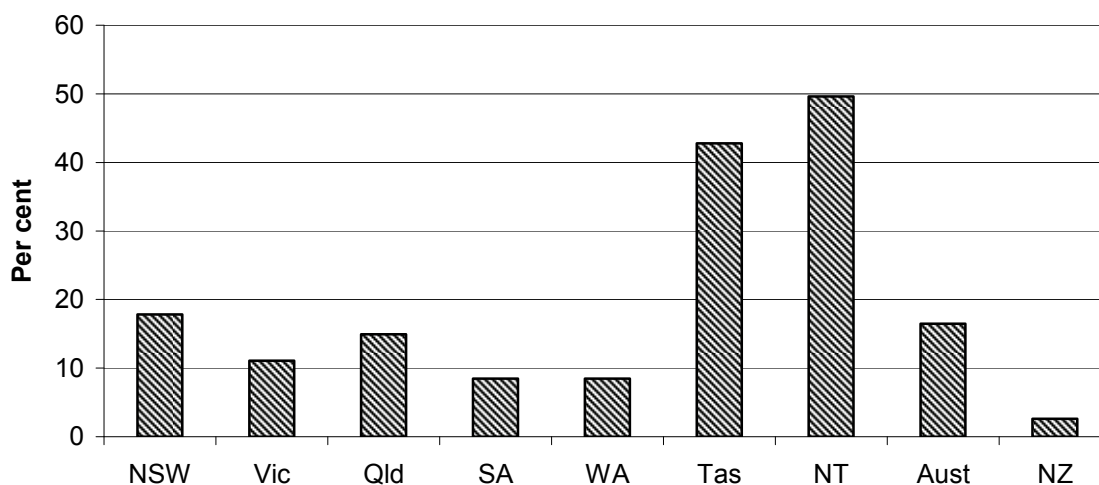
While it is recognised that authorities face resource constraints, the survey response rate of just over 50 per cent suggests that mutual recognition is not a major focus for many registration authorities.

Of the responses that were received, the inability of a number of occupation-registration authorities to provide data hampered the assessment of the effectiveness of the mutual recognition schemes. A number of survey participants were unable to provide information on the use of mutual recognition as a means of registering occupations for which they are responsible. Moreover, one state registration body was not able to provide data on the total number of workers registered — both conventionally or under mutual recognition — in all building, electrical, air conditioning and refrigeration, and plumbing occupations.⁸

Despite data limitations, it is possible to obtain some impression of the use of mutual recognition. Figure 4.6 shows that jurisdictions appear to use mutual recognition differently, with mutual recognition registrations as a proportion of total registrations varying considerably. The data suggest that mutual recognition is more important for smaller jurisdictions. Survey comments suggested that this is likely to be the case where jurisdictions do not have training facilities required for specific occupations and rely on trained practitioners from other states to fill vacancies.

⁸ This organisation did, however, offer to collate the data in return for a processing fee of \$10 per record.

Figure 4.6 **Mutual recognition registrations as a percentage of new registrations, by jurisdiction, 2007^a**



^a Data for the Australian Capital Territory are not included as they are based on a single response, and not representative of the use of mutual recognition in that jurisdiction. Total registrations in South Australia do not include 4283 'Responsible Person' and 'Sensitive Person' licences issued.

Source: Productivity Commission survey of occupation-registration authorities (appendix D).

