Workforce 2010

A document to inform public debate on the future of the labour market in New Zealand

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Ministerial Foreword

Work and employment is a central feature of life for us all.

Ensuring that high proportions of the population are in paid employment benefits the economy as a whole, and high levels of participation in paid employment are a key indicator of the health of an economy. One of the key challenges for New Zealand is to ensure continuing high levels of job growth in the years ahead. This contributes to three of the key goals that the Government adopted when it came into office. These are growing an inclusive, innovative economy for the benefit of all, improving New Zealanders' skills, and reducing disparities.

The type of paid work we do – whether it is full time or part time, the skill level of the work we do, and the level of income it attracts – also determines our standard of living, and the opportunities we are able to provide for our families. It affects how we feel about ourselves and the time that we have to undertake non-work activity.

The challenges New Zealand faces in the labour market are made more complex by the fact that our economy, like those of other developed nations, has changed considerably in the past twenty years and will change in the future at an even faster rate. This means that the sort of jobs that will exist in the future will be very different from those that people work in currently. Most will require a high level of skill and will be heavily reliant on new technology of various types. Instead of the "mass production" type of employment that predominated in the post-war years, tomorrow's jobs are more likely to be in niche markets.

It is not only our economy that is changing. New Zealand's labour force is growing older, has higher proportions of Maori and Pacific people, and is more ethnically diverse. We must improve the skill level of our workforce, in particular by achieving higher levels of participation in the education and training systems. We must also compete with other countries for skilled labour, which means that we need to attract skilled migrants, and encourage New Zealanders to bring their skills and knowledge back home.

Workforce 2010 represents the Government's attempt to inform public debate about the challenges facing our labour market. It adopts a framework for looking at the issues which is made up of three elements:

- **Capacity:** the abilities that our people have
- **Opportunities:** the options available for people to use their abilities
- **Matching:** all the processes involved in connecting people's abilities to opportunities to utilise them.

Each of these three elements contributes to improving labour market capability. Focusing on any one aspect, to the neglect of others, reduces the chance of achieving the goals sought. Looking at the overall system allows us to identify where the biggest barriers exist, and to make changes which reinforce each other.

While the issues covered in this paper are centred on the labour market, they are also relevant to a number of other economic and social policy areas that are part of the ongoing work within Government. The Department of Labour's work programme includes the development of a population policy for New Zealand, the "future work" programme, and continuing to address skill shortages in the New Zealand labour market. Other key policy initiatives that affect the labour market include reforms being undertaken in education, industry training, and social policy areas.

We hope you find *Workforce 2010* a useful document.

Hon Steve Maharey	Hon Margaret Wilson	Hon Lianne Dalziel
Minister of Social Services and Employment	*Minister of Labour*	*Minister of Immigration*

Summary

Purpose and key themes

This document explores the future of work in New Zealand using the Human Capability Framework as a base. It has been produced to inform public debate on future trends affecting the labour market, and to stimulate informed policy discussion. It is not a policy document, and it does not provide policy solutions, but is intended to assist debate about likely future employment trends and the policies that might affect them. It covers a wide range of labour market issues, but is not exhaustive. The project highlights that the following significant trends:

- The years to 2010 will involve similar influences to the last ten years with globalisation, technology, demographic, social, workplace and workforce trends continuing. This decade will, however, provide New Zealand with an opportunity to build a strong base for the years 2010 onwards, a period in which demographic changes are likely to be even more pronounced in New Zealand.
- There are widely divergent forecasts about the future of "work". Some predict that work in its current form will disappear, others predict a change in its nature consistent with communication and technological change. In the absence of major global events, change will occur over time rather than as a radical change.
- Globalisation has changed the face of New Zealand, and will continue to do so — impacting on most areas of life.
- New Zealand has become increasingly integrated into the world economy, and domestic growth (both social and economic) increasingly depends on social and economic growth elsewhere.
- There is increasing risk that there will be pockets of New Zealanders who, for many reasons, are unable to directly share in the wealth generated in the labour market. Inequality may increase.

This means that we will need to concentrate on:

- Maintaining competitiveness, and economic growth, while reducing social exclusion;
- Increasing education and skill levels and participation in work, especially for those not currently participating;
- Continually adapting and moving with changes in resources and types of work;
- Making sure we have the policies — in central government, local government, and in the private sector — that allow an efficient and equitable labour market; and
- Reducing inequality in labour market outcomes.

New Zealand's changing society

New Zealand society has been subject to rapid change during the last two decades. There has been a marked change in family structure. On average people are choosing to form couples later in life, have fewer children, have children later in life, and return to education throughout their life. There is also more diversity in living arrangements — more people are living alone, or as same-sex couples, and there are more transitions between various living arrangements over a person's life. People are also more likely to go overseas than 20 years ago. Many choose to return, but some do not.

The role of work, both paid and unpaid, has been changing for both males and females, as have hours of work. For many New Zealanders the notion of a five-day, 40-hour working week neither fits their own life choices nor the available work opportunities. The idea of a "job for life" has largely eroded, and commentators advise people to prepare for multiple job and career changes during their working life.

The ethnic composition of New Zealand continues to change. Maori, Pacific peoples, and people from other countries are making up an increasing proportion of the New Zealand population. This has changed tastes and preferences, the types of goods sold, and even the range of food available in supermarkets. The skills needed within this changing environment are also evolving, with there being an increasing demand for and value placed on general skills.

People have adapted to new ways of working and change in their use of technology. The regional locations of work (rural/urban), how the work is undertaken (in teams, groups, with technology, or by hand), who undertakes paid or unpaid work (women/men/elderly/youth/children), and where people choose to live (friends/family/alone) have all been changing. Communication and labour-saving technology have provided increasing opportunities for those with access to the technology. Technology has also been adapting to meet the needs of people, with increasing user friendliness and ease of use.

The organisation of work has changed from (in many cases) restrictive highly organised routine work, to increasingly flexible work organisation and hours. Supermarkets, for example, are now open 24-hours-a-day in some cities. This creates flexibility (for both consumers and employees) but also risks (for both employees and consumers) in terms of health and safety, the ability to choose shifts that meet both the employers' and the employees' needs and has implications for the life of other family members.

Overall, New Zealanders are being presented with an increasing degree of choice. New Zealand has become part of the "global economy", but is still a small island nation. The future shape of New Zealand will not only be a response to global pressures, but also a result of choices that we each make now.

Labour market performance

The New Zealand workforce will face a number of challenges over the coming decade. These include pressures from outside New Zealand, such as globalisation, and technology shocks, but also pressures from within New Zealand, such as an ageing workforce, increasing ethnic diversity, and technological innovations.

This paper defines the workforce broadly, so as to acknowledge the different types of work that occur, including:

- Waged work;
- Unwaged productive work (family members contributing their labour to the wellbeing of the family by working in the family run business);
- Domestic labour (work that maintains the home and family);
- Emotional/care giving labour (such as caring for the sick or elderly); and
- Voluntary work.

Firstly, we should consider what a well functioning labour market might look like in 2010. This will help us to identify the challenges facing the workforce over the next ten years.

A well performing labour market

The characteristics of a well performing New Zealand labour market in 2010 will include:

- A decline in the rate of unemployment, and reductions in the average length of unemployment spells compared to now.
- Strong innovation in business development and increased entrepreneurial spirit;
- Ready access for businesses to workers with the skills they desire;
- Information for New Zealanders on the skills in demand, and access to the training/ skills they desire;
- A rising standard of living for New Zealand (which may lead to increasing immigration inflows);
- Harmonious and rewarding relationships between employers and employees;
- People are able to maximise their potential (both in earning capacity and personal development);
- Healthy communities and regions; and
- Equality in opportunity for all people.

Framework for describing the labour market

The Department of Labour has established a framework for analysing the labour market (see *Human Capability Framework: A Framework for Analysis*, 1999). Human capability results from people matching their capacity to do things with the opportunities they experience to actually exercise these capacities. The three key components of the framework are:

Opportunities

- Opportunities refer to all the options available to people to use their skills and abilities. These options include parenting opportunities, leisure options, and voluntary work, as well as paid work;

Capacity

- Capacity refers to any ability to do something — such as play the piano, speak in public, or care for children. These abilities are both innate and learned, with learning taking place in a multitude of situations – on the marae, in the home, in a community organisation or in formal learning environments; and

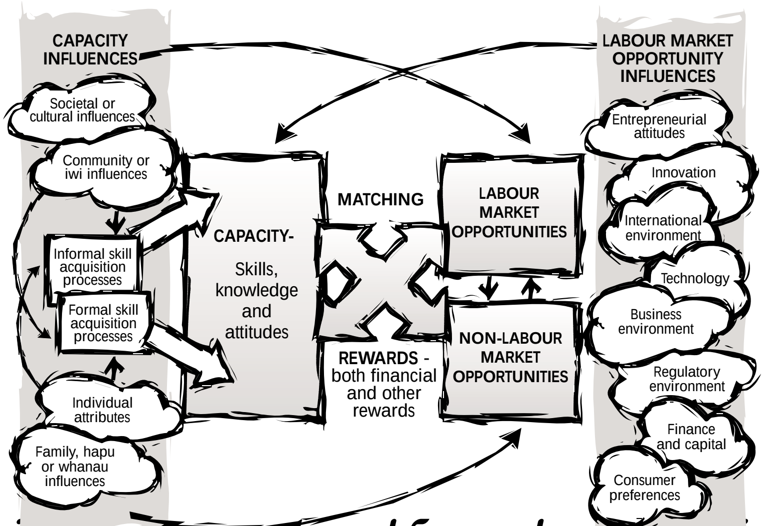
Matching

- Matching refers to all the processes involved in connecting people's abilities to opportunities to utilise them. These processes include rewards for skills, safety nets, rules around contracting, dispute resolution systems, and information that helps people make informed choices.

What is also important is the interdependence of these three aspects. Problems in one area can limit an individual's, or a group in the community's, ability to take advantage of improvements in other areas. The framework will be used below to describe aspects of New Zealand's current labour market performance and to consider the future of New Zealand's workforce.

It is important to keep in mind that throughout the document there are a number of interactions between the various sections. The major interactions are shown in the diagram below. It illustrates the complexity of the system that we are attempting to describe. While this discussion document is structured around the concepts of capacity, opportunities and matching — with particular reference to the labour market — it is acknowledged that there are many interactions that are not covered.

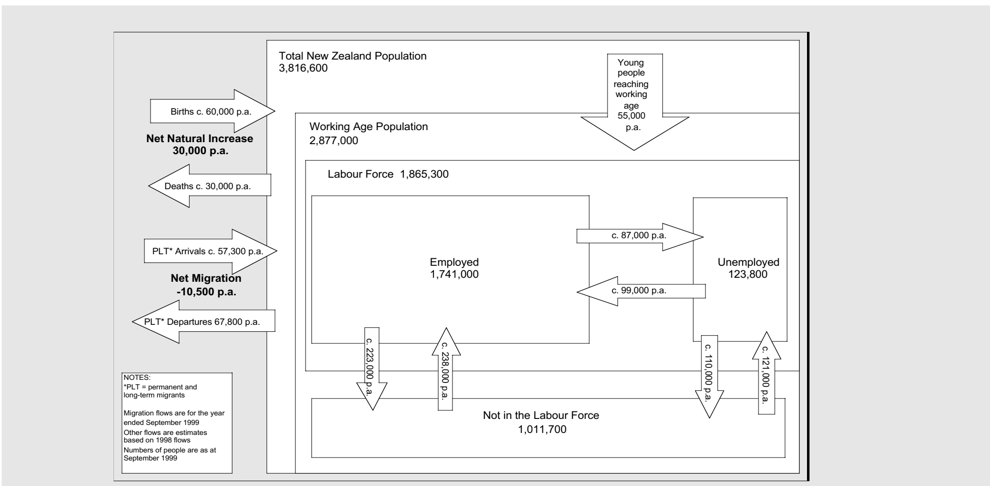
Interrelated influences within the Human Capability Framework



Description of current workforce characteristics

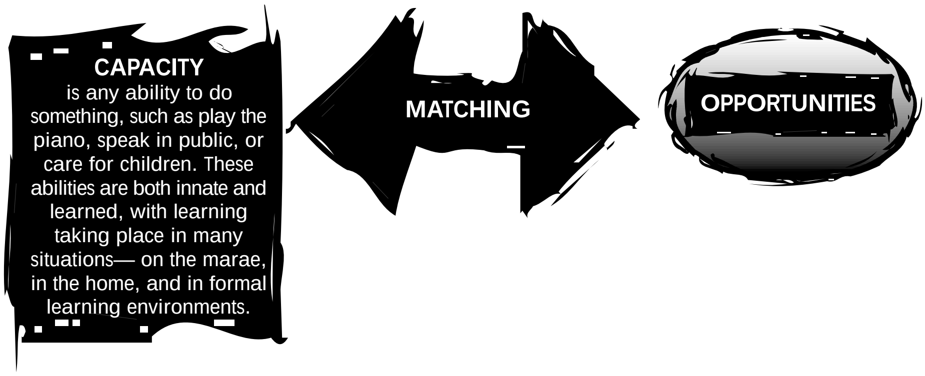
The New Zealand labour market is a complex set of inter-relationships. There are roughly 3.8 million people living in New Zealand. Of these, about 2.8 million people are of working age (age 15+). Of these 2.8 million people, approximately 1.75 million people are in paid jobs. A further 120,000 working age people are actively looking for a job. Around 1 million working age people are not in paid employment or actively seeking paid employment. These people may be providing voluntary work, domestic or emotional labour, or be investing in their capacity via formal or informal education opportunities. The remaining 1 million people are either under the age of 15, in full-time education or childcare, or are over the age of 65, retired or nearing retirement. The diagram below shows these groupings of people in the labour market and indicates movement between them.