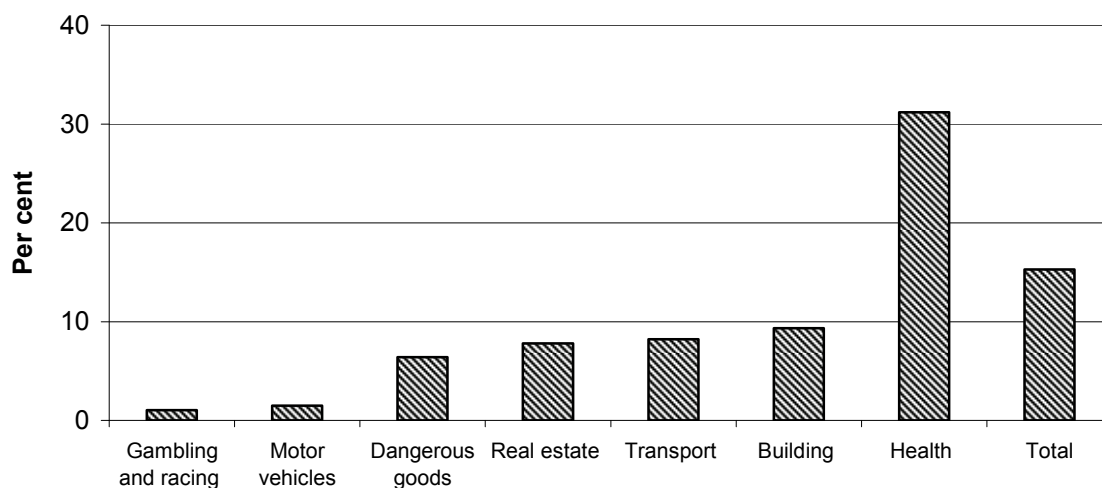
Mutual recognition does not appear to be widely used in New Zealand, with just under 5 per cent of reported registrations conducted under the TTMRA. While the survey requested information about TTMRA registrations in Australia, this was not widely available.

Similarly, the use of mutual recognition varied considerably by occupation, with the greatest proportion of registrations occurring in real estate, transport, building and health occupations (figure 4.7).

Mutual recognition and labour mobility

By reducing some costs associated with relocation, mutual recognition may increase labour mobility, as registered workers are effectively freed up to seek employment opportunities in other jurisdictions without further training or accreditation requirements.

Figure 4.7 **Mutual recognition registrations as a percentage of all new registrations — by broad occupational group, 2007**



Source: Productivity Commission survey of occupation-registration authorities (appendix D).

It is important to recognise that registration compliance costs are just one of many factors affecting the mobility of labour. That is, any increase in labour mobility observed since the MRA and TTMRA were introduced cannot be ascribed solely to those changes. A worker's decision to relocate is likely to be affected by a number of factors, including:

- the expected income from work, which is affected by both expected wages and the probability of finding and maintaining employment
- the relative costs of living, in particular those associated with housing
- regional differences that affect quality of life (Debelle and Vickery 1998).

Other costs include transport costs, income losses during migration and potential social and psychological costs. These costs suggest that migration can be interpreted as an investment, since the present costs have to be offset by future returns on migration. Costs are therefore inversely related to the probability of migrating.

Other regulations and policies that impede either the movement of workers, their ability to obtain work or their relative financial position are also likely to influence the decision to relocate. For example, while Australia and New Zealand have a long-standing agreement allowing their citizens unrestricted movement across borders, social security arrangements restricting the access of New Zealand citizens to the Australian welfare system may affect their mobility (Shah and Long 2007).

Despite the broad range of factors that may affect labour mobility, participants in the survey of occupation-registration authorities expressed the opinion that mutual

recognition of registration did facilitate greater movement of labour. For example, the Nurses and Midwives Board of Western Australia commented that mutual recognition ‘increases mobility of nurses and midwives within Australia and New Zealand’.

Economic benefits of improved mobility

To the extent that mutual recognition improves interjurisdictional labour mobility for registered occupations, it can be expected to result in economic benefits by virtue of promoting a more efficient allocation of workers across jurisdictions. For example, while relocation decisions within New Zealand labour markets are shown to be complex and multi-faceted, recent research by Morrison et al. (2008) confirms the importance of mobility as an equilibrating mechanism within the labour market.

In order to gauge the magnitude of the potential economic benefits that mutual recognition could deliver through improved mobility in Australia, a hypothetical general equilibrium modelling exercise was conducted.

This exercise assumed that, without mutual recognition, workers in registered occupations are immobile between jurisdictions within Australia. The introduction of mutual recognition is assumed to make labour mobility perfectly responsive to interjurisdictional differences in wages. The effects on the Australian economy of a ‘natural resources boom’ were then simulated under both mobility settings. The results show that, even when represented through such extreme changes in labour mobility, mutual recognition is likely to have relatively small effects on the wider economy. However, the effects at jurisdictional level could be significant with improved mobility of workers contributing to growth in gross state product in the ‘boom jurisdictions’, and also leading to a more equal distribution of the gains from the resource boom between jurisdictions (box 4.4 and appendix E).

Changes in labour mobility

Interstate labour mobility has remained relatively stable over the period that mutual recognition has been in operation. Between 1996 and 2006, the proportion of workers moving interstate only declined slightly, from 1.90 per cent to 1.86 per cent of the total workforce. There has, however, been a large increase in the *number* of workers relocating, with a disproportionate increase occurring in occupations that are either fully registered or partially registered.

The Australian Census of Population and Housing provides a useful source of information about the composition of Australian employment and, in particular, labour mobility. Data from the 1996, 2001 and 2006 censuses were used to assess labour mobility over the period in which mutual recognition has been operating.

Box 4.4 A general equilibrium analysis of improved labour mobility

The Commission used computable general equilibrium modelling to examine the potential magnitude of, and the mechanisms behind, the economic effects of improved mobility of workers in mutually recognised occupations. The simulations replicated the ‘resources boom’ that recently affected parts of Australia (modelled as a 10 per cent increase in export prices for mining commodities). The modelling estimates the upper bound of the effects of mutual recognition, based on the extreme assumption that MRA has made registered workers perfectly mobile, from a baseline of zero mobility.

Economywide effects

Removing barriers to mobility of registered workers resulted in economywide gains in real output and average real wages. For example, perfect labour mobility of registered workers adds about 0.3 of a percentage point to the baseline growth of real gross domestic product of 2.1 per cent.

Effects by jurisdiction

A commodity price boom increases the demand for labour and capital in jurisdictions that rely on production and export of commodities, such as Western Australia, Queensland and the Northern Territory. Improved mobility of workers means that workers from other jurisdictions can relocate to the ‘boom’ jurisdictions. This relocation facilitates significant growth in gross state product (GSP) relative to the baseline scenario — adding 10.7 percentage points to baseline GSP growth of 9.1 per cent in Western Australia; 5.2 percentage points to baseline growth of 4.6 per cent in Queensland; and 6.3 percentage points to baseline growth of 4.1 per cent in the Northern Territory. Conversely, remaining jurisdictions experience a net loss of workers and a reduction in their GSP. However, labour mobility reduces growth in GSP per capita in the boom jurisdictions and increases it in the remaining states and territories. This is primarily because the relocation of workers increases the share of capital in aggregate output in the source jurisdictions and reduces it in the boom jurisdictions. The baseline growth in GSP per person changes by between 0.0 and 0.4 percentage points, depending on the jurisdiction.

Effects on wages of registered workers

Following a resources boom, the wages of workers in most occupations rise. Removing barriers to labour mobility improves resource allocation and further increases the average real wage in most occupations, but the effects are relatively small. Labour mobility also facilitates a more equal distribution of gains in the wages of registered workers across jurisdictions, by moderating the growth in real wages in boom jurisdictions and increasing the growth of wages in other jurisdictions. For example, the growth in the wages of registered professional workers:

- falls from 16.7 per cent to 4.4 per cent in Western Australia and from 8.8 per cent to 4.3 per cent in Queensland
- increases from 1.6 per cent to 4.1 per cent in New South Wales; from 0.3 per cent to 4.1 per cent in Victoria; and from -0.1 per cent to 4.1 per cent in South Australia.

Labour mobility with respect to mutual recognition is defined as employed people who moved state or territory in the year before the census, or employed people born in New Zealand who had arrived in Australia within that year. This means that employed people who entered Australia via New Zealand, but were not born there, are not distinguished in these figures. Despite their importance as a source of registered workers for the Australian labour market, migrants from overseas who arrived in the year before the census are not included as they are not subject to mutual recognition.