Composition and movement of people within the New Zealand labour market



The future shape of the New Zealand labour market is important to the welfare of all New Zealanders. As far as is possible (given difficulties of future projections), this paper describes the issues New Zealand is likely to face in the coming years, and what the future labour market might look like. In some ways this raises more questions than it provides answers, for the approach is inherently speculative. However, the intent is to encourage New Zealanders to consider the future that they want for their parents, themselves, their children and their grandchildren, as well as their wider communities.

Capacity



Themes

■ In the short term the capacity of the workforce, in terms of numbers, will increase.

■ In the long term the workforce is ageing (i.e. the average age is increasing and the age distribution is changing) and may decrease in number.

■ New Zealand will become more ethnically diverse.

■ The demand for higher levels of literacy and numeracy, and emotional and social skills (general skills) will increase.

New Zealand's capacity background and continuing trends

■ New Zealand's population has been ageing, and will continue to do so.

■ The workforce has increasing levels of skills, experience and qualifications.

■ There has been an increase in tertiary education enrolments, and consequently later average entry into the workforce for many people.

■ The family structure has changed, including lower rates of couple formation.

■ Fertility rates have declined.

■ The average age of having a first child has increased.

■ There are increasing numbers of households with either both partners in paid employment ("job rich") or neither partner in paid employment ("job poor").

■ Participation rates are becoming more diverse, fitting changing opportunity patterns in work, and also life choices.

■ The male participation rate is declining, but the rate of decline may be slowing.

■ The female participation rate is increasing, but the rate of increase appears to be slowing.

■ New Zealand is becoming more ethnically diverse.

■ There is an increased availability of skills from overseas.

■ There is also an increased ability of New Zealanders to gain overseas experience or leave permanently.

■ There are increasing differences in regional capacity, as migrants usually locate near the big cities.

■ There are differences in regional capacity due to the mix of resources/infrastructure in the regions.

■ Capacity of recent migrants may be different from the native born in many respects.

- Underlying literacy and general skills levels for all New Zealanders will continue to be a significant factor in determining capacity.

Risks /Issues further out

- New Zealand's population has been ageing, and will continue to do so. In the short run New Zealand's capacity may increase, however, as this ageing process continues labour market capacity may decline as people retire from the labour market and are not replaced by new entrants.

- There may be some reduction in the number of people willing and able to enter paid employment, due to a changing demographic profile.

- As the pace of change quickens, there is an increased risk that people will not be able to adapt to change quickly enough. This could include the risk of emerging "digital[1] " or "geographic" divides with some groups and individuals having a lesser capability to take advantage of new opportunities (for any number of reasons — many outside their control).

- The "digital divide" may become an increasing determinant of winners and losers.

- Greater computer literacy of new labour market entrants (the young) could reduce the size of the group on the "wrong" side of the digital divide.

- Early childhood education may be an increasing determinant of individual capacity and whether people or groups are "winners" and "losers" — however, this is hotly debated.

- Young people may enter the labour force earlier, with less formal training due to the changing demographic profile – potentially reducing the average skill level of the labour force and perhaps also increasing risks of a lower level of adaptability in later years.

- If there is an ongoing requirement for higher levels of skills, then there is a risk of further job loss amongst people already in the workforce with low levels of literacy. There seems to be a major risk that the "lower end" of the existing workforce cannot be upskilled.

- Competition for skilled migrants could increase as other countries also seek skilled immigrants, due in part to an ageing population in many countries; this will include competition for skilled New Zealanders elsewhere. This has been put forward as the largest single risk to New Zealand's ongoing labour market capacity.

Analysis of capacity

The ageing population

New Zealand's ageing population is driving a number of capacity trends

The first important dimension of capacity for New Zealanders is the age distribution of the workforce. Since most of the people in the labour force in the next few decades are already born, we are well informed about the age structure of the labour force over this time horizon. Older workers tend to have more work and life experience. Their desire to learn new skills, however, may be lower than younger workers (education may be a factor in this – well-educated older people may be able to keep learning, and perhaps at a faster rate than many poorly-educated younger people). Older workers will usually have different preferences to younger workers on account of differences in family structure and life choices. For example, this may mean that younger workers are more mobile than their older counterparts who may have put down "roots".

The age structure of the working age population has been changing over the past 15 years, reflecting the ageing of the population. The youth segment of the working age population (defined as those aged 15-24) has been steadily diminishing over the period. For much of the time, the proportion that is in the older age group (55 years and over) has been approximately stable, but from 1995 onwards the share of this group has shown a rapid increase.

In short, the average age of New Zealanders is increasing. Also important to New Zealand is that this ageing population trend is a world-wide phenomenon and that this could have serious implications for our ability to attract and retain skilled people in the future. While the ageing process in developing countries has reflected the pace of overall population growth, in developed nations the issue has been more to do with the increase in the *proportion* of people who are old.

At the heart of this phenomenon in industrial nations is the post-World War II baby-boom, when the downward trend in fertility in developed countries was replaced by a surge in fertility that lasted in most countries for the two decades up to the mid-1960s. The baby-boom in New Zealand occurred from about 1943 to 1973.

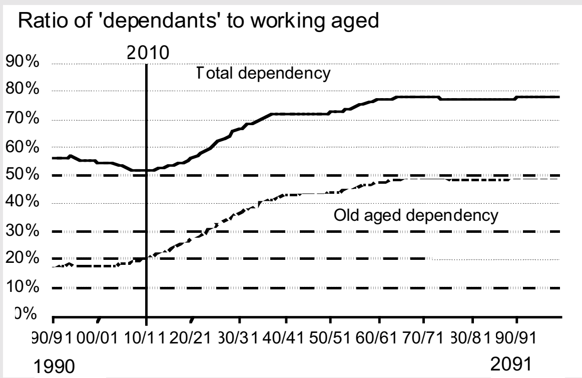
Past and future age composition of the New Zealand population

Age	1951 %	1961 %	1971 %	1981 %	1991 %	1996 %	2001 %	2011 %	2021 %	2026 %	2031 %	2041 %	2051 %
0-14	29.4	33.1	31.8	26.7	22.8	22.8	22.3	19.5	17.5	17.3	17.0	16.1	15.5
15-64	61.4	58.3	59.7	63.3	65.9	65.6	66.0	67.3	65.3	63.2	61.2	59.2	59.0
65+	9.2	8.6	8.5	10.0	11.2	11.6	11.7	13.3	17.2	19.6	21.8	24.8	25.5
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: *Statistics New Zealand*

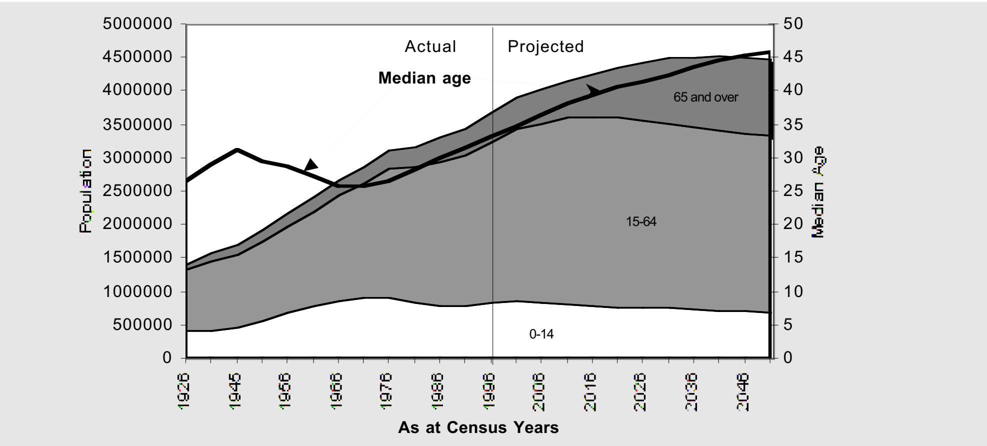
Current population projections suggest that the old-age dependency ratio will increase from under 20 percent today (or more than 5 people of working age for each person aged over 64) to nearly 50 percent in the 2050s (i.e. only around 2 people of working age for each person aged over 64). As can be seen from the chart above, the next ten years to 2010 provide New Zealand with a period to prepare for the rise in dependency ratios.

Dependency ratios



The impact of these population trends on available capacity may be mitigated to some degree by changes in labour force participation rates. Participation rates may increase as the population ages. A contributing factor for New Zealand in this could be the ongoing impact of the recent decision to remove the compulsory age of retirement. Furthermore, as people live longer they may choose to exit the labour force slowly over a longer period of time rather than simply stopping work one day when they reach 60 or 65 years of age. This increased participation of the elderly may have implications on the organisation of work at the workplace, feeding into “family friendly” employment relations and flexible arrangements to allow for older workers’ life choices and work aspirations.

NewZealand's ageing population



Recently attention has focused on the role of immigration as a means of easing the economic and fiscal pressure of declining and ageing populations in both the European Union and the United States of America. The OECD however, argues that migration cannot on its own provide for a solution, and stresses the need for action on many policy fronts. For New Zealand, our ability to attract young skilled migrants is likely to be affected by the range of countries also seeking the same people to offset some of their own demographic changes. The economic returns for New Zealanders working overseas may increase in the years to come, although this is more likely beyond 2010.

What are the implications of our ageing population on the labour market? Education and training for life? Participation rates? Attitudes to older workers? Superannuation policies? Immigration rules?

Educational qualifications, skills, experience and literacy

There will be increasing levels of skills, experience and qualifications in the workforce

The literacy levels of the population as a whole will be of increasing significance

Education is an important dimension of capacity. Education provides people with skills and techniques and also allows them to more easily learn new skills and techniques. The workforce is becoming more educated[2]. Data from the last 15 years show a strongly declining share of the working age population without qualifications and a strongly rising share with school and post-school qualifications. Given that the older cohorts of the population are more likely to have no qualifications than younger cohorts, the trends observed over the last 15 years are likely to continue into the foreseeable future.[3]

The nature of a "desirable" education for employment is also likely to change. Given technological changes, and the fact that many people's working careers are likely to involve numerous jobs and a process of life-long learning, education may be less likely to involve highly specific skills. For reasons of insurance against the uncertainty of change, a desirable education is likely to involve highly adaptable and transferable generic skills, which can be readily adapted to a wide variety of working circumstances and supplemented by specific on-the-job training. A desirable education under these circumstances is likely to involve a high level of literacy in the broadest sense (i.e. including not just the ability to read and write, but the ability to find, interpret and use information), as well as an education directed at how-to-learn skills. Education and training are increasingly being seen as life-long processes rather than something undertaken at the beginning of one's working life. At the beginning of the life cycle a high quality and flexible generic education is likely to be acquired, while thereafter specific skills are learnt and discarded as they are rendered redundant by technological or other change.

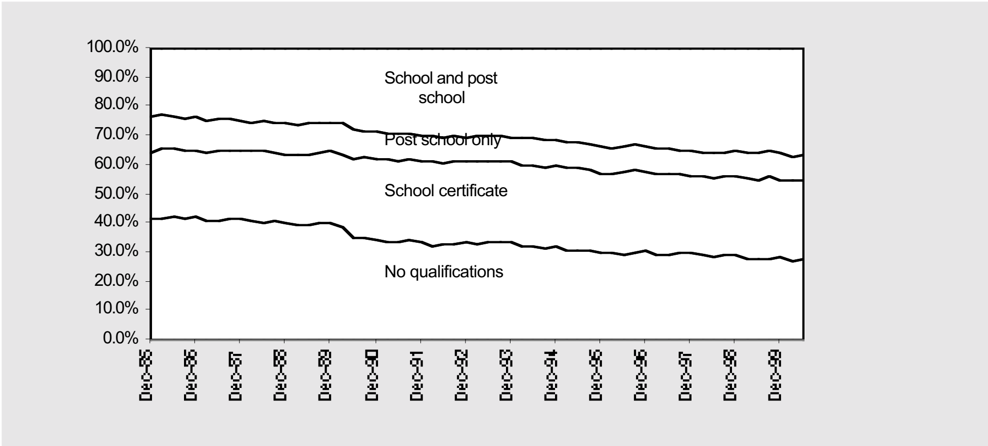
Given the ageing population already remarked upon above, labour is going to become a scarcer factor of production in the future. Greater scarcity of labour means that production will need to be carried out with more capital – both physical and human. The greater demand for human capital will further increase the amount of education and training being undertaken. It is important, however, to acknowledge that there are still a few people coming out of school with no formal qualifications. In turn there is a risk of many people in the population with below adequate levels of literacy. Indeed, there may be up to 20 percent of 15-19 year olds that have low or no formal qualifications (two or fewer School Certificate passes), with figures for Maori being 38 percent and Pacific people 27 percent. As skill and literacy requirements increase, this proportion with below adequate levels may also increase if people are unable to respond to change.

How do we ensure that we are prepared to deal with a future that will be characterised by rapid change?

How will we train, educate and upskill?

How do we ensure everyone is prepared, wherever they live, whoever they are?

Qualifications composition of the working-age population



Changing products and production processes are also drivers behind the change in the nature of skills required. Increasingly the capacity to adapt to new technology will be valued. General skills are likely to be in greater demand. Many jobs previously seen as involving manual labour now require the use of highly technical skills (for example managing stock in a brewery via computer systems, or ordering timber and building parts "online"). As outlined below, in the section entitled "Occupational Composition of Employment" the concept of qualification or skill is gradually shifting towards the that of "competence", which involves a range of interpersonal and cognitive skills. Increasingly traditional "blue collar" work appears to be moving toward:

- Supervision (actively overseeing the process);
- Optimisation (improving the performance of the technical system);
- Maintenance; and
- Flow management (close matching of production with orders).

Training and skill formation at the workplace

New Zealand's capacity is also driven through training and skill formation at the workplace. As many industries move toward a knowledge base, their competitive advantage will be driven by the skills of their workforce. Many of these skills will be learned, adapted, and improved while "on the job". The 1996 Training Supplement to the Household Labour Force Survey revealed that 23.2 percent of wage and salary earners had participated in in-house training, 13.5 percent in external training and 16.9 percent in study towards a post-school qualification. Overall, just under half of wage and salary earners aged between 15-64 had participated in some form of formal education or training.

Increases in tertiary education enrolments, and consequently later average entry into the workforce

Increasing use of information and communication technology (ICT) in building capacity

New Zealand's capacity is also developed through digital technologies. The OECD has confirmed that, used wisely, these technologies themselves can be a powerful influence in life-long learning, by assisting to overcome some of the inequalities in society. The OECD also highlights a clear risk that ICT can intensify societal divisions rather than close them. This largely hinges around access to ICT, highlighting that those unable to access ICT skills and knowledge will become less and less able to participate in an economy and society that is becoming increasingly technology dependent. This has led to the coining of the phrase "digital divide" to describe the gap between the information "haves" and "have-nots". It is likely that this trend toward ICT will continue well into the future, and raises questions concerning people's ability to adapt or gain access to these technologies and skills. These issues may be particularly important for Maori and Pacific peoples.

How do we ensure we keep on learning and adapting to change?
Everyone has access to opportunities to learn throughout their life?
Everyone has access to ICT and ICT skills?

Family structure / formation

Changing family structure, including more diversity in living arrangements, less couple formation, increasing same sex couples, and increased transitions between various household types

Declining fertility rates

Increasing numbers of households with both partners in paid employment ("job rich") or both partners not in paid employment ("job poor")

Fertility rates are historically low for New Zealand, and likely to decline further in the future with the Maori and Pacific people's fertility rates declining to match Pakeha rates. In the short run this is likely to influence paid labour market participation rates positively, particularly of females. It is also likely to lead to longer periods of uninterrupted work experience, again especially for women. Female capacity is likely to be enhanced as a consequence. Longer term, a decline in fertility rates will impact on the age structure of the labour market and hence into New Zealand's capacity.

Having said this, over the last two decades there has also been a growth in the number of sole parent families, especially those headed by women. Childcare responsibilities and financial constraints mean that sole parents have difficulty gaining entry to the paid labour market and maintaining their capacity. There is also an ethnic difference in the employment of sole mothers. In 1996 only 25 percent of Maori sole mothers and 28 percent of Pacific Island sole mothers were employed. This compared with 44 percent of European sole mothers. It is important to note that the likelihood of a mother working (both sole and partnered) increases with the age of the youngest child. The trend of increases in sole parent families is likely to have levelled off, but large numbers are also likely to remain for the foreseeable future.

How do we ensure that certain peoples or groups are not left behind or disadvantaged without access to opportunities they require?

There has also been a decline in early couple formation, and a parallel delay in childbearing. This is usually associated with increasing female participation rates. There has also been a shift toward two extremes of work arrangements within couples. One is where both partners are in paid work ("job rich"), and the other is where neither has a paid job ("job poor").

These trends have an impact on the structure of work. A continued shift toward both partners being in paid work may result in an increase in demand for services such as meal preparation, laundry and cleaning, but could also result in a reduction in the time available for voluntary work. Given the time, energy and money that may be required to undertake voluntary work, it may not be fully offset by a corresponding rise in "job poor" couples undertaking voluntary work.

Women and men – labour market participation

Participation rates are becoming more diverse and fitting changing opportunity structures and life choices

The male participation rate is declining, but the rate of decline may be slowing

The female participation rate is increasing, but the rate of increase may be slowing

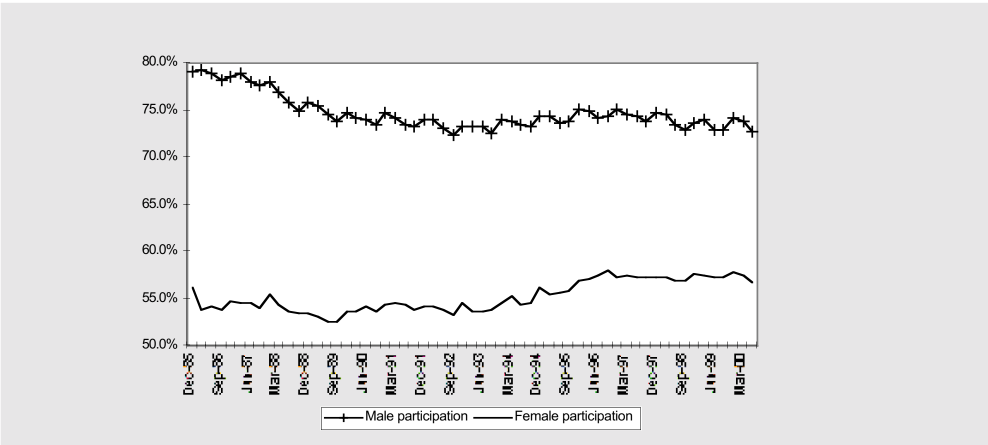
Women comprise about half the population but have been traditionally under-represented in the paid labour force. The consequence has been twofold: women have traditionally acquired less education and training, and have had less paid job experience. While female labour market capacities and opportunities have traditionally been different from males due to interrupted labour market participation and lower relative levels of education, this has been changing over recent decades.

Recent trends have been towards an equalisation of labour force participation rates for males and females (reasons behind this trend include a decline in the male participation rate and the restructuring of the New Zealand economy since the mid-1980s). It also seems likely that the longer run trends towards higher female and lower male labour force participation will continue into the foreseeable future, especially given rising relative female educational attainment, falling fertility (see above) and ongoing social trends promoting women in the workplace. It is likely that another consequence of a greater visibility of women in work is that female careers may become less interrupted. Over time, female levels of job experience may become more similar to those of men.

Again, the ageing population and likely growing labour scarcity is likely to slow down any further decline in male participation rates and further increase female labour force participation. These changes will lead to greater demands for flexible paid working arrangements by working mothers and fathers or people needing to care for their elderly parents. At the same time, there will also be a need for flexible training and education arrangements for the same people. More family friendly workplaces may be the face of the future for many employers.

Female participation and employment are likely also to be enhanced by the broad structural trends towards jobs in the service sector that have been traditionally filled by women. As the number of professional women also increases, there will be a growing demand for services previously performed by women in unpaid work, such as paid childcare and other domestic labour, creating a further demand for work that has traditionally been performed by women.

Male and female labour force participation rates



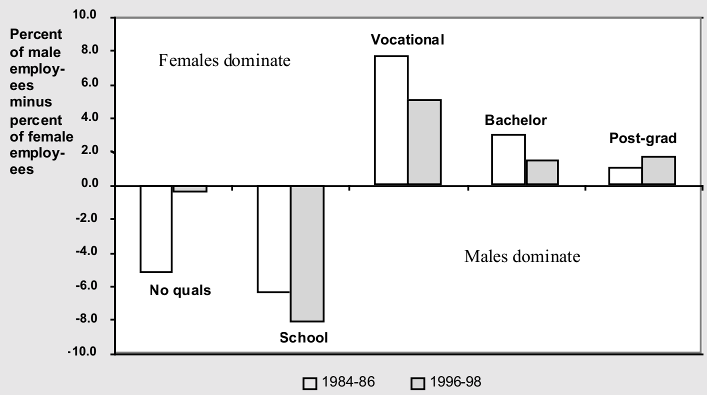
Trends in early childhood education

Between 1990 and 1997 the number and availability of childcare services has doubled[4] . This has facilitated an increase in employment among mothers of young children. Over the five years to 1996, the proportion of mothers with babies aged less than 1 year who were in paid employment rose from 23 to 31 percent. Among mothers with children aged 1-4 years, employment rates rose from 37 percent in 1991 to 49 percent in 1996. These increases were more pronounced for sole mothers than for partnered mothers. However, there still exists a disparity in the early childhood education participation of Maori compared to non-Maori. Recently completed research concludes that "overall, disparities between Maori and non-Maori participation in early childhood services grew between 1991 and 1998".[5] The workforce participation of Maori women is adversely effected by this disparity. Increasingly firms (and some educational institutions) are assisting with after school care, and school holiday care places. The New Zealand Childcare Survey 1998 reported that for many parents having their children with them at some time while they were working was the most common childcare arrangement used to help manage their childcare responsibilities.

Women and men – educational attainment

The capacity of males and females in terms of their educational qualifications has also changed over the last 15 years. Male-female differences in average levels of educational attainment have grown substantially smaller during recent decades. The figure below illustrates this by showing male-female differences in the percentage of employees at each level of qualifications, in 1984-86 and 1996-98. The bars in the graph point downwards if female employees were more likely to hold that level of qualification than males, and upwards if male employees were over-represented at that level of education. In the mid-1980s, women were less likely than men to hold post-school qualifications, and more likely to be unqualified. Over the next 15 years, male-female differences in educational attainment diminished (causing the bars in the graph to shrink towards the centre line).

Male-female differences in educational attainment, 1984-86 and 1996-98



Source: *Household Economic Survey, employees aged 20-59 years*

Other sources, such as the Household Labour Force Survey Income Supplement, show even smaller gender gaps in educational attainment.

The gender gap in employee's qualifications, 1997-98 HLFS income

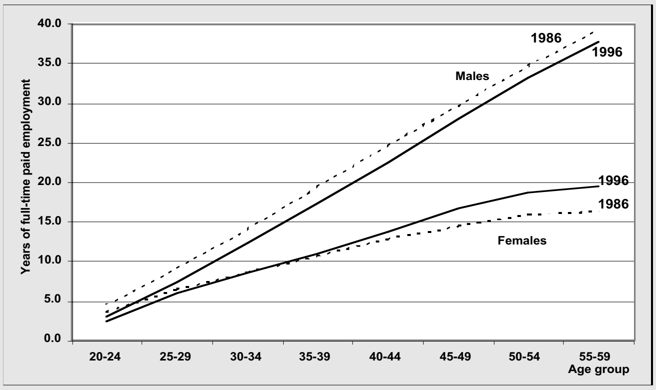
	Males %	Females %	M -F
No qualifications	18.9	18.6	*0.3*
School	20.8	26.5	*-5.7*
Vocational	45.2	40.7	*4.5*
Bachelor	9.8	10.4	*-0.6*
Post-graduate	4.8	3.5	*1.3*

For new entrants to the labour market, the gender gap in qualifications is showing signs of reversal. Females outperform males throughout education levels. While this trend is likely to impact on the workforce further out than 2010, it is likely to bring with it many forms of social change and expectations for participants.

Women and men – past paid work experience

The paid employment patterns of men and women have also become more similar during recent decades, as female employment rates increased, and male employment rates declined. The figure below shows estimates of the average number of years of past paid work experience that men and women had undertaken in 1986 and 1996.[6]

Estimates of the accumulated prior paid work experience of males and females, 1986 and 1996



Source: *Population Census employment and population data, 1945-96*

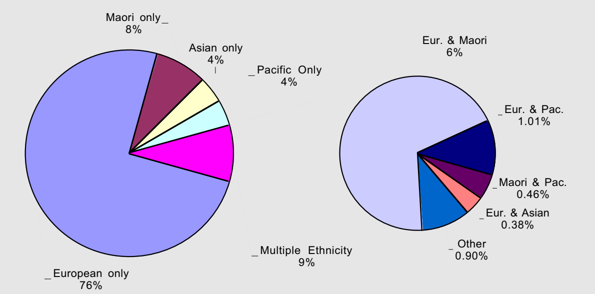
Length of employment experience is positively associated with earnings because of the accumulation of general and job-specific skills, and because workers with greater work experience are likely to have undertaken more formal training. Averaging over all age groups from 20-59 years, New Zealand men were estimated to have had 18.4 years of past work experience on average in 1996. Women were estimated to have had 11.2 years of past paid work experience, on average — a difference of 7.2 years. The figure above illustrates the fact that the male-female gap in work experience grew smaller between 1986 and 1996. It is likely that these gender experience differentials will decline further in future years.

Ethnicity

New Zealand is becoming more ethnically diverse

The ethnic composition of the workforce influences overall capacity. Historically Maori, Pacific peoples, and the "other" ethnic group have on average had lower levels of English language literacy and educational attainment. Hence they have also tended to have lower job experience than the majority Pakeha/European group.

New Zealand's population by ethnicity, 1996 Census



Note: The Maori population is usually defined as the amalgamation of "Maori only" with those defined as "European and Maori", and "Maori and Pacific Peoples" around 14.7 percent of the total population.

Having said this, educational attainment is not lower for some of the "other" category, namely Asian migrants. This raises questions over the barriers to paid work for some of this "other" group including lack of English language, occupational licensing, and discrimination.

Maori participation

Maori participation in the economy is predicted to increase over the next decade. Maori are significant owners of the nation's natural resources, and that share of ownership will increase. These resources include:

- 5.6 percent of the land of New Zealand is owned by Maori trusts and other Maori agencies, together with an unknown proportion held by Maori in private title;
- Treaty settlements and further acquisitions will increase this proportion;
- In addition to the land itself, Maori own the assets associated with the land including those in pastoral and horticultural farming and in forestry;
- At least 55 percent of the assets in the New Zealand fishing industry are owned by Maori agencies;
- The Maori commercial asset base is at least $11 billion;
- The Maori commercial asset base is about twice as involved in exporting for income as the New Zealand economy as a whole (60.1 percent versus 31.4 percent); and
- Maoritanga makes a unique contribution to the New Zealand tourist industry, and Maori have control over many of the key tourist sites.