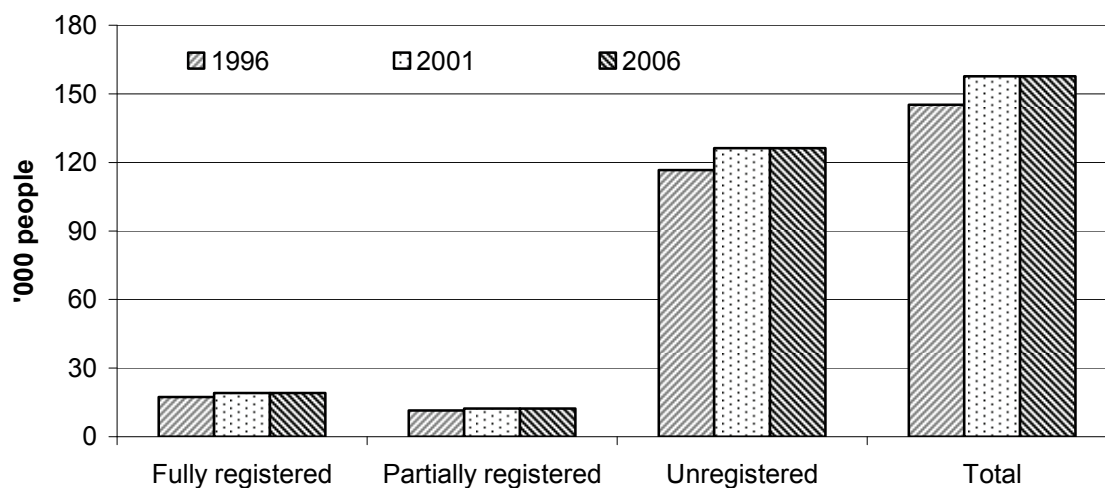
Occupation information contained in the censuses, and the list of registered occupations in appendix F, enables an estimate to be made of the number of people employed in Australia in:

- fully registered occupations, where registration is required for that occupation in all Australian jurisdictions
- partially registered occupations, where registration is required in at least one Australian jurisdiction
- unregistered occupations, where registration is not required in any Australian jurisdiction.

Employed people who had moved to another jurisdiction within the year preceding the 1996 census numbered around 145 000 (figure 4.8). By 2006, this number had increased to around 169 000, an increase of about 16.5 per cent. Between 1996 and 2006 there was a small shift in the composition of the mobile workforce, with the proportion of fully registered workers increasing from 11.9 to 12.9 per cent. The proportion of employed people moving between jurisdictions working in partially registered occupations increased from 7.9 to 9.0 per cent.

Labour mobility in fully and partially registered occupations increased by around 26 and 33 per cent, respectively, over the period between 1996 and 2006 (table E.2 in appendix E). This represents an increase from around 28 700 per year in 1996 to approximately 37 000 fully and partially registered workers in 2006 (table E.1 in appendix E). In contrast, mobility among unregistered workers increased at less than half the rate for occupations subject to registration (13.4 per cent), but the total number of unregistered workers relocating each year is much greater, given that they comprise around 80 per cent of total employment.

Figure 4.8 Labour mobility by occupation-registration status
Employed people who moved jurisdiction in the previous year^a



^a Includes New Zealand-born people who arrived in the preceding year.

Source: ABS (*Census of Population and Housing*, 1996, 2001 and 2006, unpublished data).

Shift-share analysis of interstate labour mobility

The observation that the increase in annual labour mobility between the 1996 and 2006 censuses was proportionally greater for registered occupations, than for unregistered occupations is not sufficient evidence to conclude that mutual recognition has increased the mobility of labour. The observed increase in mobility could also be due to an increase, over this time period, in labour demanded by industries that employ relatively more registered workers. If the geographic distribution of those industries differed from that of all industries, greater mobility of registered occupations would ensue. Alternatively, an increase in the mobility of registered workers could reflect a general increase in demand.

To help distinguish between the mobility effects of mutual recognition and those of structural economic change, changes in labour mobility can be decomposed into three components using a technique known as ‘shift-share’ analysis (described in more detail in appendix E). This analysis is conducted using data from the 1996, 2001 and 2006 Australian censuses.

The shift-share approach is used to examine changes in the interjurisdictional mobility of people employed in all 19 Australian and New Zealand Standard Industrial Classification industries, working in either fully registered, partially

registered or unregistered occupations at the time of the census.⁹ For each occupational group/industry pair, changes in annual mobility between 1996, 2001 and 2006 are compared with:

- the economywide change in mobility across all industries and occupational groups.
- the change in the mobility for that occupational group, across all industries.