Ethnicity population projections

Over the last 15 years there has been a slight increase in the Maori share of the working age population of about 1 percentage point. Over the same period Pacific peoples recorded a 2 percentage point gain in population share. The largest relative increase has been by the "other" ethnic group. Largely as a consequence of immigration, their share has increased by about 2.5 percentage points.

Maori are also a younger population than non-Maori. It is likely then that Maori will be an increasing source of New Zealand's capacity. Contributing factors to this view are that the median age for Maori is about 22 years, compared to about 35 years for non-Maori; that in 1996 11.5 percent of the labour force reported itself as of Maori ethnicity, but 23.5 percent of those under 15 were Maori.[7] Because Maori are often unskilled relative to the average labour force participant, there may be major gains to the economy from the upskilling of the Maori workforce.

In terms of the future ethnic composition of New Zealand these broad trends will continue. Using Statistics New Zealand's medium population projection, the Maori population is projected to rise from 15 percent of the population in 1996 to 20 percent in 2051. Over the same period on the same medium assumptions, the Pacific portion of the population is forecast to rise from 6 percent to 12 percent. Having said this, as is the case for the rest of the population, the Pacific population is also ageing. By 2031, 1 in 12 Pacific peoples will be of age 65 or more compared with 1 in 40 in 1991[8] .

The projected rising shares of Maori and Pacific peoples are to some degree due to the older non-Maori population and to the higher fertility rates for Maori and Pacific peoples. In 1996 estimated fertility rates were 2.7 for Maori, 3.3 for Pacific peoples and 2.0 New Zealand wide.

The changing ethnic composition of the population is often seen as negatively impacting on capacity. Such an analysis assumes that non-European ethnic groups are not continuously improving their relative capacity or do not have high levels of capacity to begin with. Higher levels of educational achievement lead to higher levels of flexibility in matching capacity to opportunity. The current inequitable participation of Maori at higher levels of educational achievement is likely to adversely affect future Maori ability to match capacity with opportunity.

Among Pacific peoples, Samoans alone make up half of the group, and Cook Islanders make up about one in five. Tongans and Niueans together make up another quarter. While these are all distinct regions, all these groups (as well as Tokelauans) are Polynesian with similar traditional languages and cultures. The main Pacific sub-populations all have considerably younger age structures than the rest of the population. The median age for the main sub-groups is in the early 20s compared with 33 for the population at large. While sharing a common low median age, some Pacific peoples are more recent immigrants than others. Samoans and Tongans average around 10 years in New Zealand compared with Niueans, Tokelauans and Cook Islanders who average around 20 years in New Zealand. The latter group are thus much more likely to be New Zealand born. Neither the average age nor the educational attainment levels of Pacific people appear to be converging fast with the rest of the population. The qualifications of Pacific people also tend to be low in the sciences and in technical skills areas, which are prerequisites for work in "knowledge-based industries".

What are the implications for the labour market of an increasingly diverse population?

How can we ensure Maori assets are more productive?

How do we ensure appropriate educational aspirations for coming generations?

Migration

There is increased availability of skills from overseas

New Zealanders are increasingly able to gain overseas experience or leave permanently

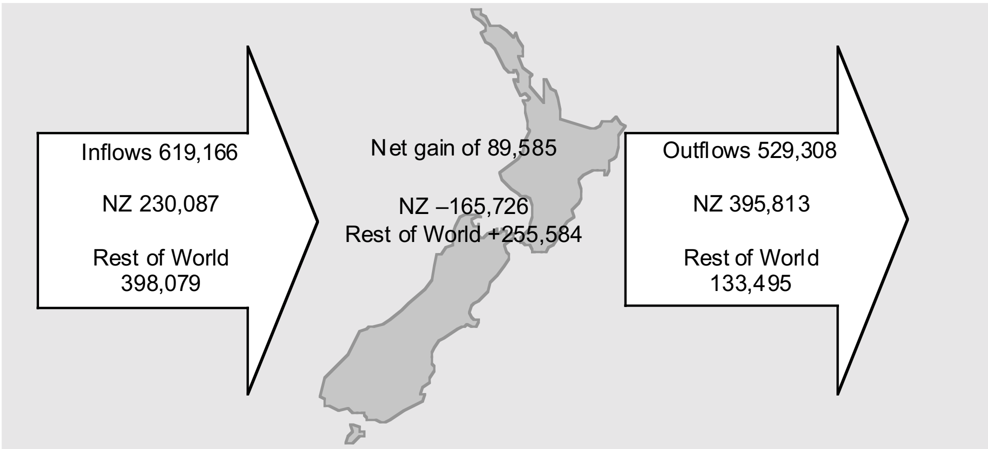
There may be a difference in regional capacity as migrants usually locate near the larger urban areas

The capacity of recent migrants may be different to that of the native born in many respects

As discussed above, the capacity of the New Zealand population changes through emigration and immigration. The major flows of permanent and long-term migrants over the last decade are shown below. A relatively small net population gain (89,585) corresponds to much larger gross inflows (619,616) and outflows (529,308) of people. Also hidden behind these figures is the fact that a large proportion of the inflows (37 percent) and outflows (74 percent) are New Zealand residents.

Because it is likely that emigrants leave from different places than where immigrants settle, these international migration flows play an important role in redistributing capacity throughout New Zealand. Historically, immigrants have tended to settle in the major population centres of Auckland and Wellington, and to a lesser extent Christchurch and Hamilton.

Total migration flows, June 1990-June 2000



Overall, people are more likely to be leaving to go abroad from regions where the net population is growing. While Auckland makes up 29 percent of the working-age population, on average it contributes 35 percent of permanent and long-term emigrants. On the other hand, Southland, an area of low or negative population growth, has 2.7 percent of the working-age population, but contributes only 1.8 percent of emigrants.

International emigrants more likely from expanding areas (September 1994 to June 2000)

	Average share of the working-age population	*Average share of all permanent and long-term emigrants*
Region	*%*	*%*
Northland	3.4	4.0
Auckland	29.4	35.4
Waikato	9.3	7.1
Bay of Plenty	5.7	6.0
Gisborne / Hawke's Bay	5.1	3.9
Taranaki	2.8	2.6
Manawatu / Wanganui	5.7	4.7
Wellington	12.3	14.0
Nelson, Marlborough, West Coast	4.3	3.1
Canterbury	13.9	12.3
Otago	5.3	5.2
Southland	2.7	1.8

Research on migration from New Zealand suggests that those who leave on a permanent and long-term basis have higher skill levels than the New Zealand population as a whole. On the other hand, New Zealand workers going to Australia have very similar occupational patterns to those in the domestic economy.

However, there is also considerable return migration by New Zealanders who have gone overseas for a time. Those returning bring skills, ideas and knowledge acquired overseas back into the economy, resulting in new and different ways of doing things to the benefit of all. Thus while emigration may impose costs, it also promises gains.

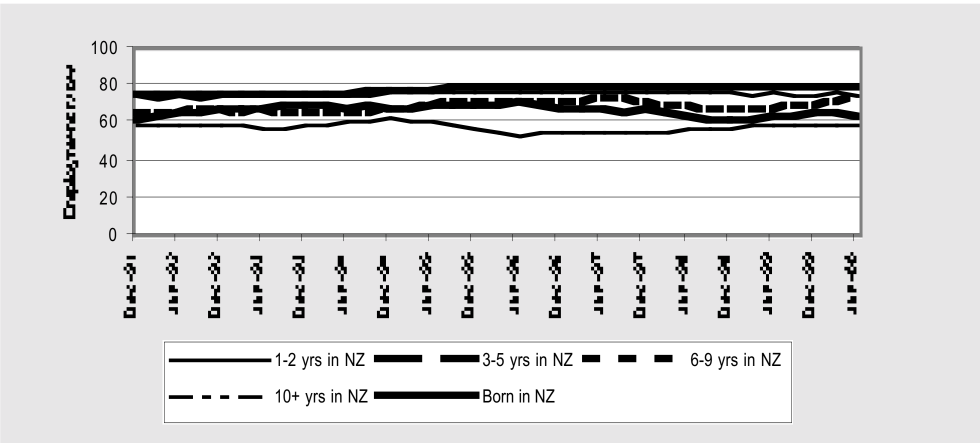
Despite frequent assertions to the contrary, the table below indicates little evidence of a massive “brain drain” over the last four years when examining both inflows and outflows. In fact, the skills-based migration policy has led to a net influx of professionals. The highest outflow rates were for relatively unskilled occupations, such as Services and Sales and Elementary occupations.

Net migration inflows (+) or outflows (-) between 1996-2000 as a proportion of those employed in that occupational category in March 1996

Managers, administrators and legislators	0.2%
Professionals	5.3%
Technicians	-1.0%
Clerks	-0.1%
Service and sales	-1.9%
Agriculture and fisheries	-0.9%
Trades	0.6%
Print and machine operators	-1.7%
Elementary occupations	-1.9%

However, migrants who have lived in New Zealand for less than 10 years have substantially lower employment rates than the New Zealand born, which suggests that the specific skills held by many new migrants are neither well suited nor well utilised within the New Zealand labour market. This difference in employment rates is especially pronounced for those who do not come from an English speaking background.

Employment rates of all migrants (usual residents who were born overseas) and the NZ-born



Source: *Household Labour Force Survey.* Migrants who have lived in New Zealand for less than one year are not included in the 1-2 year category. To smooth fluctuations due to sampling error, we have plotted a 5-quarter moving average of each employment rate series

Most of the gains from emigration and immigration accrue to migrants themselves. Overall efficiency gains or losses from migration on the rest of the population are relatively small compared with the impact of migration in redistributing income. In other words, skilled migration from New Zealand benefits those skilled people leaving. Gains also accrue to those skilled people who remain, since their skills command a greater premium. There is some efficiency loss from the lower level of output but it is likely to be minor. The converse applies for net immigration – significant distributional impacts, but small efficiency gains.

While New Zealand may have contributed a subsidy to the education of the skilled emigrant, this subsidy is a sunk cost. It is only subsidies currently being given for the education of people who are likely to leave in the

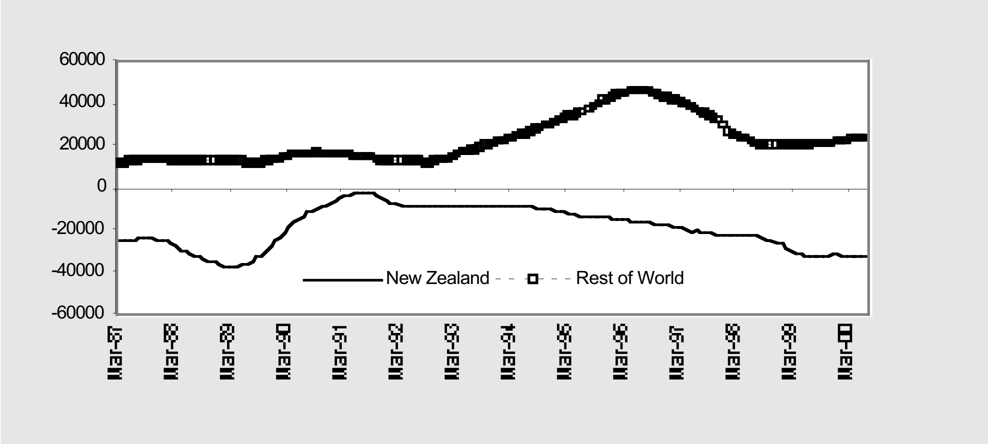
What should New Zealand's migration policy look like in the future?

How can we make New Zealand an attractive place for skilled people?

How can New Zealanders harness the greatest benefits from education and training via migration?

future that we should be concerned about. In addition, the emigrant may be better placed to pay off the borrowings used to fund their education from earnings abroad than if they remained in New Zealand. This increased ability to pay off borrowings can also combne with the significant gains that may accrue to New Zealand from an emigrant returning to New Zealand after spending some time overseas.

Year ended net permanent and long-term migration by nationality



As discussed above the ageing population phenomenon is world-wide. Increasingly New Zealand is likely to compete with other countries for the scarce resource of highly skilled young people. This could potentially impact on New Zealand's migration patterns and hence New Zealand's capacity in the longer term. Not only will New Zealand be competing with other countries for highly skilled young people, but other countries will be competing with New Zealand for highly skilled New Zealanders.

Capacity – Overall risks and challenges

As discussed above, the nature and structure of New Zealand's labour market capacity is changing rapidly. The above trends give rise to the following risks or issues in the longer term for New Zealand's capacity:

■ New Zealand's population has been ageing, and will continue to do so. In the short run New Zealand's capacity may increase, however, as this ageing process continues labour market capacity may decline as people retire from the labour market and are not replaced by new entrants.

What do we need to do to increase education and skill levels, especially to those not currently working?

■ There may be some reduction in the number of people willing and able to enter paid employment, due to a changing demographic profile.

■ As the pace of change quickens, there is an increased risk that people will not be able to adapt to change quickly enough. This could include the risk of emerging "digital" or "geographic" divides, with some groups and individuals having a lesser capability to take advantage of new opportunities (for any number of reasons — many outside their control).

■ The "digital divide" may become an increasing determinant of winners and losers.

■ Greater computer literacy of new labour market entrants (the young) could reduce the size of the group on the "wrong" side of the digital divide.

How do we ensure that everybody has opportunities and the ability to learn?

■ Early childhood education may be an increasing determinant of individual capacity and whether people or groups are "winners" and "losers" — however, this is hotly debated.

■ Young people may enter the labour force earlier, with less formal training due to the changing demographic profile – potentially reducing the average skill level of the labour force and perhaps also increasing risks of a lower level of adaptability in later years.

■ If there is an ongoing requirement for higher levels of skills, then there is a risk of further job loss amongst people already in the workforce with low levels of literacy. There seems to be a major risk that the "lower end" of the existing workforce cannot be upskilled.

■ Competition for skilled migrants could increase as other countries also seek skilled immigrants, due in part to an ageing population in many countries; this will include competition for skilled New Zealanders elsewhere. This has been put forward as the largest single risk to New Zealand's ongoing labour market capacity.

References— Capacity

1 The "digital divide" is the divide between those who have access to and the ability to use information and communication technology (ICT) and those who do not.

2 Measuring the amount of information people have acquired, in most cases through the formal education system, is difficult. Typically these skills are proxied by some measure of highest education qualifications, which unfortunately measures not only information acquired in education but also the abilities and information that people possessed before entering the formal education system.

3 Some caution must accompany these observed trends, for to some extent the rising levels of qualifications may be picking up "skills inflation or qualifications creep" — simply more pieces of paper being handed out, rather than genuine educational improvements.

4 See the June 1999 *Environmental Scan* undertaken by the Ministry of Social Policy.

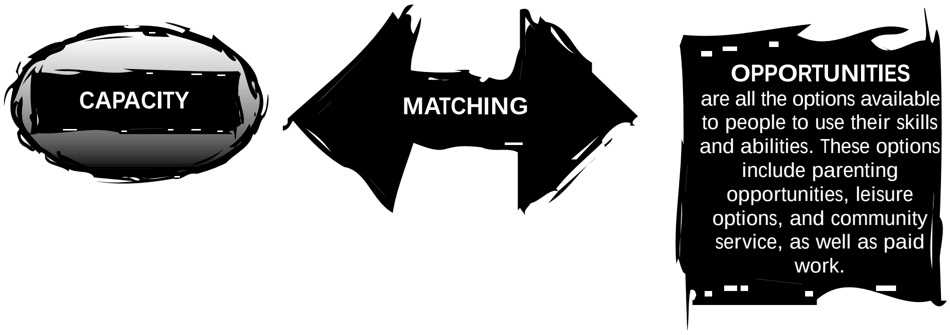
5 Monitoring and Evaluations Research Associates Limited, *Disparities between Maori and non-Maori Participation in Early Childhood Services*, report prepared for Te Puni Kökiri (February 2000), p 4.

6 These work experience estimates are derived from age-specific employment rates collected in successive Censuses, from 1945 through to 1996.

7 Ministry of Maori Development *Post-Election Brief*, November 1999, p 41.

8 Taskforce on Positive Ageing, 1998

Opportunities



Themes

■ The number or level of labour market “opportunities” is important. There is a need to generate many opportunities both for current and future New Zealanders.

■ The range or diversity of opportunities is also important (this includes what we can make or be through ingenuity, social and economic growth and our business performance).

■ Employment growth is largely underpinned by economic growth.

New Zealand's opportunities background

■ Globalisation has changed the industry, occupational and work patterns of New Zealand.

■ Increased international flows in goods and services (trade), money (finance/capital) and people (migration) have exposed New Zealand businesses to greater levels of competition, but have also increased market opportunities and access to resources.

■ Trade in information flows (ideas) are an increasingly important part of globalisation.

■ Diversification of trading partners and the range of products traded has reduced some national risks for New Zealand.

■ The private sector is increasing in size — four out of five employees are now employed in the private sector.

■ There is a continued shift in employment opportunities from primary production towards processing and services.

■ There is a trend towards self-employment — and more people are establishing themselves as employers.

■ Non- standard employment has become prevalent — in particular, part time employment by firms.

■ There is an increased concentration of economic activity in the main urban centres.

Opportunity trends to continue over the next ten years

■ There are increasing linkages between New Zealand and the rest of the world through trade, money and people. There is a continuing trend towards integration with Australia (and, to a lesser extent, towards Asia).

■ Changes to opportunities will be evolutionary, rather than drastic. Domestically there is likely to be:

- ■ A continuing shift towards employment in the tertiary sector[1] — in particular travel, leisure and entertainment, financial services, technology and health care;
- ■ More opportunities for “upper white collar” workers with general skills, including the ability to use skills over a range of occupations;

- Increasing provision of and demand for non-standard work patterns (part time /seasonal / voluntary);
- Increasing competition for skilled migrants, including New Zealanders abroad;
- Continuing high reliance on primary products, with the GE / organics debate likely to impact on future opportunities; and
- Increasing impact by the “third sector” (the sector that provides formalised non-profit, non-government goods and services) as a source of employment opportunities.

Risks /issues further out

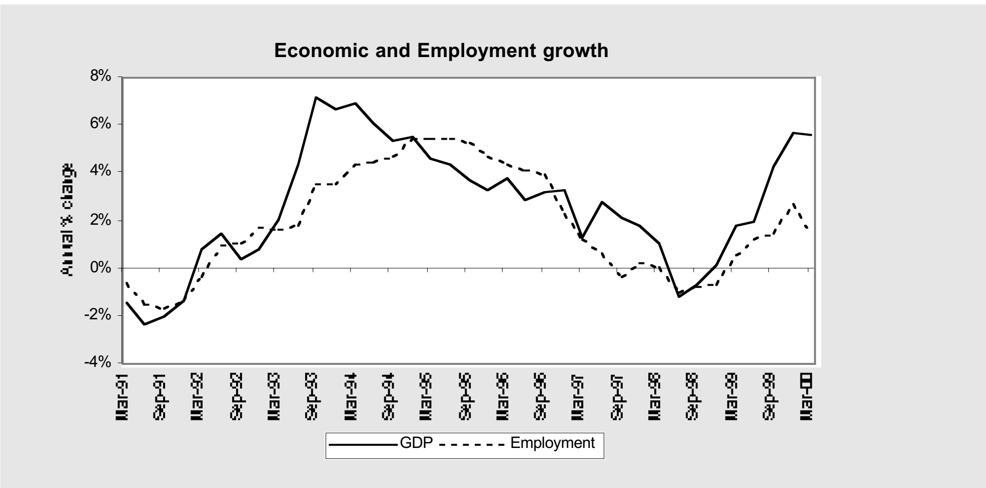
- Some opportunities within New Zealand may decline if greater returns on capital or human capability are to be made offshore.
- Varying levels of economic growth between regions or locations could mean insufficient levels of opportunities for some regions.
- These uneven opportunities within the labour market may disadvantage some groups through increasing inequality of earnings.
- The changing demographic profile (ageing population) is likely to influence opportunity structures (for example, a rise of care or services for elderly in the past is likely to continue into the future).
- Productivity gains in non-service sectors of the economy may not be sufficient to support the increased demand for services.
- Technology changes are likely to continue to reduce the effects of many of New Zealand’s inherent disadvantages, such as small size and isolation.
- Increasing scarcity of labour could encourage businesses to discriminate less and may increase the availability of re-training opportunities to many workers.

Analysis of opportunities

Opportunities largely depend on economic growth

The labour market outlook is largely driven by prospects for future Gross Domestic Product (GDP) growth. There are cycles in the economy — periods of growth followed by periods of decline. Employment growth is determined by economic growth and the efficiency and flexibility of the labour market to respond to changes in labour market conditions (see graph below). Following on from this, the poor employment growth over the past decades has primarily reflected low economic growth. While some commentators have suggested that economic growth and employment growth are being “decoupled” through the use of technology, there is no long-term evidence of this.

Economic and employment growth



What the chart above does not highlight is that even when "times are tough", some industries and people will still be doing well. Various sectors or firms will be growing while others are declining. When overall economic growth declines, the number of declining industries or firms outweighs the numbers of firms or industries growing.

Increasingly New Zealand's GDP growth pattern is linked with our trading partners. For example the effects of the last Asian crisis very quickly filtered through to the forestry industry, and from there to the rest of the New Zealand economy — and were felt throughout the labour market[2]. New Zealand is now closely linked to the rest of the world and this process of integration over the last 20 years has changed the industrial, occupational, sectoral, and type of work undertaken in New Zealand. Globalisation has also changed consumer tastes and preferences, which in turn impacts on opportunities.

How do we ensure that New Zealand's economy grows and takes advantages of global opportunities ensuring "quality" jobs without losing sight of what makes us unique?

How does globalisation fit alongside local communities and allow local communities to grow?

Globalisation

Globalisation has changed the industry, occupational, and work patterns of New Zealand

Globalisation – the increasing flow of capital, labour, goods and services and ideas across national boundaries – is a reality, and it is important that we understand its nature and its effects on opportunities. It is also likely that the size and rate of international exchange will continue to grow in the coming years. This will influence the pattern and types of work undertaken by New Zealanders, but these changes are likely to be less radical than some have predicted. Evolutionary, rather than drastic, change is the most likely response to globalisation.

The data indicate that even in national jurisdictions that have long, open and geographically contiguous borders and which share a common language and many aspects of their culture, boundaries consistently matter for price adjustment of goods and services. Also, labour markets respond far more slowly than markets for goods and services. This means it is reasonable to predict that national boundaries, and hence national discretion in policy, will continue to matter for labour market regulation and adjustment for the foreseeable future.

While earnings are important, people are also attracted to where they live by its amenities – the quality of life on offer. The amenities affected by policy include culture, levels of crime, the quality of public services, and the physical environment — including pollution, overcrowding, and proximity to recreational activities. These dimensions, by being important to people's location decisions, are also relevant to labour market policy.

Below we discuss how New Zealand is becoming increasingly part of the global economy and how this has changed opportunities available to New Zealanders over time.

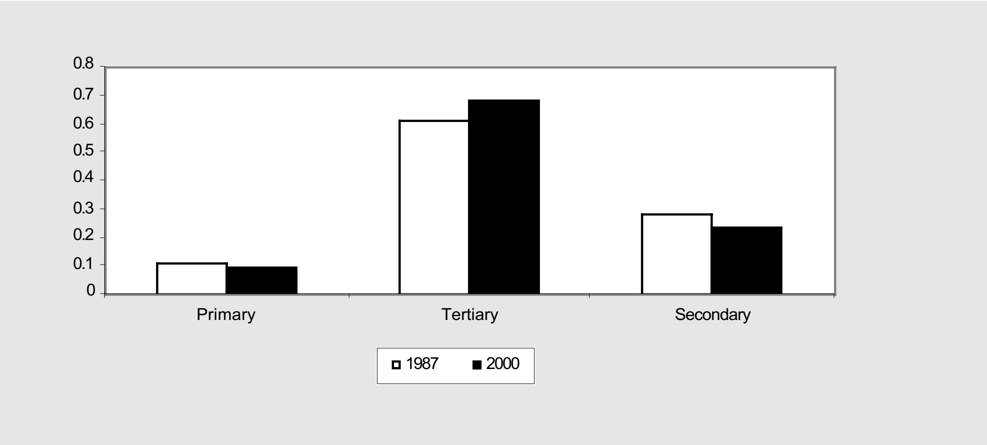
Industry composition of employment

Employment opportunities will continue to shift from primary production towards processing and services

Over the past 15 years employment growth has varied considerably across New Zealand industry. There has been a shift towards the tertiary sector which is made up of service industries, including wholesale and retail trade, transport and communication, business services, and community and personal services. At the same time there has been a shift away from the secondary sector (defined as the manufacturing, electricity, water and gas, and construction industries) and the primary sector (including the agriculture and mining and quarrying industries). Employment in the tertiary sector as a proportion of total employment has grown by approximately 8 percentage points. The proportion of employment in the secondary and primary sectors has fallen by approximately 5 and 3 percentage points respectively.

Service industries have experienced the highest levels of employment growth — particularly in business and financial services. This has resulted from technological change, the deregulation of this industry and, to some degree, a trend towards the "contracting out" of services from industries such as manufacturing rather than doing them "in-house". Conversely, employment has fallen in both the manufacturing and agricultural industries over the past 15 years. This fall in employment in manufacturing reflects increased international competition, technological change and contracting out. A counter trend to this decline in employment in manufacturing industries has been some strong growth in some high technology niche markets (for example the boat/yacht building industries).

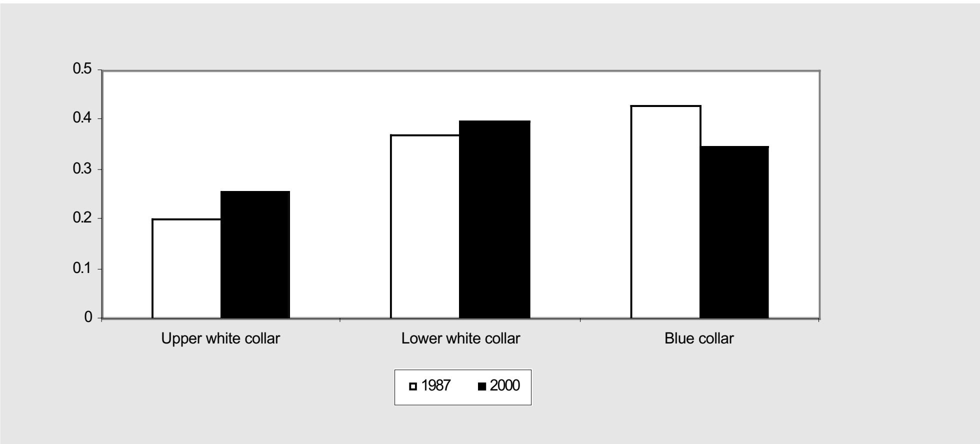
Broad industry composition of employment (average June years, 1987, 2000)



Occupational composition of employment

Just as the industrial structure of employment has changed over the last 15 years, so has the occupational structure of employment. There has been a significant decline in the proportion of occupations that are broadly "blue collar" (with an approximate 9 percentage point drop in "blue collar" occupations as a proportion of total employment), especially up until the early 1990s. The strongest growth has been in the share of "upper white collar" workers (with there being an approximate 6 percentage point rise in upper white collar occupations over the period). It seems likely that the weaker mid-1990s trends will continue into the future.