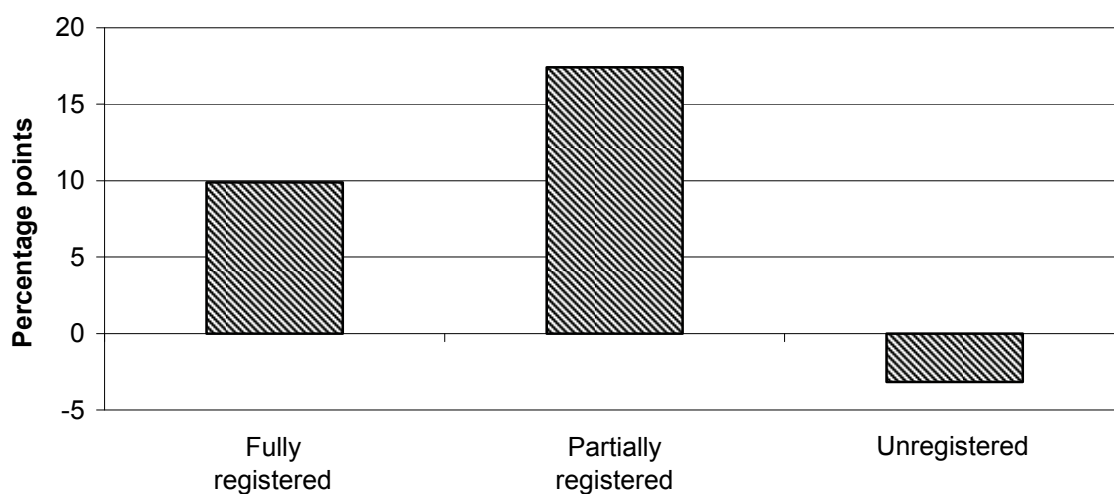
That is, for each occupational group/industry pair, the model decomposes the change in mobility levels over two points in time into three components:

- a ‘national change’ component, reflecting the overall percentage change in labour mobility across all industries and occupations
- an ‘occupational mix’ component, reflecting proportional changes in the mobility of people working in occupations with different registration requirements, relative to the total change in mobility (figure 4.9)
- an ‘industry’ component, reflecting proportional changes in the mobility of people working in occupations with different registration requirements within a particular industry, relative to the change in mobility for that occupational group as a whole in the economy.

Results from decomposing the changes in mobility over time into these components are consistent with the expectation that mutual recognition has increased the labour mobility of registered occupations, relative to unregistered occupations. These results suggest that the national growth in proportional labour mobility between 1996 and 2006 has been due entirely to people working in fully and partially registered occupations (figure 4.9). For other occupations, the percentage change in annual mobility between 1996 and 2006 has been negative, that is, the proportion of the population of unregistered workers who move each year has decreased over that period.

⁹ The shift-share analysis in this report and the analysis presented in the Commission’s 2003 evaluation of mutual recognition schemes are not comparable. The analysis presented here decomposes differences in the *changes* in labour inflows, whereas the previous analysis decomposes differences in the *levels* of labour inflows.

Figure 4.9 Occupational mix effect, 1996–2006^a



^a For each occupational group, the change in the occupational mix is the difference between the proportional change in mobility levels between 1996 and 2006 for that occupational group (across all industries) and the proportional change in mobility for all occupation groups and industries over the same period (appendix E).

Source: Commission estimates using ABS (*Census of Population and Housing*, 1996, 2001 and 2006, unpublished data).

The change in the occupational mix of labour mobility shown in figure 4.9 may be thought of as the difference between the percentage change in mobility for an occupational group and the percentage change in national mobility. This is the extent to which the increase in mobility for one group is greater than the increase in mobility for all groups. For example, the proportional increase in mobility for fully-registered occupations between 1996 and 2006 was around 27 per cent, while the national proportional increase in mobility was around 17 per cent (table E.2 in appendix E). This results, in figure 4.9 in a compositional swing of 10 percentage points towards fully registered occupations.

While mobility rates for all occupations requiring registration increased at a rate greater than the average between 1996 and 2006, the bulk of this increase appears to have occurred between 2001 and 2006, well after the introduction of mutual recognition (table E.3 in appendix E). The difference between the change in mobility for fully registered occupations and the change in mobility for all occupation groups increased from around 2 per cent between 1996 and 2001 to around 7 per cent between 2001 and 2006 (table E.3). Similarly, there was little difference in the change in mobility for partially registered occupations and the change in mobility for all occupations between 1996 and 2001. However, between 2001 and 2006, that difference rose to be approximately 17 percentage points.