Occupational structure of employment (average June year, 1987, 2000)



The nature of work itself has also changed. There has been a trend toward more knowledge based, less manual and routine work, increased use of automation and computerisation. Many traditional manual jobs now require the use of technology alongside manual tasks. These jobs require increased numeracy and literacy skills and in some case require on the job retraining and teamwork.

In other industrialised nations it has been noticed that traditional "blue collar" work appears to be changing in nature towards greater degrees of:

- Supervision (actively overseeing the process);
- Optimisation (improving the performance of the technical system);

- Maintenance; and
- Flow management (close matching of production with orders).

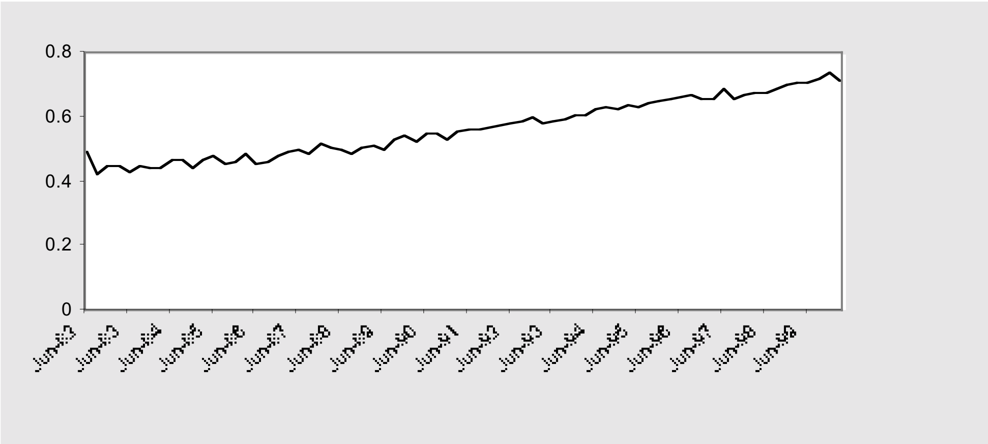
Workers at all levels are becoming more versatile, but their autonomy is limited by a new interdependence with other workers and teams. The concept of "qualification" or "skill" is gradually shifting towards the concept of "competence". Routine activities are increasingly being automated, even in knowledge-based occupations. This means that "value-added" activities will become more important and require a different skill set across all occupation types — with a focus on interpersonal and cognitive skills values.

Flows of goods and services

Increased international flows in goods and services (trade), money (finance/capital) and people (migration) have exposed New Zealand businesses to greater levels of competition, but have also increased market opportunities and access to resources.

The trade exposure index (measuring the sum of exports and imports as a percentage of gross domestic product) highlights the increasing significance of international trade to New Zealand, and how the economy is increasingly linked to the rest of the world. There was a steady growth in New Zealand's trade exposure over the period. While the index is not high in comparison with many other countries, an important issue arising from its increase is the relationship between levels of self-employment and small businesses development and the international economy. ICT change has enabled many new opportunities for the self-employed and many small businesses.

Trade exposure (exports + imports)/GDP

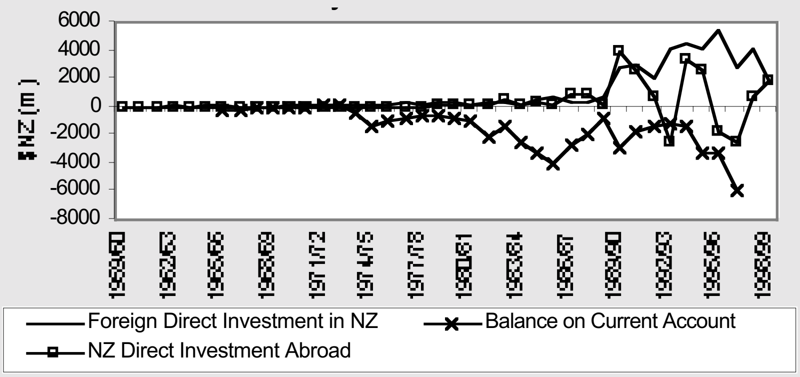


Flows of capital

Increased access to international capital

Flows of international capital have become increasingly important to labour market outcomes in New Zealand through the provision of funding for investment and growth. After the 1984 removal of limits on direct foreign investment, increasing amounts of capital have flowed in and out of New Zealand, as can be seen from the chart following.

Balance of Payments flows 1960-99



Wise investment decisions using capital from abroad should yield significant gains for overseas investors, but also for New Zealanders via increased opportunities. However, the opposite effect may apply to unwise investment decisions. Opportunity structures in the future will in some respects be governed by the “track record” of former investment decisions.

Flows of people

People are increasingly mobile across national borders. Flows of people are becoming increasingly important for labour market outcomes. This is because of the effect on the supply of people available to a country, the skills and experience that these immigrants bring to the labour market and, in some cases, the opportunities that they bring with them to New Zealand.

New Zealand immigration policy is often highly contested and fluid. For example, barring pakeha, Pacific people are often considered the most influential group of migrants to New Zealand, in terms of their labour market participation in the 1950s and 60s. Large numbers of Pacific peoples moved to New Zealand then, after being encouraged to help New Zealand meet its manual labour shortages. Migration policy has more recently seen the development of a points system to target higher-skilled migrants and meet demand for certain sets of higher-skilled workers, for example highly-qualified teachers.

Diversification of trading partners and the range of products traded has reduced some national risks for New Zealand

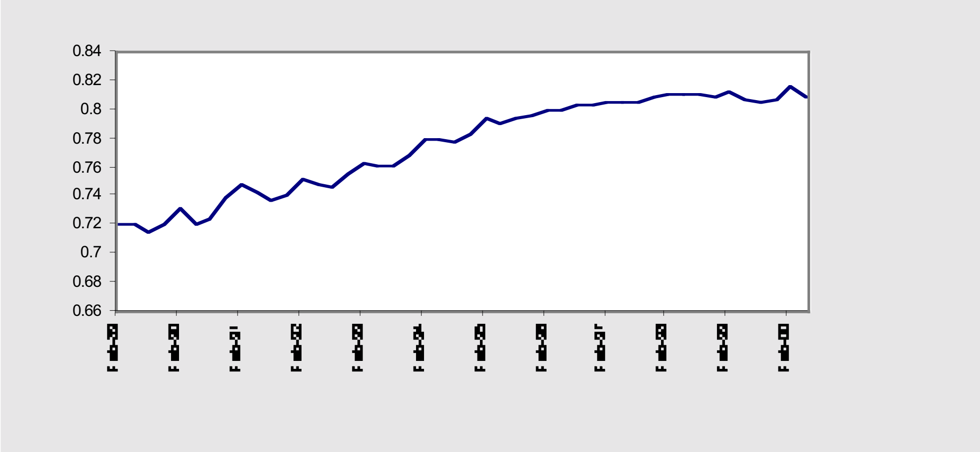
Private sector share of employment

The private sector is increasing in size, four out of five people are now employed in the private sector

Opportunities in the government sector have been shrinking, both relative to total employment and absolutely. In 1989 government, both central and local, comprised 28 percent of total employment[3]. By 2000 the government share had shrunk to 19 percent, a remarkably large fall in just over a decade of 9 percentage points. The reduction in the share of the public sector was caused not simply by growth in private employment, with a slower-growing or static government sector, but by an actual fall in the number of government jobs. Between 1989 and 2000, government employment shrank by over 70,000 people (-20 percent growth).

While it is unlikely that this trend will continue in such drastic fashion (there is some evidence of stabilisation in the government share of employment), private sector employment is likely to grow more strongly than public sector employment over the next decade. More than 4 in every 5 employees are in the private sector. This will continue into the foreseeable future.

Private sector share of employment



Regional/urban analysis

Increased concentration of economic activity in main urban areas

To a certain extent, opportunities will locate where there is sufficient capacity to meet the productive requirements of the firm. Capacities are distributed unevenly across the country. New Zealand is a highly urbanised country, with over 80 percent of the population living in urban areas. Much of the population's capacity is concentrated in Auckland, Wellington, Christchurch, Hamilton and Dunedin. People in larger urban areas are generally younger and with higher levels of education than those in rural areas. Towns, especially the larger cities, tend to attract the most highly educated people, as well as younger people. This is partly because cities offer more and better work opportunities and partly because cities have the scale where they can offer the sort of amenities that are attractive to people including higher levels of education.

Actual and projected population growth has typically differed across geographic areas, however defined. Recent trends include the "hollowing out" of provincial and country towns through the middle of the North Island as well as outside Christchurch in the South Island.

At the same time, an important factor behind the regional redistribution of the population is international migration — even if net migrant flows are low. Immigrants tend to remain in the larger population centres, as outlined above. Auckland's population is projected to grow by the greatest amount in the next 20 years. There is a general tendency for the northern parts of both islands to grow more rapidly than the middle and southern parts.

Projected regional population growth, 1996-2021

Location	*Percent*
Auckland	38.5
Tasman	30.3
Bay of Plenty	29.2
Nelson	27.3
Northland	25.1
Marlborough	22.9
Waikato	20.4
Canterbury	16.6
Wellington	10.7
Manawatu/Wanganui	10.2
Hawke's Bay	10.0
Otago	8.2
West Coast	5.7
Gisborne	4.5
Taranaki	1.8
Southland	-10.5
New Zealand	**21.8**

It is not certain that growth in regional population is a good indicator of regional opportunity growth (as the capacity of the population is just as important as raw numbers). However, it is likely that those regions that highlight poor population growth are experiencing difficulties in providing labour market opportunities. There is some New Zealand evidence that employment is becoming less evenly spread on a geographical basis.

While regional differences are important, there are also major differences within regions and even within cities. Maori and Pacific peoples are over-represented in the "work-poor" areas. There is a danger that economic growth will increasingly bypass particular regions and communities.

How do we ensure that there are jobs where people choose to live?

Linked to this, there is some evidence that the rapid rise in educational attainment that has taken place in New Zealand has been unevenly spread on a geographic basis. While there remain many communities where there is a wide mixture of education levels amongst the residents, the geographic clustering of similarly qualified (or unqualified) people is important in New Zealand.

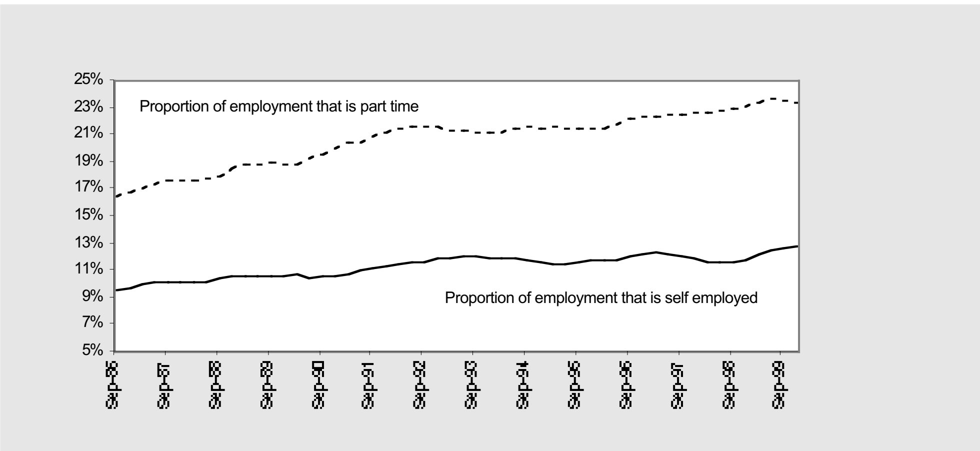
Growth in non-standard work patterns

More widespread use of part-time employment by firms.

Not only has the industrial, occupational and sectoral (private versus public) structure of employment changed, but the pattern of work has also changed. Over the last 15 years there has been growth in non-standard employment (employment that is not permanent full-time as a wage and salary earner). For males there has been a disproportionate growth in part-time employment[4] , while for females there has been a disproportionate growth in self-employment. Over the period there has also been growth in those normally working more than 50 hours per week, and in numbers of multiple job holders. Having said this, those defined as unpaid relatives working in a family business have been a relatively stable share of employment. Also stable has been the number of employers, and permanent full-time employment still makes up over two-fifths of total employment.

Part-time employment is generally associated with low pay, less training and less tenure. Department of Labour research provides mixed evidence as to whether these worse conditions are the result of the nature of part-time employment or a result of the characteristics of those employed part-time (e.g. people who work part-time on average tend to have fewer qualifications). Data also reveals that almost all people employed part-time (over 90 percent) indicate that they do not want a full-time job. These two pieces of information suggest part-time work, and growth in part-time work, may not in itself be a cause for concern. The growth in some forms of non-standard work is likely to be a combination of labour *demand* factors, such as technological and structural change, and labour *supply* factors, to do with changing social attitudes and changes in family structures.

Proportion of total employment that is part-time or self-employed



In addition to the growth in part-time employment, there has been a growth in self-employment. Historically, self-employment has been an important component of the New Zealand workforce. Self-employment as a share of total employment has been gradually increasing over the past 13 years, from around 9 percent in the mid-1980s, to around 13 percent by 2000 (see figure above[5]). Research in New Zealand suggests that it is has been "pull" factors, rather than workers unwillingly being "pushed" out of being employees, that has been the main contributor to this growth. It seems likely that these moderate growth patterns will continue into the future, especially with self-employment being more common amongst older workers. The ageing population will, in some ways, raise levels of self-employment, at least in the short run.

How do we ensure that non-standard workers have good working conditions?

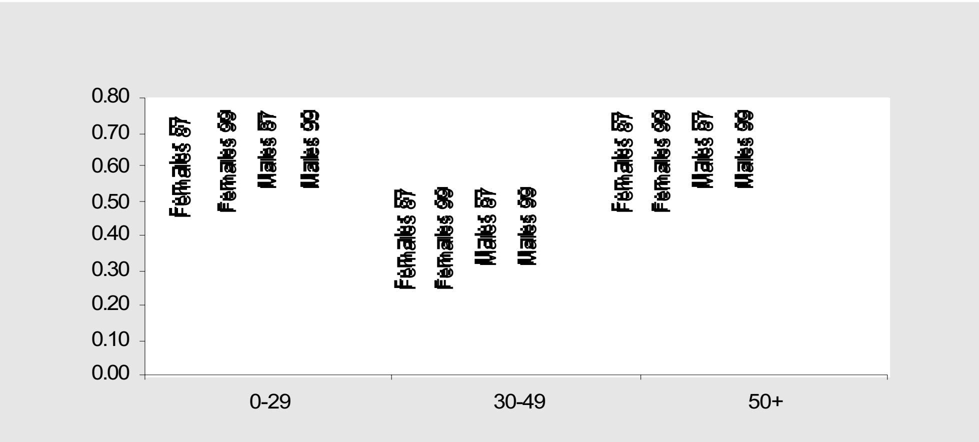
The majority of self-employment is in the agriculture industry, with relatively high proportions also in the construction, retail trade, and property and business services industries. These industries are characterised by the dominance of family farms and small businesses. Around 35 percent of those in corporate management are self-employed. There tends to be a concentration of self-employed at the lower ends of the qualifications scale, with many having skills vocational (trade) training.

Changing hours of work

The usual hours of paid work[6] for both males and females have been changing. While for both males and females the majority are still employed for 40 hours per week, there has been a move away from 40 hours per week toward either end of the hours-per-week spectrum. This trend may reflect changing opportunity structures in paid employment, or it may reflect people's changing preferences toward paid employment and leisure. Aggregating the paid hours per week worked into 1-29 hours, 30-49 and 50+ highlights that females are over represented in those working from 1-29 (considered part time) hours per week and males are over represented in those working more than 50 hours.

Since 1987, the numbers of employed females working 1-29 hours per week has increased by 6 percentage points from 32 to 38 percent. The percentage of employed females working from 30-49 hours has declined 8 percentage points to 52 percent. For males, the percentage employed for 30-49 hours has declined by 12 percentage points to 57 percent, while the percentage working for more than 50 hours per week has increased to 31 percent.

People employed: Usual weekly hours (1987 and 1999)



How do we ensure that people can work the hours they want to?

Overall, evidence of a continued 40-hour standard working week is mixed. There are around 496,500 people employed usually working 40 hours per week. This leaves around 1,230,000 people employed who do not usually work a 40 hour week. There is a growing range of employment opportunities covering both less or more than 40 hours per week. The drivers behind these changes are not clear, but are likely to include both changes in consumer preference for longer shopping hours, and hence opportunities meeting these demands, as well as people being able to fit paid employment opportunities to their life choices.

The third sector and unpaid work

Following international trends, employment and unpaid work in the "third sector" has become increasingly apparent in New Zealand. The third sector comprises "non-profit" organisations, including around 23,000 incorporated societies, 10,000 charitable trusts, unincorporated community groups, churches, community networks, hapu, iwi, and pan-tribal organisations. While there has been a growth in paid employment for those in the third sector, many people still undertake unpaid work in the third sector or for family, friends and associates.

Information from the 1996 census indicates that in the four weeks prior to the 1996 census, 1.1 million people did some form of voluntary work. Women were more likely than men to undertake unpaid work in the home, and also nearly half of the female population (49.2 percent) aged over 15 years participated in some form of unpaid work outside the household. Most of these women undertook between 1 and 14 hours of unpaid work in the four weeks. In comparison, around 42 percent of men undertook some form of unpaid work outside the household. When examining the type of work undertaken in unpaid work the greatest gender difference occurred in the proportion of women caring for children outside the household, with 44.9 percent of women who worked without pay indicating their involvement in this type of work, compared to 25.3 percent of men. Unpaid work for men was most likely to involve administration and policy work. Other forms of unpaid work included, household work, teaching, training, coaching, and fundraising.

It is likely that significant levels of unpaid work will continue well into the future. The role of unpaid work is often undervalued, and should instead be seen as a vital part of the New Zealand economy. Participation in the third sector, both in paid and unpaid work, is both a valuable capacity building tool and an opportunity for social participation that should not be undervalued.

What will the future role of the third sector be?

How can we fully value and recognise the role of the third sector and the skills that people gain in the third sector?

How can we ensure that people work the combination of paid and unpaid hours they want to?

Tele-work

In the early 1980s tele-work was promoted as the future of work opportunities. There has been a growth in tele-work, but it has not grown as rapidly as predicted. There are two schools of thought on the impacts of tele-work. The first highlights the benefits of technological innovation and having the home as workspace liberating people from “alienation” and “discipline” of industrial production — outwork offers freedom of self-regulated work and integration of work and personal life. The second view concentrates on the risks associated with the growth in tele-work — a growth of casualisation of work, a reduction in employer’s costs associated with the potential for “exploitation” of workers.

Studies into tele-working show mixed positive and negative impacts on workers. Tele-working was revealed to cause more stress on participants, although the perceived impact on health was mixed[7]. Very few participants indicated that they would want to be a tele-worker all the time. Tele-working had a positive impact on employees as family members, but negative impacts on career aspirations and perceptions of future careers. Managers tended to perceive tele-working as potentially allowing for better performance due to ability to work without interruptions.

Globalisation and changing consumer tastes and preferences

Opportunities may increasingly be determined by wealthy consumers in various other nations. As an example, in the past New Zealand lamb could only be purchased by high-income people in Britain (at the end of the nineteenth century). By the 1930s, however, a rising standard of living had widened this demand to the working classes. This had a positive impact on the New Zealand meat industry, and demand for labour in the industry. However, in recent times, in industrialised countries, there has been a move away from red meat, which has had a negative impact on the New Zealand meat industry. Yet, a switch by many consumers from meat to fish has assisted the growth in New Zealand’s fishing industry.

Changing consumer preferences can also reverse seemingly strong historical trends. For example, the trend toward manufacturing clothes in low wage countries can be challenged if consumers decide to demand “original”, non-mass-produced, clothing and, in addition, do not accept a delay between ordering and delivery. This is not to say that producers do not influence the tastes and preferences of consumers — for example, the switch away from wool to synthetics in the outdoor clothing industry, which was followed by the move toward fine Merino products. It is hard to determine whether this change in consumer preference was driven by innovative manufacturers, or was mainly driven by a switch back to natural products by consumers. Overall however, New Zealand consumers have a wider range of products available to them, and tastes and preferences are increasingly being driven off international trends and exposure to international ways of thinking. Once again this links back to the growth in ICT, international movies, music, advertising and many other forms of information from overseas.

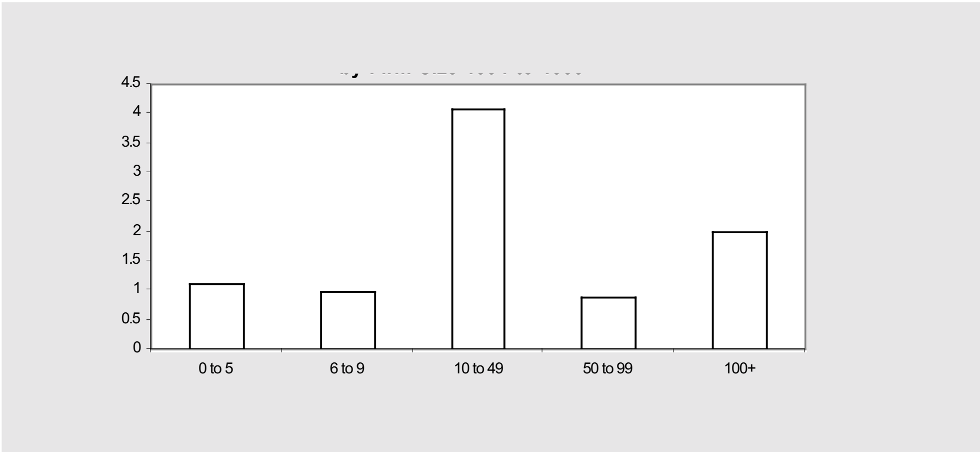
How can New Zealand respond and adapt to global opportunities and preferences?

How can New Zealanders build opportunities?

Opportunities and the size of the firm

Small and medium sized enterprises, (SMEs) i.e. those with less that 50 full-time equivalent (FTE) employees, contribute the large proportion, over two thirds, of employment growth. From business activity statistics, the total number of FTEs grew by 9 percent over the period 1994 to 1999. This recorded growth in opportunities has not been evenly spread across different firm sizes.

Percentage point contribution to growth in FTE employees by firm size 1994-99



The 10 to 49 FTE enterprise size provided the greatest contribution to employment growth. SMEs also made up the majority of geographic units, in both 1994 and 1999 — over 98 percent of geographic units. Given the relative size of New Zealand as a country, it is likely that the trend of opportunities being created in SMEs will continue well toward 2010.

Maori in growth areas

Maori are already proportionally strong in a number of key growth sectors, and are likely to become important contributors in others. Among those growth sectors are: agriculture, forestry, fishing, and tourism. Maori have significant representation in employment and manufacturing industries, while a number of fashion-wear businesses are Maori owned and operated using unique Maori designs. Maori communities are also creating networks with one another and indigenous peoples elsewhere to share knowledge, improve information systems and develop trade opportunities.

Maori enterprise is taking advantage of indigenous knowledge and culture to distinguish its products and services in growing industries and markets such as cultural and eco-tourism, organic farming and gourmet foods, art and clothing design, and environmental management.

What can be done to promote the development of Maori enterprise?

The presence of Maori providers and workers is increasing in the service sector of health, education, and personal services, and as the Maori population ages there will be needs and opportunities for elderly Maori. In addition, the numbers of Maori in self-employment in businesses are growing. Maori also have businesses, which because of their financial strengths and entrepreneurial vigour will play a central role in business development. This is well illustrated by some successful businesses in the Maori economy, for example, Whale Watch (Kaikoura); Tamaki Tours (Rotorua).

Increasing asset base for Maori

Although justice is the primary purpose of settling historical grievances, Treaty settlements are facilitating Maori economic growth by extending the Maori asset base. To date the Crown has transferred approximately $522 million in cash, fishing quota and commercial property to Maori through Treaty settlements. Maori now own more than half the assets in New Zealand's fishing industry. Further Treaty settlements and acquisitions will increase this share. Taken together, these assets establish Maori as a major owner of New Zealand's natural resources. The increase in potential for Maori participation in the economy will create a corresponding demand for increased education and training, from the future management, and entrepreneurial opportunities that flow from these assets and the industries associated with them.

Opportunities – risks and challenges

Employment growth is highly reliant on sustainable economic growth. Economic growth is influenced both by domestic conditions and by what is happening in world economy. Future opportunities in New Zealand are likely to include:

- A continuing shift towards employment in the tertiary sector, in particular travel, leisure and entertainment, financial services, technology and health care.
- More upper white collar workers will be required, including people with high levels of literacy and numeracy. This may create a risk if New Zealand's capacity in these areas does not meet the required standards.
- More service sector employment, with increasing opportunities developing to cater for the changing age structure of New Zealand.
- Increasing demand by some employers and some workers for non-standard work patterns (part time / seasonal / voluntary work).
- Increased competition for skilled migrants as the age structure of other countries changes. This includes increased opportunities for New Zealanders abroad and heightened competition for highly skilled New Zealanders.

The above discussion suggests the following risks and challenges:

- The continued opening up of world trade, migration and information flows may lead to some domestic opportunities declining if greater returns can be gained offshore.
- Differing growth paths of regions or locations could provide for an insufficient level of opportunities for people in some regions. There is the risk of an increasing disparity between the main urban centres and non-urban centres.
- A changing demographic profile will influence opportunity structures (for example a rise of care for elderly in the past). There is likely to be a rise in the number of opportunities for services relating to this ageing population.
- Productivity gains in non-service sectors of the economy may not be sufficient to support the increased demand for services.
- Technology changes are likely to continue to reduce the significance of New Zealand's innate handicaps such as size and isolation.
- Increased scarcity of appropriate labour could encourage businesses to discriminate against older workers less, and may increase re-training opportunities for older workers.

References — Opportunities

1 The tertiary sector is made up of service industries, including wholesale and retail trade, transport and communication, business services, and community and personal services. The secondary sector is defined as the manufacturing, electricity, water and gas, and construction industries, and the primary sector includes the agriculture and mining and quarrying industries.

2 Domestic shocks are important also: the effects of a drought in New Zealand also quickly filter through to the labour market.