Labour mobility by industry

The shift-share analysis also shows that the greater than average mobility of people working in fully and partially registered occupations was not even across all industries. This suggests that, if mutual recognition is responsible for increased mobility, the effect is not uniform across industries.

Industries that benefited disproportionately from the high increases in mobility of registered workers include finance and insurance; property and business services; and electricity, gas and water (table E.4 in appendix E). Mobility of workers in fully registered occupations in the electricity, gas and water industry increased by around 109 per cent between 1996 and 2006, which was 82 percentage points above the total increase for fully registered workers for all industries. However, the increase in labour mobility in the electricity, gas and water industry was large across all occupational groups. This suggests that mobile registered workers may have been attracted to that industry due to an increase in its overall labour demand, rather than an increase in its demand for specific skills.

Interestingly, given the relatively high use of mutual recognition by health professions (table D.2), mobility of registered workers towards health and community services increased at a lower rate than did mobility of registered occupations as a whole. This is consistent with the slight decline in the proportion of registered workers in that industry — in 1996, around 35 per cent of health workers were fully registered, whereas by 2006, this percentage had decreased to about 32 per cent.

Trans-Tasman labour mobility

As with interstate labour mobility, movement of labour across the Tasman is subject to a number of influences, and disentangling the effects of mutual recognition from these other influences is difficult. This is largely due to the fact that trans-Tasman migration amounts for a relatively small proportion of the total workforce in either country. Despite this, there is evidence to support the expectation that trans-Tasman labour mobility — particularly from New Zealand to Australia — is significant and encouraged by the TTMRA.

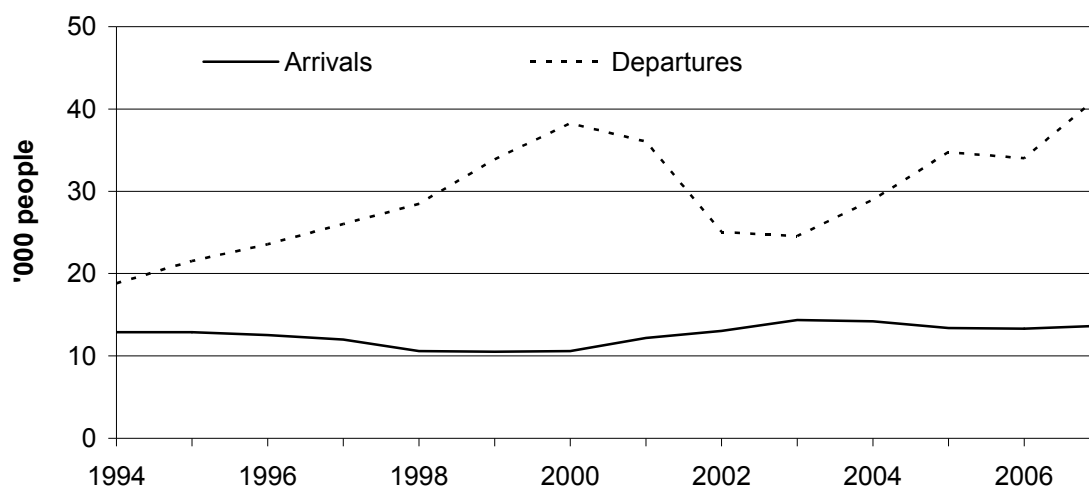
Available evidence suggests that the impact of mutual recognition on the New Zealand labour market is small in terms of the labour market as a whole, but important in terms of labour market flows. In 2007, permanent and long-term arrivals into New Zealand from Australia numbered around 13 500. This level of migration has been relatively stable while the TTMRA has been in place, ranging between 10 500 and 14 000 per year (figure 4.10). Of these long-term arrivals, 76 per cent were of ‘working age’ (between 15 and 64) and 38 per cent were

non-New Zealand citizens. Given that New Zealand census data suggest that around 320 000 workers were employed in registered occupations in 2006, the total number of working age arrivals from Australia would increase the number of registered workers by less than 3.3 per cent if they were all to work in registered occupations.¹⁰

Survey data support the idea that, while mutual recognition plays a small role in the New Zealand labour market, it is important in terms of labour flows. As shown in figure 4.6, mutual recognition registrations made up nearly 5 per cent of all new registrations in New Zealand in 2007. Survey responses suggest that the TTMRA impacts for New Zealand centre on specific occupations, particularly in the health sector.