3 The public sector's share of employment is exaggerated by the omission of the agriculture sector from the Quarterly Employment Survey.

4 The data is cross-sectional – many people move between job states so some will work part-time when young, in mid-career will work long hours and then might work part-time again when older. Part-time work at some ages might be preferred over full-time work.

5 Note that it is not possible to add those indicating they are self employed to those indicating they are part-time employed as people can be both self employed and working part time and to do so would in effect double count some proportion of those included.

6 The analysis of usual hours worked is by "people employed" which covers, paid employees, employers, self-employed without employees, and those who are unpaid but work for a family business.

7 Most felt better with no commuting but indicated the need for physical activity was denied.

Matching

Themes

■ New Zealand has some current mismatch between capacity and opportunities as a result of past changes in New Zealand society and economy.

■ As before, change is expected to continue at a rapid pace.

■ New Zealand must get better at matching as the pace of change increases.

New Zealand's Matching Background

■ People's capacity and opportunities change with time - they are dynamic.

■ The matching process is complex and involves costs in both time and energy.

Matching trends to continue over the next ten years

■ There is a growth in the rate of change, both in capacity and opportunities.

■ The matching process is becoming increasingly complex.

■ There is a heightened risk of negative longer-term outcomes for those unable to adjust to the changing environment.

■ Regulation is the oil that can enable matching or the sand that can hinder matching.

■ Communication advances are improving access to information, international resources and flexibility over work arrangements.

Risks/Issues further out

■ There is a need for clear signals (information provision and incentives).

■ There is a need for adaptable regulation in a quickly changing world.

■ There may be a greater need for appropriate safety nets for those who are not able to adapt quickly to change.

■ Although workforce outcomes over the coming decade might be fine, there is a risk that preparations for challenges beyond 2010 will be insufficient.

■ Superannuation prospects / rules / expectations may encourage people to retire early, while at the same time as there is the risk of shortages of labour or skills (outlined above).

Analysis of matching

The nature of the process of matching people's capacities to job opportunities is changing. Currently people and jobs are brought together by advertisements in newspapers, by public and private sector job agencies, and through informal information networks of friends, neighbours and family. Increasingly it is likely that matching will take place electronically. Already advertising and responses to these occur online for many jobs and this will become an efficient way of improving matching in the future, reaching out to a larger market at a lower cost. This form of matching is likely to increase the degree of labour market globalisation since the internet is well suited to the transmission of job information across national boundaries.

Electronic matching is likely to improve the efficiency of public and private sector job agencies and may also largely eliminate matching through newspaper advertisements in ten or twenty years time. At the same time, informal job networks will remain important conduits of matching information since they overcome many of the problems of incomplete information arising from the impersonal matching of strangers, which are issues with the other matching methods.

Increasingly important is the provision of information on careers and jobs to young people and those undertaking training or retraining. Education decisions impact on future matching possibilities, and clear signals and information about choices available and requirements will assist many. Many industries are already providing this type of information to schools and training establishments. Other industries are considering how to promote their industry and attract new workers.

There is a diversity of preferences and it is a complex job to match the two together. How can we ensure better matching? Better information? Better service delivery?

The role of regulation

Regulation is important for labour market outcomes. Most labour market interactions occur without reference to the law, but rather are conducted through the application of social norms and agreed behaviours. Whether there is "good" or "bad" regulation is still important, however, as regulation of labour markets can be thought of as either sand or oil in the wheels of social and market interactions. Regulations are important in shaping perceptions and conditioning responses, and they also become particularly important in resolving and distributing the costs of disputes. Good regulation will be clear in its purpose, easy to use and have helpful and effective enforcement procedures. Belief in a regulation's effectiveness and usefulness will reduce costs produced by resistance to it or poor workings of it.

Labour market regulation will, in addition, not work in isolation from other government policies. For instance, the availability of benefits will influence the labour supply decisions of those in the labour market, probably more so than minimum wage rates (where those are set near the levels of benefits).

Having said this, labour market regulation does not appear to be the principal influence on labour market trends. Both New Zealand and international evidence strongly indicates that the influence of labour market regulation on labour market trends is generally small when compared to other factors.

The globalisation of business and information is likely to marginally reduce the effectiveness of labour market regulation to "bite" at a local level, given that governments face a more mobile business sector and a workforce that can, to some degree, choose whether to locate in one country or another. Labour market regulation will, however, not be a major factor in the decisions of business or employees as to where to locate. The price of labour and the capacities of a country to meet the needs of employers and employees 'in the round' will usually be of greater concern.

Regulation of labour markets often follows social trends. An example is the introduction of the Equal Pay Act 1972. This legislation occurred as the participation of women in the workforce grew, and the expectations of society, in particular women, of the role that women would play in the workforce and society more generally changed.

Social trends are therefore often the germination point for regulations. Regulations may effectively arbitrate between potentially competing private interests. The Holidays Act 1981, for example, requires the provision of domestic leave as part of an employee's special leave entitlements. These cannot be contracted out of. One reason for this is to ensure that an employee with family responsibilities cannot be pressured to trade away a right that may adversely affect a dependant.[1]

Social developments and economic developments are often associated closely one with the other. So the changes in the role of women in the workforce have both preceded and followed the development of different social attitudes or norms in the labour market.

Regulation should assist or lubricate, rather than inhibit or hinder, the development of the labour market.

Regulation is important for matching: it can enable matching and can assist continued matching.

How do we ensure appropriate regulation that both promotes matching and protects people, ensuring better matching outcomes for all?

To ensure the best match possible, how do we ensure that all people have access to and the ability to use technology to enhance their capacities and opportunities?

Regulation can provide concrete rights (like minimum wage rates), set standards or declare goals. It is likely that it will also increasingly set standards and goals, which can remain flexible to the particular circumstances that are encountered by individual participants.

Technology and matching

Technology advances are increasing access to information, international resources and flexibility over work arrangements.

As outlined above, increasingly technology — especially information and communication technology (ICT) — is making a change to how matching takes place. ICT is also making a change to work once a match has been made. Work can be undertaken across national borders, with people from different countries working on the same project at the same time. Knowledge work can be spread around different locations and timeframes, in essence creating a 24-hour-a day work pattern, with people working in shifts around the world. As one set of workers leave for the day, another team starts seamlessly in another location. This increases both the opportunities and the capacity open to New Zealand. It does, however, require efficient matching systems, both within individual organisations, and between organisations.

Increasingly, New Zealanders will require high levels of capacity to take advantage of these opportunities. It is likely that these knowledge jobs will not require people to undertake a well-defined set job, but flexible and co-operative work, quite often in teams. Employers will be increasingly looking for what are sometimes labelled generic skills. These are general skills, which are transferable across different occupations. They encompass communication, numeracy, information and communication technology (ICT) skills, and the ability to work with others alongside problem solving, improving one's own learning and performance, reasoning skills for work planning and work process management skills. Additionally, so-called softer skills are often cited in the context of generic skills. These include team leadership, negotiation, facilitation and social skills.

Skills, recruitment, selection and retention

Concerns have been raised throughout the 1990s over the level of skill formation in New Zealand, with a relatively high proportion of the population with no or low education and a low level of commitment to training by firms being identified as particular concern. This has the potential to impact negatively on the possible matching of opportunities to capacity in New Zealand's future. However, according to Statistics NZ's *Training Supplement*, just under half of all salary and wage earners aged 16-64 had participated in some form of formal education or training. A recent OECD study placed New Zealand sixth out of 24 countries, with hours of training being second highest. There is another risk associated with the increasing need for generic skills. Certain groups may have higher rates of mis-match than others, as they find themselves lacking in ICT skills and unable to break into on-the-job training. As labour becomes increasingly scarce, there is likely to be a need for a certain amount of upskilling of the existing workforce to be undertaken at the firm level. Recruitment and selection policies are also likely to become increasingly important with those able to match efficiently gaining an economic advantage over those who are unable to match vacancies with capacity efficiently.

Recruitment strategies are changing, with more and more firms seeking to advertise vacancies electronically. Many firms are also choosing to recruit internationally, including overseas firms choosing to recruit New Zealanders. Other options or recruitment strategies for firms include referral bonuses, building relationships with educational institutions, sponsoring programmes, and scholarships. Many firms will find it increasingly attractive to promote family friendly workplaces, flexible working hours, and good physical working conditions as a means of recruiting and retraining staff.

Industry co-operation and planning provides another alternative for positive outcomes. Just as the nature of work has changed, so too has the ability for some firms to compete on smaller projects, while combining for larger projects. Industry planning and co-ordination are also important for training and upskilling needs, as well as promotion of an industry so that people will want to work in the industry when the time comes for people to move from education to employment.

Partnership arrangements

Where employees and employers have developed a high-trust relationship, it is more likely that there will be innovations in work practices, and the successful implementation of new technology, as opposed to situations where there is a more conflict-based model of workplace relations. While unionisation has been declining in New Zealand over recent years, unions can act as a mechanism for "collective voice" on issues of concern for individual employees. Employers, employees and unions can all act as mechanisms for reducing dissatisfaction, and improving outcomes and morale.

Interactions and signals

There are a number of interactions between capacity and opportunities. In some respects capacity feeds into and interacts with opportunities, just as opportunities feed into capacity decisions (see the diagram on page 9). People's capacities are built in response to the available opportunities or expected opportunities. A clear example of this is "on-the-job" training. People also plan for the future, and sometimes decide on formal study, well before they can expect to earn from their increased capacity. These decisions to build capacity in various ways are influenced by many different forces, both social (family experiences and expectations, history, location,) and economic (expected rates of return, costs, availability of capital to finance study). People's capacity-building decisions also feed into the range of opportunities: firms may choose to locate or invest in an area that has the particular capacity that they require.

As capacities and opportunities become more diverse, the interactions between the two become diverse and complicated. This complexity in itself has generated opportunities; for example many people are now employed to find a way through the complexity and match capacities with opportunities, provide career advice or assist people making life decisions. The ability of participants to send and receive clear signals becomes increasingly important. Clear signals enable efficient matching and enhance participants' decision-making abilities.

How do we ensure people are able to make good decisions that enhance not only their own lives but the lives of all New Zealanders? How do we ensure that signals and information are clear to all participants?

Matching – risks and challenges

Improved outcomes for New Zealanders result from an efficient matching process. The level and diversity of capacities and opportunities will to some extent be driven by the trends outlined in the relevant sections above. To account for these trends individuals, groups, communities, regions and industries must view the matching process as starting well before participants are ready to be matched. It begins with the planning for future capacity and opportunities, an analysis of risks and the acceptance that for some there will be a degree of mismatch.

- Globalisation, new technology, changing age and ethnic structures, and changing patterns in life choices all impact on the system of matching in New Zealand. The matching process is becoming more complex.
- There is a heightened risk of negative longer-term outcomes for those unable to adjust to the changing environment.
- Regulation is the oil that can enable matching or the sand that can hinder matching.
- Communication advances are increasing access to information, international resources and flexibility over work arrangements.
- Firms are likely to respond to many of the above forces of change by adapting to new work practices, including flexible working hours, family friendly workplaces, and increased retention of staff past the normal retirement age.
- Opportunities are also likely to develop to accommodate the above trends. This may include the outsourcing of services currently undertaken by non-paid employment.

- New Zealand's capacity to a certain extent will need to be developed to meet these new needs. The increasing use of technology, even in routine production jobs, will require new entrants to have high levels of general skills, and also the up-skilling of the existing workforce. Clear signals will assist New Zealanders to develop and meet these challenges.
- There may be a greater need for appropriate safety nets for those who are not able to adapt quickly to change. This may include investment to bring some groups or people back into the workforce by enabling them to adapt to change more readily.
- Although workforce outcomes over the coming decade might be fine, there is a risk that preparations for challenges beyond 2010 will be insufficient. This will be the period when New Zealand can prepare itself for the effects of the demographic changes that will become apparent post 2010.
- Superannuation prospects/rules/expectations may encourage people to retire early, at the same time as there is the risk of shortages in labour. It is likely that this will create incentives for participants to change their life choices, expectations and outcomes. The period of retirement may be shortened with many people participating in both paid and unpaid employment well beyond what was once the compulsory age of retirement.

References — Matching

1 There is, of course, no obligation on an employee to take the leave, or complete protection against an employer deliberately not employing a person with domestic responsibilities or putting pressure on an employee not to take leave when it is needed.

Conclusion / challenges

The ten years to 2010 will involve similar influences to the last ten years, with the trends of globalisation, technology, demographic, social, workplace and other workforce trends continuing. This decade will, however, provide New Zealand with an opportunity to build a strong base for the years 2010 onwards, a period in which many of the demographic changes are likely to be even more pronounced in New Zealand.

There are quite widely diverging forecasts about the future of work. Some forecast work to disappear, others view work adapting to a paradigm shift based on the internet and technology change. We speculate that work will evolve over time rather than undergo a radical change.

Globalisation has changed the face of New Zealand and will continue to do so, impacting on most areas of life in New Zealand.

New Zealand has increasingly become part of the world economy and growth (both social and economic) in New Zealand also depends on social and economic growth elsewhere.

There is an increasing risk that there will be pockets of New Zealanders who for a multitude of reasons are unable to directly share in the wealth generated in the labour market. Inequality in labour market outcomes may increase.

In light of these trends, the challenges are to:

- Maintain competitiveness and economic growth while reducing social exclusion;
- Increase education and skill levels and participation in work, especially for those not currently participating;
- Continually adapt and move with changes in resources and types of work;
- Make sure we have the policies, in central government, in local government and in the private sector that provide “oil” rather than “throw sand in” the labour market; and
- Reduce inequality in labour market outcomes.

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