Conversely, employment has long been recognised as a significant motivation for migration from New Zealand to Australia, with relative labour market conditions playing an important role in determining rates of migration, particularly from New Zealand to Australia (Brosnan and Poot 1987; Zoladkiewicz 2007). Of those planning to move from New Zealand to Australia, nearly 47 per cent cite employment as the main reason for relocating (Statistics New Zealand 2007c).

Figure 4.10 **Trans-Tasman migration, 1994–2006^a**



^a Permanent and long-term arrivals from and departures to Australia.

Source: Statistics New Zealand (2007b).

¹⁰ Figure 4.5 shows that registered workers comprise around 16 per cent of employed persons in New Zealand in 2006. If a similar percentage of working age long-term migrants were registered, this would suggest that around 1700 registered workers, or around 0.5 per cent of the registered workforce in New Zealand, migrate from Australia each year. This level of impact on the stocks of workers is similar to that of New Zealand workers in the Australian labour market, where the inflow makes up less than 0.2 per cent of the total number of registered workers in Australia.

Over the course of the TTMRA's operation, there has been an increase in recent migrants from New Zealand working in either fully or partially registered occupations. In 1996, employed people who were born in New Zealand and had arrived in Australia the previous year numbered around 1900. By 2006, this number had increased to just under 3500, representing an increase in the proportion of New Zealand migrants working in registered occupations from 17.9 to 21.4 per cent. Over the same time, the movement of unregistered workers from New Zealand has increased by around 50 per cent, from about 8400 to 12 500 (ABS unpublished data).

The inflow of workers from New Zealand comprises around 10 per cent of the total labour mobility associated with registered workers in Australia. That is, 2200 New Zealand-born migrants who were employed in registered occupations in 2006 arrived in the preceding year. The inflow of registered workers from New Zealand comprises less than 0.2 per cent of the total number of registered workers in Australia.

The quality of the data supplied by local registration authorities in Australia makes it difficult to draw any conclusions about the use of the TTMRA in Australia. However, census data show that around 75 per cent of New Zealand migrants working in fully-registered occupations do so in the construction, transport and storage; property and business services; or health and community services industries. In these industries, inflows from New Zealand comprise between 11 and 15 per cent of the total mobility for registered occupations.

Impact on wages

In theory, removing the costs associated with the movement of labour should result in an increasing similarity in the wages received by workers in a given occupation across jurisdictions, as workers face lower barriers to relocating in search of higher wages. Using data from the Household, Income and Labour Dynamics in Australia panel survey, Andrienko (2008) provides support for this hypothesis, by demonstrating positive returns to relocation within Australia, particularly for lower wage earners. The search for higher wages should, all else equal, result in a trend towards wage equalisation, over time.

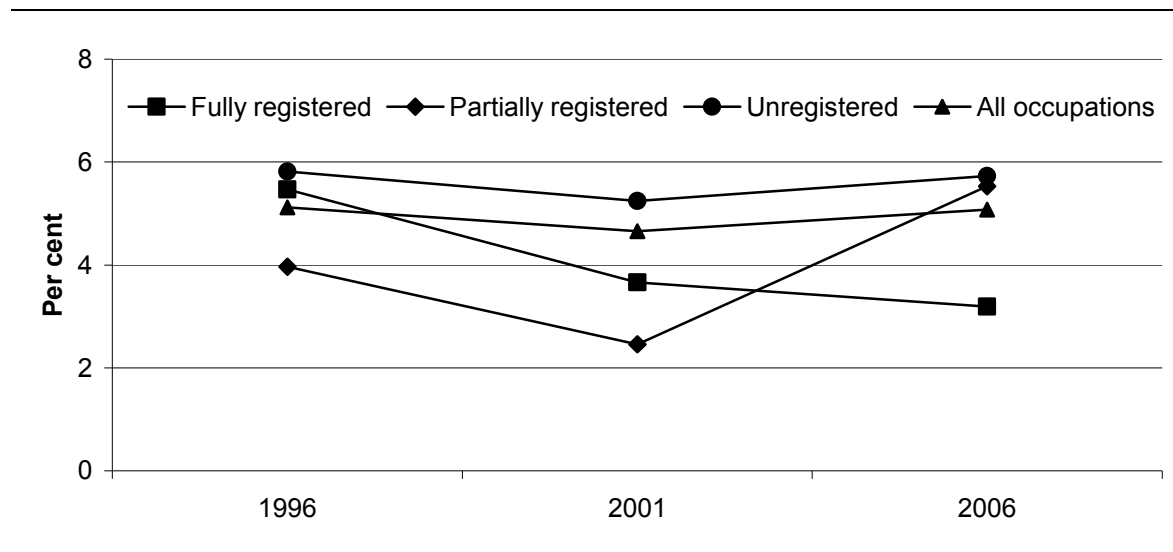
The convergence of wages across jurisdictions can therefore be regarded as an indirect indicator of increased efficiency in the allocation of labour. Conversely, a lack of convergence can indicate the persistence of interjurisdictional labour immobility (HM Treasury 2007; McKissack et al. 2008). While interjurisdictional wage differences are affected by a number of factors — for example, industry

composition, cost and quality of living and employment levels — convergence of wages is consistent with the removal of impediments to the movement of labour.

Wage convergence may be conceptualised as a reduction in the dispersion of wages across jurisdictions over time (Maza and Villaverde 2006). If an indicator of dispersion is shown to have decreased over time, then it can be inferred that wages have converged.

Figure 4.11 shows the coefficient of variation for average wages for Australian jurisdictions, by type of occupation. The coefficient of variation for a given occupation is the standard deviation of average wages over all jurisdictions, divided by the national average for that occupation. It is a measure of wage dispersion relative to the average wage.

Figure 4.11 Convergence of wages across jurisdictions, by occupation-registration status
Coefficient of variation^a



^a Coefficient of variation is the standard deviation of the mean wage in each jurisdiction expressed as a proportion of the national mean (Villaverde 2004). The proportion is shown as a percentage. The average wage for each jurisdiction is the average of individuals' incomes divided by hours worked (for employed persons who worked 35 or more hours) for each age/sex categories within that jurisdiction. The Australian Capital Territory is excluded due to significant differences in the occupational structure of the workforce. Further detail is provided in appendix E.

Source: Productivity Commission estimates based on ABS (*Census of Population and Housing*, 1996, 2001 and 2006, unpublished data).

The dispersion of wages received by those working in registered occupations clearly decreases between 1996 and 2006, indicating wage convergence. Wage levels in registered occupations coming together in this way is consistent with the uptake of mutual recognition over this time period; reduced impediments to the mobility of labour; and an increase in the movement of workers in registered occupations. This

convergence provides support for the expectation that mutual recognition facilitates more efficient allocation of labour market resources across Australia.

4.4 Conclusion

Assessing the economic impact of the mutual recognition schemes has been difficult because of a lack of relevant data on users of mutual recognition (particularly for goods) and the compliance costs avoided through use of the schemes (that is, what would have been the additional costs in the absence of the schemes).

What information is available supports the view that mutual recognition reduces barriers to interjurisdictional movement of goods. However, available data on growth of interstate and trans-Tasman trade reflects multiple forces affecting Australian and international markets. It has not been possible to distinguish these broader effects from the effects of mutual recognition. It is likely that the MRA and TTMRA have had positive effects but that these have been overshadowed by other factors influencing trade across borders. Nonetheless, the limited anecdotal evidence available suggests that the schemes have been beneficial to trade.

There is relatively more evidence of the positive effects of mutual recognition on labour mobility. The available data suggest that there has been strong growth in labour mobility across fully and partially registered occupations over the period that mutual recognition has been in place. As with goods, it is not possible to attribute these changes exclusively to mutual recognition. Rather, it is more appropriate to conclude that observed increases in the labour mobility of registered workers, and the convergence of wages in registered occupations, are developments that are consistent with the expected outcomes from mutual recognition.

FINDING 4.1

The Mutual Recognition Agreement and the Trans-Tasman Mutual Recognition Arrangement have increased the mobility of goods and labour around Australia and across the Tasman.

- *In the goods area, mutual recognition has led to lower regulatory compliance costs for firms arising from jurisdictional differences. There is some evidence that this has contributed to the expansion of interstate and trans-Tasman trade.*
- *Increased labour mobility and reduced wage dispersion are consistent with the expected effects of mutual recognition of occupational registration.*